MAESTRO FRANCISCO CORREA DE ARAUXO'S (1584–1654) FACULTAD ORGÁNICA (1626) AS A SOURCE OF PERFORMANCE PRACTICE

by Iina-Karita Hakalahti



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by Iina-Karita Hakalahti

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lina-Karita Hakalahti:
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ABSTRACT

I regard Francisco Correa de Arauxo as the most important composer of organ music of seventeenth-century Spain. Besides having been a renowned organist at the Sevillian Church of San Salvador, the Jaén Cathedral, and the Cathedral of Segovia, Correa was a teacher and a significant writer on issues of music theory and performance conventions. His *Facultad orgánica* of 1626 involves sixty-nine compositions plus pedagogical and theoretical writings in the form of an extensive foreword and preambles written to compositions. Despite the undisputed importance of Correa's book, it has been studied surprisingly little – and even less from the angle of performance practice.

My research belongs to the field of study on performance practice of early Spanish keyboard/organ music, its main focus being on Correa's advice on different elements of performance considerations. Additionally, upon studying Correa's book, one encounters some issues connected with performance that the author of the *Facultad* does not comment on himself (e.g., the 3+3+2 rhythm and rules of musica ficta). I examine the following elements of performance in the present study: 1) *glosas* (diminutions) and *adornos* (ornaments); 2) fingerings; 3) tempo, time signatures and proportions; 4) special rhythmic features (*ayrezillo*, most importantly); 5) registration; and 6) musica ficta.

Besides the main purpose of research – of gathering and analyzing the performance considerations involved in the *Facultad* – I present updated facts about Correa's life and professional career, situate the *Facultad* and its author in their historical context, introduce Correa's central theoretical concepts and discussions (including the *cifra* tablature), and give a brief account of local Spanish organ types and of the general lines of development of the historical Spanish organs. In addition to the above-mentioned research objectives, I aim at demonstrating that Correa, with his *Facultad*, was an important renovator of style and a great advocate of a particular compositional type, the *tiento de medio registro*, for divided registers. My research results include a list of the currently known exemplars of the *Facultad orgánica* and their location.

The theoretical framework of my study is the philosophical hermeneutics of Hans-Georg Gadamer, whose *Wahrheit und Methode* [Truth and Method] (1960) is a fundamental

work of philosophical hermeneutics of the twentieth century. In regard to Correa's compositions, I have used an analytical approach supplemented by an "experimental" approach – stemming from my experience as an organist and as a performer. I have applied a historical approach to considering Correa's theoretical and pedagogical texts, the emphasis being on the history of musical styles, of music theory, and of the history of keyboard instruments. (In situating Correa and his book in their historical context, I have taken advantage of an occasional micro-historical touch.)

Upon completing my research on Correa's *Facultad orgánica*, I have become convinced of its significance as a work which reflects performance practice of Spanish organ music of the early seventeenth century at various levels and which involves – in relatively great abundance – maestro Correa's pieces of advice, which are useful and of interest to today's performers of his *tientos* or of pieces by other Spanish/Iberian composers of his time.

KEYWORDS: Correa/Correa de Arauxo/Libro de tientos y discursos/Facultad orgánica/ performance practice/Spanish keyboard music/organ

PREFACE

The interest and affection towards early music which have been present since my childhood and which gave direction to my music studies from the very beginning have provided the background for this study. However, I did not have any contact with early Spanish keyboard music until the early 1980's nor had I any plans initially to carry out further studies upon completing the degree of Master of Music. Both of these matters were to change, however, as the result of a particular concert experience.

One evening in the summer of 1982, I went to the Cathedral of Helsinki to listen to an organ recital by Professor Montserrat Torrent from Barcelona. At this concert, I heard a piece by Francisco Correa de Arauxo for the first time, in addition to some other compositions from the early Iberian repertoire. I was deeply impressed and touched by this music, and from that moment I began to seek the means to gradually become acquainted with the early Spanish keyboard music and the instruments that go with it. My first chance to hear and play some of the historical Spanish organs was offered in 1985, when I participated in an international course on the interpretation of Spanish organ music at the illustrious University of Salamanca. After having heard the sound of the instruments (although, regrettably, not entirely in their original state), I knew that studying and performing early Spanish organ music would belong permanently to my activities as a performer. Since then, I have returned to Spain from time to time, I have worked on the Spanish keyboard music repertoire, and I have strived to delve deeper into the world of this refined music. Now, about twenty-five years after I discovered the early Spanish keyboard music, I am still following the same path, with the same mission.

Aside from the masterful pieces by Antonio de Cabezón, Correa's music – found in his *Facultad orgánica* from 1626 – has made the greatest impression on me of all the 16th-and 17th-century Spanish keyboard music with which I am acquainted. My efforts to try to find interpretational solutions for various challenging questions posed by Correa's *tientos* gave birth to the idea of launching a research project on Correa, especially on his remarks concerning playing. I was soon to find out that, despite its significance, Correa's book had been studied surprisingly little.

I sincerely hope that my study will promote a growing interest towards maestro Correa's music and towards his writings – on matters of performance considerations, in particular. The purpose of my research report is not to serve as a guidebook or manual on how to perform Correa's pieces. Rather, I have aimed at introducing to the reader the main contents of the *Facultad orgánica*, letting "Correa's voice" be heard and – hopefully

– providing some tools for individual musicians in their encountering interpretational challenges that inescapably confront every performer of Correa's works.

In the course of my research, I have had the opportunity to immerse myself in the Spanish culture of the past and the present. During this process, I have come to love and respect the culture of the land of contrasts through my explorations of its history and splendid cultural achievements, being conscious that my lifelong journey in the Spain of *El Siglo de Oro* and of today is only at its modest beginning.

Iina-Karita Hakalahti

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INTRODUCTION

Francisco Correa de Arauxo (1584–1654) was the most important Spanish composer of organ music of seventeenth-century Spain, a skilled organist (serving at San Salvador of Seville, the Jaèn Cathedral, and the Cathedral of Segovia), and a significant writer on both theoretical and performance practice issues. However, his work *Facultad orgánica* (1626, Alcalá), which includes an extensive foreword, sixty-nine organ compositions, and prefaces written to these compositions, has been studied surprisingly little. Moreover, there are inconsistencies and also factual errors found in the Correa research carried out so far, in addition to the creditable work of several scholars. Perhaps the areas that have involved the greatest confusion until recently have been the dates and details of Correa's life and the number and location of the extant exemplars of the *Facultad orgánica*.

Chronologically, Correa's works represent the period between such notable Spanish composers of organ music as Antonio de Cabezón (1510–1566) and Juan Cabanilles (1644–1712). The Iberian keyboard music can be divided into three main epochs: the period of the Renaissance (ca. 1500–1560), the period characterized by the divided registers (ca. 1560–1680), and the period whose major figure was Juan Cabanilles and which was marked by the compositional type of *Batalla* (ca. 1680–1720). In many respects, Correa's music – belonging to the second of the said epochs – can be termed "revolutionary," his having been aptly described as having "one foot in the Renaissance and the other in the Baroque." At the same time, Correa's music continues the tradition of the Spanish keyboardists leading back to A. de Cabezón.

Correa's works consist mainly of *tientos*, a *tiento* being a compositional type comparable to the Italian imitative ricercar. The musical part of Correa's *Facultad* contains sixty-two *tientos*, three sets of variations, two intabulations of *canciones*, and two settings of cantus firmi. The great majority of Correa's *tientos* are in the form of *tiento de medio registro*, works meant to be played on organs having divided registers – a central element of the Spanish organ building which Correa obviously held in great esteem.

The rather extensive textual part of Correa's book discusses several theoretical and practical issues, the latter involving remarks on performance practice in abundance. Both the theoretical and practical discussions are further supplemented by Correa's pieces of advice in the prefaces to his compositions. Correa's theoretical topics include issues such as the *cifra* tablature notation, modes and several theoretical concepts related to them, genera, and *falsas* (dissonances). Correa's theoretical writings on dissonances focus on describing the nature of the interval of a fourth and Correa's obviously favorite dissonance, the *punto intenso contra remisso* (a simultaneous cross-relation).

Among the practical and performance practice issues of Correa's *Facultad* figure importantly his dealings with the embellishment of music, fingerings and touch, tempo, time signatures and proportions – especially the special playing style which he called *ayrezillo*, and some advice on registration. Correa does not give any instructions or rules about musica ficta as such but touches the practices of musica ficta in his discussions of *falsas*. This is the reason for my including a brief subchapter on musica ficta in the chapter on Correa's performance practice considerations. By this particular placement of the subchapter on musica ficta (among the issues concerning performance practice), I have wanted to stress that musica ficta was once an important element of performance practice primarily, although the presentation of rules governing musica ficta are typically theoretical discussions by nature. On the contrary, I decided to place the subchapter on *cifra* in my chapter on theoretical issues of the *Facultad orgánica* because Correa's writings (and praise) of this particular tablature, in which all of his compositions are notated, are perhaps slightly more theoretically than practically oriented. The *cifra* tablature notation was also employed in the Spanish keyboard music collections of A. de Cabezón and Venegas de Henestrosa.

While Correa dwelled musically in the period of transition between the late Renaissance and the early Baroque, as a character he has been fittingly described as "not precisely a docile lamb" by Santiago Macario Kastner (1948: 15), the pioneer in research on Correa and the editor of the first complete modern edition of Correa's works. The zealous temper of the author of the *Facultad* is reflected, for instance, in the documented clashes with his superiors during his Sevillian years. Further, many places in Correa's writings display stern professional pride and warnings not to take up repertoire that exceeds one's skills (trying to play his virtuoso *tientos*, involving *glosas* in thirty-second notes, for example), obviously presenting not merely sound pedagogical advice but a genuine concern on the part of a master who did not want performers to ruin his pieces. Moreover, Correa's texts show both his great respect (but often scorn, as well) towards many colleagues with whose compositions and theoretical writings Correa was clearly well acquainted. Besides, Correa's writings mirror his different roles – as a virtuoso organist, as a composer, as a theorist, and as a Christian

1 Performance Practice as a Discipline

The interest in two kinds of historical artifacts, surviving musical instruments and musical scores, gave birth to the revival of early music, beginning in the late nineteenth century (Silbiger 2004: 359–360). The playing from the old scores which did not contain interpretive markings that the players of the modern times had been accustomed to raised at once several questions on how the music had earlier been performed. The search for the information on historical performance conventions "eventually gave rise to the discipline now commonly called performance practice" (ibid.: 360). The study of the old sources concerning issues of performing soon revealed the obvious existence of both "a command

of numerous unwritten conventions as well as a creative participation in the form of improvised additions and alterations," expected to be brought to performances by early musicians (ibid.). The research of the two stated elements has been – and continues to be – one of the central elements of studying performance practice. On the contrary, the over-simplified and many times naive endeavor to restore or reproduce the "authentic" performance conventions – which was characteristic to the study of performance practice at the beginning – was to change into the later realizations that these conventions were not uniform even in their own time and that the performance practice of a particular musical work is subject to constant change.

As far as my research on Correa is concerned, I regard performance practice as a discipline whose primary purpose is to look for information about the different elements of performing music of earlier times and to analyze the information relevant to these conventions found in the sources. In the study of performance practice, the consultation of the primary sources is of great importance, as well as knowledge about the characteristics of historical instruments, about the systems of notation, and about the compositional types employed in the period of time to be examined. Lastly – and most importantly – I want to emphasize that "the performance of early music, with its associated discipline of performance practice, continues to be a living tradition" (ibid.: 361).

2 Objectives of Research

The object of my research is *Libro de música práctica y theórica de órgano intitulado Facultad orgánica* (1626, Alcalá) of the Spanish organist and composer Francisco Correa de Arauxo (1584–1654). The *Facultad orgánica* consists of a collection of sixty-nine pieces of organ music, and an extensive textual part involving Correa's discussions on theoretical issues and performance practice considerations. Both theoretical and practical matters are additionally dealt with in the prefaces written to each composition of the *Facultad* by its author. Correa's book is clearly pedagogically oriented, which is shown, for instance, in his arranging his pieces in order of difficulty – an exceptional practice for his time. Correa who was a virtuoso organist himself, takes also the advanced players into account in many places of his work, addressing a special "third order of fingering" intervals to them, for example. In my research, I focus on the advice on performance practice given by Correa.

The research objectives of the present study are threefold. First of all, the primary purpose of my research is to summon and analyze the different elements of performance practice that Correa discusses in his book. The main categories of these elements are:

1) the embellishment of music with *glosas* (diminutions) and *adornos* (ornaments); 2) fingerings and touch; 3) tempo, time signatures and proportions; 4) the special playing style of *ayrezillo*; 5) registration; and 6) issues related to musica ficta – such as discussions of certain dissonances

Second, by my study on Correa and his *Facultad orgánica*, I aim at demonstrating his work to be a significant renovator of style and an important source of inspiration for several representatives of the Spanish school of organ/keyboard music, post-Correa. Besides launching new elements of style and advocating particular compositional types – such as the *tiento de medio registro*, a *tiento* for divided registers – Correa was a reformer in regard to many theoretical issues, perhaps most importantly in striving to develop the notation of tempo by trying to reconciliate some of the old proportional meanings of time signatures with new means of expressing tempo in notation. In the context of Correa's theoretical discussions, I also take up his writings about *cifra*, the tablature notation strongly advocated – and lauded – by him. Since Correa's most central theoretical considerations and the special nomenclature pertaining to them are often closely related to issues of performance practice, I have regarded it necessary to include his most essential theoretical concepts in my dissertation as a basis for deeper comprehension of Correa's advice on matters of performance practice.

Third, I describe the local Spanish organ types – dealing particularly with the main characteristics of the Castilian and Catalonian organ types – and draw an outline of the technical development of Spanish organs in general, placing special emphasis on the central elements of the Spanish organ building. I intend to demonstrate to the reader how closely the characteristics of the historical Spanish organs and the development of the keyboard repertoire are interrelated. Besides establishing the close connection between the instruments and the repertoire of a certain period of time, I endeavor to situate Correa and his *Facultad orgánica* into their historical context, as regards Correa's early years and his professional career as organist, as well as to describe the more general historical and cultural events and elements in the period of *El Siglo de Oro* in Spain.

3 Sources

Despite Correa's being a significant figure in the history of the early Spanish/Iberian keyboard music, until recently the research on him and his works has been amazingly scarce. Consequently, the sources and literature of the present study are relatively limited and specific by nature. Among the scholars who have made major contributions to the study of Correa and the *Facultad orgánica* are José Enrique Ayarra Jarne, Miguel Bernal Ripoll, Guy Bovet, Andrés Cea Galán, Jon Holland, Charles Jacobs, Louis Jambou, Macario Santiago Kastner, Dionisio Preciado, Antonio Ramírez Palacios, and Robert Stevenson. The valuable archival research of Ayarra Jarne, Jambou, Kastner, Preciado, Ramírez Palacios, and Stevenson has supplied us with increasingly accurate and detailed information about Correa's life, while Bovet, Holland, and Jacobs have focused more on the performance practice relevant to Correa's works, Bovet and Holland having worked on complete translations of Correa's texts, in addition. Cea Galán pondered the performance considerations of Correa's ayrezillo in his article of 1990, and Preciado wrote a book on

Correa's ornaments in 1973 in addition to several articles concerning details of Correa's life and the third Spanish exemplar (the exemplar of Bueu) of the *Facultad orgánica*. In his unpublished study (1968) compiled in the Département l'Etudes Hispaniques of the University of Nanterre, Jambou deals with both the theoretical and practical issues conveyed by the textual part of Correa's *Facultad orgánica* and provides a French translation of the textual part of Correa's book.

Besides the already-mentioned scholarly works, three other American studies besides Holland's can be mentioned, namely, the DMA document by Karen Jane Hastings (1987), the Ph.D. dissertation by Barbara Brewster Hoag (1980), and the DM document (1987) by David Dillon Schrader. Although Hoag's dissertation is on the performance practice of the 17th-century Iberian keyboard music in general, it is, nevertheless, a study relevant to research on Correa, as well. Schrader's study focuses on translating the Facultad orgánica into English and on applying the theories and practices found in the textual part of the Facultad to Correa's first twelve tientos. Hastings's brief document, which concentrates only on the second *tiento* of Correa, seems to lie heavily on Holland's dissertation of 1985 and supplies us thus with practically no new information on either Correa or his Facultad. In regard to the works by other authors which have already been mentioned, Jacobs's book on Correa, published in 1973, is a surprising exception to the generally high and reliable level of his scholarly writings. Due to various notable factual mistakes in the book, Robert Stevenson suggested in an issue of the Journal of the American Musicological Society (Spring 1975) that the book should be at least temporally withdrawn and its literary portion updated.

Essential to our knowledge of Correa's compositions and to the research on Correa's works and especially to the elements of performance practice are the three modern complete editions of the *Facultad orgánica*. The first edition is the study and transcription of the *Facultad* by Kastner, published in 1948 and 1952 and reprinted in 1974 and in 1980–81 – though without the transcription and commentary of the textual part proper by Correa, included in Kastner's earlier volumes. The second modern edition of the *Facultad* is likewise Spanish, its being the study and transcription by Miguel Bernal Ripoll, published in 2005. The third complete modern edition of the *Facultad orgánica* was published recently (2007) by Guy Bovet. With its accuracy, loyalty to Correa's original notation, translations of the main portion of Correa's treatise into English, French, German, and Japanese (the lastmentioned translation being available separately), inclusion of Correa's prefaces (having also been translated into English), and the author's own remarks on several theoretical and practical matters, Bovet's edition completes in a fine way the important pioneer work by Kastner in the very challenging task of editing Correa's works.

The main primary sources of my dissertation are the facsimile edition of the Brussels exemplar of the *Facultad orgánica*, published in 1981 by Minkoff in Geneva, and the two Madrid exemplars (R.9279 and R.14069) found today in the Biblioteca Nacional of Madrid. In addition, the study of the rare original exemplars of Antonio de Cabezón's *Obras de Música* (1578, Madrid) and Venegas de Henestrosa's *Libro de cifra nueva para*

tecla, harpa y vihuela (1557, Alcalá) has been of importance in the course of my research. The exemplar of Cabezón's book is housed in the British Library in London (with the call number K.8.e.10), and the exemplar of Venegas's work is found in the Biblioteca Nacional in Madrid (having R.6497 as its call number). I have also consulted the facsimile editions of Juan Bermudo's *Declaración de instrumentos* (1555, Osuna), published in 1957 in Kassel by Bärenreiter Verlag, *Fray* Tomás's *Arte de tañer Fantasía* (1565, Valladolid), published in 1973 by Minkoff in Geneva, and Pablo Nassarre's *Escuela Música* (1723–24, Zaragoza), published in 1980 by Institución "Fernando el Católico" in Zaragoza. The main secondary source of my study is the complete modern edition of the *Facultad orgánica* by Kastner, published first in 1948 and 1952 in Barcelona by Instituto Español de Musicología and reprinted in 1974 and in 1980–81 in Madrid by Unión Musical Española. Unfortunately, I was not able to consult the new complete *Urtext* edition of the *Facultad orgánica* by Guy Bovet (2007, Bologna, Ut Orpheus Edizioni) until the very last stages of the present study.

Besides Correa's original text, I have employed the translation of his textual part and/ or prefaces by Guy Bovet (a complete French translation of both the textual part and the prefaces published in several issues of *La Tribune de l'Orgue* 1985–1992 and also in his unpublished *Une traduction intégrale de la préface et des remarques de Francisco Correa de Arauxo*), by Louis Jambou (a French translation of Correa's treatise in an unpublished study of 1968), and by Jon Holland (a complete English translation of both the treatise and the prefaces included in his dissertation of 1985). In addition, I have had a look at the English translations of some excerpts from the *Facultad* by Barbara Brewster Hoag and by Charles Jacobs, plus the rather free translation into English of Correa's textual part by David Dillon Schrader.

4 Methods of Research

I regard my research on Correa as belonging to the hermeneutical framework and research tradition, which I understand to be the tradition within the continental philosophy stemming from Friedrich Schleiermacher (1768–1834) and Wilhelm Dilthey (1833–1911), focusing on problems and meaning of interpretation and understanding, particularly in humanistic research (Nordenfelt 1982: 171). I have found the ideas of Hans-Georg Gadamer (1900–2002), who continues the tradition of Martin Heidegger (1889–1976), particularly helpful to research concerning fields of art, ontology being closely related to the theory of knowledge in Gadamer's philosophy.

In general, one could perhaps say that, according to the hermeneutical tradition, all contingent knowledge concerning human activities is bound to be relative in regard to the interpreter (rather than all knowledge being relative as such). The finding of meanings needs a process of interpretation. Our understanding depends on language, which is of prime importance in hermeneutics. Contrary to the theories and methods traditionally used in

research in the natural sciences and in the field of scientific positivism, the hermeneutical theories are not purely deductive and experimental since, according to hermeneutical thinking, facts can be grasped through understanding meanings rather than by mere perception. In other words, conceptual observation and theoretical knowledge do not reveal everything and are not sufficient methods in the research of the humanities. Besides, the scholar and his object of research together form a whole, a process of understanding going on between the one who is researching and the object of his research.

According to Hans-Georg Gadamer, whose *Wahrheit und Methode* (1960) is a fundamental work of philosophical hermeneutics of the twentieth century, there is no true/actual *method* of interpretation (Haaparanta-Niiniluoto 1986: 66). As Gadamer explains in the foreword to the second edition of his *Truth and Method*: ". . . the purpose of my investigation is not to offer a general theory of interpretation and a differential account of its methods . . . but to discover what is common to all modes of understanding and to show that understanding is never a subjective relation to a given 'object' but to the history of its effect; in other words, understanding belongs to the being of what is understood" (Gadamer 2004: xxviii).

Gadamer has presented a kind of practical pre-understanding/fore-understanding (Vorverständnis) as a necessary basis for understanding. In Gadamer's hermeneutical dialogue, the preliminary understanding is given to us by the tradition and guides the proceeding of interpretation. Contrary to Dilthey, Gadamer considers interpretation a dialogue between the text and the interpreter, in which process one's self-understanding increases – rather than interpretation being a process of psychologically entering into the spirit of the object of understanding. Reaching an objective interpretation is not the aim of Gadamer's hermeneutical thinking; the task of the interpreter is, instead, to listen to the message of the tradition and then to apply it to the current situation. (Haaparanta-Niiniluoto 1986: 66–67.) Moreover, a scholar who is endeavoring to understand his object of research – a text, for instance – is always in some particular situation himself, this situation inescapably having an impact on his preliminary understanding. Thus, most of the humanistic research is seen as contextual in light of certain hermeneutical tradition, and neither history in general nor objects of research – such as pieces of art – exist independently "somewhere" as such. Gadamer has used as an example a play, which "happens in the minds" of the spectators. Consequently, the border between the actors and spectators disappears, since both are a part of the production of the play. The aesthetic consciousness is an integral part of a piece of art (in this case a play) rather than being a separate entity of its own. According to Gadamer, this way of observing is likewise applicable to other fields of art – to books, for example. The ontology of an individual piece of art appears in practice and in action, and it is not possible to tie it to any physical object. To come back to Gadamer's example, a play can function only as a part of certain social context, and thus it cannot permanently "stay the same" through time.

With his concepts of a 'situation' and a 'horizon,' Gadamer characterizes the necessity of beginning the process of understanding from where one stands oneself – meaning that

one's own concepts and ideas provide the starting point for a process of understanding. Situation "represents a standpoint that limits the possibilities of vision" (Gadamer 2004: 301). Horizon is essential to the concept of situation, a horizon being "the range of vision that includes everything that can be seen from a particular vantage point" (ibid.). In the process of understanding, the horizon of one's own and the one belonging to the object of understanding blend, producing a new, richer horizon, which results from a dialogue with the tradition. Gadamer sees a synthesis between the horizon of the past and the present being constantly built by language (Gadamer 2005: 27). According to Gadamer, understanding concerns a process which fuses horizons, remaining beyond methodical thinking (Kannisto 1986: 173). Consequently, the research carried out in hermeneutical sciences resembles a Socratic dialogue – both in the role of active questioner and passive listener – more than practicing science, which is based strictly on rules and methods (ibid.). Gadamer emphasizes that the task of hermeneutics is to unravel the marvel of understanding, "which is not a mysterious communion of souls, but sharing in a common meaning" (Gadamer 2004: 292).

Besides the concepts of situation and horizon, Gadamer's third central concept is the *Wirkungsgeschichte*, a kind of history of effects/influences, according to which our consciousness is the result of the effects/influences of history and is thus a proof of the actuality of history (Kannisto 1986: 173). According to Gadamer, the true actuality of history is contained in the understanding itself, which the proper hermeneutics should show (Gadamer 2005: 39). The objects that we are trying to understand offer a vast potential for actualizing different meanings by differents interpreters. It is only a part of the potential meanings of an object to be interpreted that each individual person can actualize. The choice of these potentials depends on who is doing the interpretation and on his particular situation (Kannisto 1986: 173–174). In brief, hermeneutical research can be described as a process of seeking the truth from the tradition (ibid.: 175). However, it has been observed that the hermeneutical dialogue presented by Gadamer does not differ by structure much from the way of scientific deduction modelled by the hypothetical-deductive method, with the exception of Gadamer's idea about the increase of the self-understanding of the interpreter/researcher (Haaparanta-Niiniluoto 1986: 67).

Coming back to the *Facultad orgánica*, as far as Correa's compositions are concerned, I have approached them analytically (and also "experimentally," by practicing and performing Correa's works). As regards Correa's theoretical and pedagogical texts involved in the *Facultad orgánica*, I have used a historical approach, involving making comparisons of Correa and his contemporaries when relevant. In the historical approach, the history of musical styles (involving compositional types) and theoretical developments and the history of keyboard instruments – the early Spanish organs, in particular – come to the fore.

In undertaking to situate Correa and the *Facultad orgánica* in their historical context in *Chapter I*, I make some remarks and references to Correa's life along with the more general events simultaneously taking place at the time of *El Siglo de Oro*. It is possible to see these remarks as an occasional micro-historical touch and as taking advantage of some

ideas inspired by micro history. However, I want to stress that my dissertation does not aim to be a proper micro-historical study.

A group of historical studies in about 1975 by Emmanuel Le Roy Ladurie (*Montaillou*), E.P.Thompson (Whigs and Hunters), Carlo Ginzburg (The Cheese and the Worms) and Natalie Zemon Davis (Culture and Society in Early Modern France) "seemed to indicate a change in the paradigm of historiography" (Peltonen 1999: 166). In these studies which can be given the label of "the new micro history of the 1970s" (ibid.), the choice of research subjects was different from the former studies on history. For instance, new groups of people were being studied (such as groups of people held previously to be "uncultured") and discoveries of documentation associated with such groups were made with enthusiasm. To give an example, the first famous "new micro history," Le Roy Ladurie's Montaillou (1975), examined the life of peasants living in a small French village in 1294–1324. Some commentators of the 1980s have termed the new micro history as "the return of narrative" or "the historian's return to the archives" (ibid.). The particular nature of historical study was now, in its concreteness and in its focus, on singular or specific phenomena – demonstrated, for example, in the work of Ginzburg (ibid.: 167), according to whose narrative strategy exciting conflicts could be created by the articulation of the long-term structures with events of shorter duration (ibid.: 169). In the thinking of the micro historians, studying details and phenomena at the micro level can reveal significantly important aspects of the more "general" macro level.

One needs to be aware that micro history is a particular way to view things rather than a method of research in the conventional sense of the word. As Matti Peltonen has observed, rather than a method, micro history is something more extensive, connected to points of departure of research, to strategic choices done at the beginning of a research process, and to choices having an effect on one's entire work (ibid.: 21). Through my references to particular events and details of Correa's life in *Chapter I*, I intend to give some examples of the interrelations of the "micro level" (Correa's life, Correa as an individual) and the "macro level" (the historical events and cultural achievements during the Golden Century) in describing the historical context of the *Facultad orgánica* and its author.

The earlier-mentioned experimental "method" – in regard to Correa's compositions – is used to try out the advice given in his texts in practice and to weight different interpretational possibilities rather than to try to prove certain arguments right or wrong. I believe that the "experimental method" can, nevertheless, make a major contribution to the results of this study on performance practice, the outcome of the said experimentation being seen "between the lines."

5 Structure of This Study and Some General Remarks

In *Chapter I*, I outline the historical context of Correa's times. In *Chapter II*, I deal with the currently known facts about Correa's life, including his early years in Seville and

the different phases of his professional career. Chapter III focuses on the early Spanish organs and other keyboard instruments relevant to the period of time that my research concerns. In Chapter IV, I describe the structure and contents of the Facultad orgánica and present the results of my inquiries and study of the number and location of the extant exemplars of the Facultad. Chapter V concentrates on introducing the most important theoretical concepts and discussions of Correa. Chapter VI focuses on the practical issues and, particularly, on Correa's advice on different elements of performance practice. The last main chapter, Chapter VII, consists of a compendium of my main research results and involves suggestions in regard to future challenges of research on Correa and the Facultad orgánica. The appendixes contain an English translation and commentary on Correa's Errata (Appendix A), a chronological summary of the musicological literature concerning the extant copies of the Facultad orgánica (Appendix B), some observations on the original edition of the Facultad orgánica [concerning the two Madrid exemplars] (Appendix C), problems with folio numbers in Madrid, R.9279 (Appendix D), markings made in ink and by hand in Madrid, R.9279 (Appendix E), and problems with folio numbers in Madrid, R.14069 (*Appendix F*).

The English translations of the excerpts and citations of Spanish sources are my own if not otherwise indicated. In the translations, I have aimed, first of all, at transmitting to the reader the contents of the original texts as thoroughly and accurately as possible. Second, particularly in the case of Correa's own texts and the writings of his contemporaries, I have tried to maintain the essence of the original style of writing.

In my parenthetical references and in the bibliography, I use the paternal surname (Correa) of the author of the *Facultad*. As regards the name of Tomás de Santa María, I prefer employing the form '[*Fray*] Tomás' instead of '[de] Santa María' since the actual meaning of 'de Santa María' is "from [the locality of] Santa María," rather than being a surname proper. In my reference technique, such a parenthetical reference which is a "sentence of its own" – with a period inside the parenthesis – refers to several preceding sentences. When a period in a parenthetical reference is placed outside of the parentheses, a reference is made to only one sentence.

In the cases where a question might arise as to whether a reference is made to the recto or the verso side of the folio, I add a ' ν ' [verso] or an 'r' [recto] to the number (e.g., f. 2 ν ; f. 3r). Usually, the plain folio number refers either to a whole folio (covering both the recto and verso sides of it, e.g., folios 1–5) or to only the recto of a folio – when conveyed by the context.

I

A GLANCE AT CORREA'S SPAIN AND THE TIME OF "EL SIGLO DE ORO"

The life of an individual is always in relation to a particular environment, from the effects of geography and climate to the circumstances produced by the state of the social, political and cultural life of his time, generating the "spirit of an age." I believe that at least some knowledge about the historical context in which any piece of art was created is essential to the process of evaluating and understanding cultural achievements of the past. Marcelin Defourneaux, for instance, expresses the essence of the historical context much to the point in the foreword to his book *Daily Life in Spain in the Golden Age*: "The sum total of the actions and behaviour which make up the daily life of individuals is inseparable, not only from the social framework of their lives, but also from their beliefs and ideals, which themselves constitute the spirit of an age" (Defourneaux 1970: 7). Before glancing at the Spain of Correa's time, I refer the reader wanting more extensive information to the excellent account of the history of the Mediterranean countries by Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II* (first published in France under the title *La Méditerranée et le monde Méditerranéen à l'époque de Philippe II* [1949]).

Francisco Correa de Arauxo's life (1584–1654) overlapped with the famous Spanish "Siglo de oro," the "Golden Century," which can basically be given two different definitions. We can regard the Golden Century as either a period of time which lasted from the end of the reign of the Emperor Charles V (1516–1556) to the Peace of the Pyrenees (1659), or, alternatively, as a period of time characterized by great cultural achievements, such as the literary masterpieces of Cervantes and Lope de Vega, the masterly paintings of Velásquez, "El Greco," and Zurbarán, or the ingenious musical works of Cristóbal Morales, Francisco Guerrero, Tomás Luis de Victoria, Sebastián Aguilera de Heredia, José Jiménez, Francisco Correa de Arauxo, and Pablo Bruna. Robert Stevenson, for one, names the time stretch from 1530 to 1611 as the golden age of Spanish music in particular, in his Spanish Cathedral Music in the Golden Age (Stevenson 1961: third [unnumbered] page of the preface), focusing on Spanish masters of vocal polyphony.

Correa's life coincided with the reign of three sovereigns, Philip II (1556–1598), Philip III (1598–1621), and Philip IV (1621–1665). Correa was a youth of fourteen when the rule passed from the great Philip II to his son. During Philip II's reign, Spain had reached the

hegemony of practically all of Europe and the Spanish Crown governed vast territories, requiring a constant struggle in order to keep the acquired possessions. For instance, in 1574 seventy per cent of the whole budget of Castile was used for expenditures on defense (Lalaguna 1992: 76). There had been signs of the coming economical decline of Spain already in Philip II's time and by the 1660s, the debts of the Spanish Crown equalled its income of from ten to fifteen years (ibid.: 77). During the reign of Emperor Charles V, there were seventeen realms under his rule (ibid.: 64). He passed to Philip II an imperium "where the sun never set."

1 Spanish Territories and Costs of Defense

At the beginning of the seventeenth century, Spain had territory in northern Europe, Italy, the Mediterranean, the Americas, Africa, India, and even in the Orient (Darby 1994: 1). The King of Spain dominated Italy by ruling Sicily, Milan, Naples, Sardinia, and also the *presidios*, coastal forts adjacent to Tuscany (ibid.: 10, 118). Flanders, as the Spanish Netherlands was usually called, had a great importance to the Spanish monarchy, the Army of Flanders being Spain's largest fighting force (ibid.: 11). The American possessions, with the import of bullion, also had a major significance to Spain, engaged in nearly constant warfare.

The lion's share of the monarchy's budget was naturally directed to expenses of defense. It has been estimated that the total number of soldiers in the command of the Spanish Crown was about 170,000 by the 1630s (ibid.: 19). The annual sum needed for defense was probably 8-10 million ducats during the reign of Philip III but was as much as 12 million ducats in the reign of Philip IV (ibid.: 12). In the first half of the century, the Army of Flanders was ordinarily the largest item and required about 4 million ducats annually, and even 1.5 million ducats during the Truce of 1609–21. It is probable that, as time passed, the cost of the Army of Flanders was reduced to about 2 million ducats, further declining after 1656. (Ibid.) The Army of Flanders involved soldiers from Spain, Burgundy, Italy, Germany, and Britain, and it numbered about 90,000 men in the year of 1640 (ibid.: 19), declining to 42,000 in 1659, and further to 11,000 in 1664 (ibid.: 67). The second important Spanish army was the Army of Milan, consisting mainly of Spanish and Italian soldiers. The Army of Milan numbered approximately 40,000 men in the 1630s, declining to about 10,000 men in the 1660s. (Ibid.: 20.) The Army of Milan was ordinarily funded by Italy but during the reign of Philip IV, large sums were sent from Madrid – for instance, in 1637 as much as 2.5 million ducats (ibid.: 12). During the second half of the seventeenth century, the largest Spanish army – around 20,000 men by 1640 – operated on the Iberian peninsula, mostly on the Catalan front (ibid.: 20).

The annual cost needed for naval defense was from 1 to 1.5 million ducats, which funded the two important Spanish fleets, the Atlantic fleet of galleons and the Mediterranean

¹ A ducat (ducado) equalled 375 maravedís, a maravedí being the basic unit of account (Darby 1994: v).

fleet of galleys (ibid.: 13). The Atlantic fleet consisted of the *Armada del Mar Océano* (forty ships in 1622) and the *Armada de las Indies* (about ten ships), the task of the latter being the protection of the vessels carrying silver (ibid.: 21). The Mediterranean fleet consisted of about sixty ships (ibid.: 20).

The greatest contributors to the expenditures of the Spanish defense were Castile (covering about 75 per cent of the costs in 1626), Naples, and Sicily (ibid.: 16). However, following the viceroyalty of Medina de las Torres (1637–44), taxation had to be reduced as an aftermath of the revolt of 1647 in Naples, whose contribution to the expenses of defense dropped finally to a level of minor significance after the plague epidemics that occurred in 1656 (ibid.: 17). One of the most challenging matters in the organization and funding of the expenditures of the Spanish defense was the unevenly distributed recruitment and costs. The nearly ceaseless warfare lasting for fifty years was mostly financed by Castile and Naples, that is to say, by half of the population of about 15 million (ibid.: 24). The powerful minister of Philip IV, the Count of Olivares, tried to solve this problem with his proposal for the Union of Arms, the inauguration of which was decreed by Philip IV in 1626 (ibid.: 41). Olivares's Union of Arms was a kind of collective defense, which also imposed the task of providing troops and raising funds for defense on such regions whose contribution to the Spanish war machine had hitherto been poor or nonexistent. Although Olivares's reform eventually led to revolts and rebellion, he managed to offer a partial solution to the most urgent needs of ever-increasing costs of defense and to the military emergency until after the 1630s (ibid.: 57).

Since the Spanish foreign policy appears to have been based much more on the principles of *reputación*² and *conservación*³ than on prudent economical thinking, there was the constantly worsening situation of ill-balanced finances present. In other words, the income that the government could raise did not meet its expenditure at all. For example, in the 1640s when the costs of defense reached as much as 12 million ducats, 6 million of this sum had to be borrowed (ibid.: 15).

2 The Organization of Government and Distribution of Power

The power of the King of Spain varied according to region, being greatest in Castile. However, even within the Crown of Castile there was the kingdom of Navarre, which had its own laws, parliament (*Cortés*), coins, and custom posts (Darby 1994: 10). The Crown of Aragon and the Basque provinces were, similarly, considerably independent, with their own tax systems. Portugal, too, was rather loosely governed by the Spanish monarch (ibid.). The King was represented by a viceroy in the independently governed areas. The governors ruling in the Burgundian lands of Franche-Comté and Flanders were

² The monarchy's prestige, image, and standing, for example (ibid.: 118).

^{3 &}quot;A policy aimed at preserving and defending all the territories of the Spanish crown" (ibid.: 117).

also appointed by Spain; naturally, the post of governor of Flanders was strategically the more important of these. In the Spanish Indies, viceroys for Mexico and Peru had been appointed since 1535, while America was ruled directly by Castile via the Council of the Indies. (Ibid.: 11.)

Both the *Cortés* and the twelve councils figured significantly in the organization of the Spanish government. Each independent realm on the Iberian peninsula was governed by a parliament called *Cortés*, the *Cortés* of Castile being by far the most influential. The *Cortés* of Castile was surprisingly small, especially regarding its authority and importance. Originally, it consisted of thirty-six deputies who represented eighteen cities; in the reign of Philip IV there were forty deputies representing twenty-two cities (ibid.: 8). The *Cortés* held considerable power in matters of taxation. For example, no new taxes could be imposed without the consent of the *Cortés* (ibid.).

Besides the *Cortés* of each independent peninsular realm, there were twelve councils in Madrid which had representatives from the numerous Spanish dominions. The most important of these councils was the Council of State, which took care of the foreign policy. Next in importance was the Council of War, focusing on peninsular Spain. Under the supervision of the Council of State, there were seven superior councils, the most significant of which was the Council of Castile whose president was the second person in authority after the King of Spain. Also crucial was the Council of the Indies, the field of which was the overseas trade and administrative matters of the New World. The rest of the seven superior councils under the Council of State were the Council of Aragon, the Council of the Inquisition, the Council of Italy, the Council of Portugal, and the Council of Flanders. The last three of the twelve councils were the Councils of Finance (*Hacienda*), of Military Orders, and of Crusade. (Ibid.: 6–7.) All the councils gathered in the royal palace in Madrid on a certain day. However, the great amount of work to be done by the councils also necessitated setting up juntas, smaller committees of advisors. The central government operated locally through about eighty chief magistrates (corregidores), situated in towns (ibid.: 8). Although the councils exercised real power, they could, nevertheless, be ignored by both the King and his ministers (ibid.: 7).

As regards the King's power, the real responsibility was given to the Spanish monarch's favorite, the first Duke of Lerma, Francisco Gómez de Sandoval y Rojas, in Philip III's reign (ibid.: 26), and to the Count of Olivares, Gaspar de Guzmán, in Philip IV's reign (ibid.: 37) until 1643 (ibid.: 39). Another important figure in both Philip III's and Philip IV's reigns was Olivares's uncle, the former ambassador to Brussels, Paris, and Vienna, Don Baltasar de Zúñiga, who acquired a seat in the Council of State in 1617 (ibid.: 31). Upon his death in 1622 (ibid.: 43), Olivares joined the Council of State and became a minister (ibid.: 38). After Olivares's dismissal in 1643, his power was in practice transferred to his nephew, Don Luis de Haro (ibid.: 58).

Both the structure of the Spanish seventeenth-century government and the great distances between the different dominions under the Spanish crown generated a vast amount of paperwork, a system of extensive bureaucracy, and day-to-day problems in ensuring the

vital communications and control in even the most remote parts of the Spanish territories. The Spanish Road, the land route used for transportation of supplies and soldiers from Italy to Flanders was particularly important to Spain. The original route via Savoy was replaced from 1620 to 1631 by a route via the Valtelline regions and Alsace (ibid.: 20), the Valtelline being an Alpine valley which ensured connection from Milan to both Brussels and Vienna. In addition to the transport of troops and supplies from one place to another, the postal communications presented another practical dilemma due to the considerable distances even within the Iberian peninsula – not to speak of the more faraway Spanish dominions. To give an example, it took at least two weeks for a letter sent from Madrid to arrive in Brussels or Milan, at least two months before a letter from Madrid reached Mexico, and one year for a letter to reach the Philippines (ibid.: 9). To give some idea of the huge amount of paper produced by the Spanish bureaucracy, there is a mention of Philip IV having worked six hours daily on his papers (ibid.: 37).

3 The Spanish Economy and the Sources of Revenue of the Spanish Crown in the Seventeenth Century

As already mentioned, there is documentary evidence that the Spanish foreign policy with its vast and increasing military expenditure was guided by the ideals of guaranteeing the monarchy's *reputación* and by the policy of *conservación* rather than by a sound and balanced economy. The ambitious foreign policy led to severe financial problems and to the constant urge to invent new sources of revenue. However, despite setbacks, the Spanish monarchy was still in control of the western Mediterranean at the 1640s (Darby 1994: 20–21) and maintained its position as a considerable power into the 1650s (ibid.: 69).

The largest individual contribution to the government budget was provided by the *Cortés* of Castile. This sum consisted of such sources of revenue as customs duties, a 10 per cent sales tax called *alcabala*, a grant of taxes by the *Cortés* called *servicio*, and the important tax on basic foodstuffs entitled *millones* (ibid.: 13). The income acquired from the church was also significant and consisted of the 'Three Graces': the *cruzada* (the sale of indulgences), the *subsidio* paid from the church revenues, and the *excusado* paid from the tithe (ibid.). Important as well was the sale of *juros* by the Spanish government, *juro* being "annuity paid out of state income for loans to the crown" (ibid.: 118). *Censos* were ground rents on the land holdings of peasants which served the same end as *juros* (Defourneaux 1970: 44). The revenue from the Indies was substantial, too, especially around 1600, but steadily decreased thereafter (Darby 1994: 13). Also American silver was one source of ready cash and a means of credit, although it "never really played the dominant role that contemporary perception ascribed to it" (ibid.: 23). Among other sources of income were the manipulation of the coinage and *donativos*, which were non-spontaneous donations to

the treasury (ibid.: 118),⁴ and the introduction of new taxes, many of which were imposed at the time of Olivares. Some of the less successful new taxes were the salt tax (from 1631) and the paper tax (from 1637), the former leading to fierce revolts in Vizcaya (ibid.: 49, 51). *Lanzas* (cash substituted for military service) and the sales of jurisdictions and offices added their share to the income of the Spanish monarchy.

It has been observed that although there is information available about the different sources of income, it is hard to know the true amount of the annual revenue, which was probably about 8–10 million ducats in the reign of Philip III (ibid.: 14), 1598–1621. What is certain is that the collection of taxes was far from efficient and a considerable portion of the potential tax revenue was lost by the abuses of the numerous middlemen. A mention in a memorial from 1655 states that the King could get only 5.5 million [ducats?] out of 14 million [ducats?] of the *servicios* due (ibid.).

The problems of raising money were worsened further by the coincidence of several hardships such as demographic loss, agricultural depression, and the commercial and industrial decline. The decrease in population was significant since by the middle of the seventeenth century there were only 4.5–5 million inhabitants in Castile, compared to the figure of about 6.5 million in 1600 (ibid.: 21). The region of Castile, in particular, was devastated by plague: approximately 600,000 people died in the epidemics of plague between 1596 and 1602, and it has been estimated that about 500,000 lives were lost again between 1647 and 1652, and probably still another half a million between 1676 and 1685 (ibid.). (I do not consider it impossible that there was some connection between the abruptly deteriorated health of Correa in his last years and the epidemics of plague, since Correa held the position of the organist of the Segovia cathedral from 1640 to 1654, in the plague-ridden region of Castile.)

The continuous warfare and emigration, aggravated by the Spanish Italy also being hit hard by plague, had their impact on the decrease in population. Moreover, there was a long period of problematic climatic conditions which must have affected the general state of health of the population through the shortage of food and even famine. In Castile, there were ten particularly wet years, beginning in 1589, and soon after, a drought lasting for another ten years, until 1614, the worst harvest of the whole seventeenth century occurring in 1647 (ibid.: 22). Still another factor having impact on the level of the Spanish population in Correa's time was the expulsion of approximately 300,000 Moriscos (Christianized Moors) between 1609 and 1614, reducing the population of Valencia by as much as one third (ibid.: 29).

⁴ Donativo could also mean "a subsidy voted by the parliaments of Naples and Sicily" (ibid.: 118).

4 The Religious Life and the Honor of Being a Christian

Both honor and religion were strongly present in the everyday life of a Spaniard in the Golden Century. The tolerance of *mudéjares* – the Moslems living in the Christian kingdoms of Spain – was significant up to the fourteenth century but was to diminish (Defourneaux 1970: 30). The honor of being a Christian soon became to embody the idea of Spain "being entirely and uniquely Catholic" and led to such measures as the expulsion (or enforced conversion) of the Jews in 1492, followed by the expulsion of the Moslems in 1502 (ibid.: 36) and, further, the already mentioned expulsion of the Moriscos between 1609 and 1614, in Philip III's reign. The honor of being a Catholic Christian was affirmed in the doctrine called *limpieza de sangre* (purity of blood), the first law of the purity of blood, coming into existence at the beginning of the fifteenth century (ibid.).

The number of laws and statutes concerning purity of blood kept increasing between the end of the fifteenth century and the beginning of the seventeenth century (ibid.: 37), the process being accelerated by Portugal coming under Spanish rule and this territory bringing a lot of *conversos*, Portuguese with Jewish ancestors, under the eye of the Spanish Crown. One particularly strict law of the purity of blood was issued in 1449 by the magistrates of Toledo, although even the Castilian king, John II, and Pope Nicolas V opposed it. This law regarded *conversos*, offspring of Jewish ancestors, unfit to hold any public office or benefice in the city of Toledo, or in land under the jurisdiction of Toledo. About thirty years later (1478), the Spanish Inquisition was founded. (Ibid.: 36.) The growing emphasis on the purity of blood in one's pedigree produced such undesirable phenomena as the 'green books,' which contained family trees of great families attributing to them either Jewish or Moslem roots, which was true in some case but false in many others. The *Tizón de España*, reprinted several times, from the sixteenth century was the most famous of the green books. (Ibid.: 38–39.)

It is a detail of interest that in a document written in 1629, at the request of Francisco Correa de Arauxo – and probably having been presented at some point to his Sevillian *Cabildo*, Correa proves himself to be the legitimate son of potter Simón de Correa and Isabel de San Juan, who were legitimately married, had been inhabitants of the parish of San Vicente, and who had led a good life, having being good Christians (Ramírez Palacios 1987: 802–804). (See also the chapter *Correa's Early Years and His Family* in this dissertation.) Although the described document, found by the scholar Antonio Ramírez Palacios, differs from documents concerning the purity of blood, I see the mentioned document as reflecting the spirit of Correa's age when it was necessary to show and even prove oneself (and one's family) to be an honorable, good Christian.

The Inquisition (since 1478) and the Spanish Crown were closely united and the Inquisition figured as part of the monarchic government, the Council of the Inquisition with its large staff having been set up in 1483 (Darby 1994: 6). The Council was led by the Grand Inquisitor, and at his disposal were fifteen tribunals (local courts of enquiry) and a "police" consisting of more than 20,000 persons in the seventeenth century (Defourneaux 1970:

123). As Marcelin Defourneaux phrases it, "... the Inquisition occupied a very important place in Spanish life during the sixteenth and seventeenth centuries, not only because of the jurisdiction which it exercised, but also because of the impression it made on people's minds and the mixture of terror and veneration which was conjured up by its very name, and which made its presence, even though invisible, constantly felt" (ibid.). Particularly in the first fifty years of the seventeenth century there were fierce and extensive persecutions of witches; in Catalonia, over three hundred victims fell to the witch hunt (ibid.: 120, 122–123). Even Philip IV's favorite, the Count of Olivares, was commonly thought to have a devil inside his walking-stick and popular opinion accused him of having resorted to the aid of sorcerers in order to be able to retain the King's favor (ibid.: 122).

The ceremonies called 'Edicts of Faith' were proclaimed – commonly during Lent – in all major towns whereby people were urged to denounce anybody who might exercise heretical or blasphemous acts (ibid.: 124). The pronouncement of the sentences of those found guilty by the Inquisition was declared in a solemn public ceremony entitled an *auto-da-fé* [Sp. *auto de fe*, act of faith], which was often arranged in connection to some great event, such as Philip IV's ascension to the throne in 1621 (ibid.: 125). There were about thirty *autos* in the reign of Philip IV (1621–1665), eight of these taking place in Seville, where Correa worked from 1599 to 1636. Seville was also known for particularly sumptuous and spectacular processions during the important religious celebrations such as the *Semana Santa* (the Holy Week) or the *Corpus Christi*.

Different religious fraternities and the numerous monasteries and convents were an important part of the religious life of Spain in the seventeenth century as well. The foundation of new holy orders (such as the Jesuits) and the reform of older ones (such as the Augustinians and Carmelites) took place and contributed to the increasing attraction of monastic life (ibid.: 106). Numerous brotherhoods and sisterhoods played a prominent role in the worship of the Virgin and the saints. The different confraternities could be locally oriented, could be affiliated to different guilds and professions, or could in some cases even be directed to foreigners residing in Spain (ibid.: 114–115).

The growing interest in monastic life had also disadvantages and a negative impact on the political economy of seventeenth-century Spain. In 1625 the Spanish monarch received complaints from the *Cortés* about the number of monasteries, which had already reached 9,000; it is probable that the number of convents was not smaller. It has been estimated that if the monks, nuns and lay clerics were counted, their figure was at least 200,000 in all (out of a population of eight million people). (Ibid.: 107.) The keenness to enter a monastery or a convent was not solely explainable by religious reasons. Holy orders offered the possibility of eventually acquiring some high office in the church or state, regardless of whether one was of noble birth (ibid.: 106). The contempt for manual labor has also been mentioned as having an impact on the attraction of monastic life (ibid.: 107). In addition, convents could serve as refuges for widows and young daughters of noble birth. The convents of the commanderesses of Calatrava and St. James were founded by two orders of knights and were meant exclusively for nobles. (Ibid.: 109–110.) All in all, the numerous monasteries

and convents were – somewhat surprisingly – still another factor which was decreasing the badly needed labor supply, the other major reasons for the lack of workers being the nearly endless warfare, emigration, long periods of unfavorable climatic conditions, and severe epidemics of plague during the seventeenth century.

The worship of the Virgin had an important role in the Spanish church, which had tried to persuade the Council of Trent to adopt a dogma of the Immaculate Conception (ibid.: 114). It is remarkable that all classes of the society and the state were united in the defense of this dogma, to the extent that it was respected among the knightly order of Calatrava and even by the Sevillian brigands (ibid.). The significance of the dogma of the Immaculate Conception and the worship of the Mother of God in general had its reflections in Correa's life as well, including his *Facultad orgánica*. On the verso of the last folio of Correa's book, he expresses his veneration and praise for the "MOST HOLY SACRAMENT, AND THE Immaculate Conception of the Virgin Mary Our Lady Conceived Without the stain of the Original sin".

ALABADO SEA EL
SANTISSIMO SACRAMENTO, Y LA
Inmaculada Concepcion de la Virgen Maria Nuestra
Señora Concevida Sin mancha de pecado
Original (Correa 1626: 204v).

Also of interest is a mention found in Correa's testament (preserved in the *Archivo Histórico Provincial* of Segovia and made known by the musicologist Louis Jambou), that he be buried in the nave of *N[uest]ra Señora de la Conzecion*, as near to the holywater font as possible (Ayarra Jarne 1986: 106–107; plate 10). In practical terms, Correa wanted to be laid to rest in a place where the churchgoing people crossed themselves and worshipped the Virgin.

Upon studying the religious life of seventeenth-century Spain, one is bound to get an impression of its twofold aspects. On one hand, religious fervor was often embodied in the hatred of heresy and in fierce measures taken to weed it out. (Hence the power of the Inquisition still in Correa's lifetime.) The King of Spain was known as the "Most Catholic King" who confronted heresy much beyond the boundaries of his own dominions (Darby 1994: 3). On the other hand, there was another kind of practical Christianity, in the form of considerable charitable practices, such as hospitals and hospices for the poor and the *sopa boba* (the 'convent broth'), which saved many from death by starvation (Defourneaux 1970: 113).

⁵ The English translations of the citations of Spanish sources are my own if not otherwise indicated.

5 The Concept of Personal Honor

Besides the honor of being a good Christian, the concept and sense of personal honor was important in the Spanish culture of the Golden Century and of Correa's age. It has been observed that besides the Catholic faith, la *honra*, honor, was another value "which surpassed life itself" (Defourneaux 1970: 32). This concept of honor had two different aspects to it: the expression of one's personal worth and of one's social standing, the latter being easily destructible (ibid.). Those of noble birth cherished the tradition that went with nobility and enjoyed several privileges. One's nobility was verified by a letters patent, the *executoria*, and it exempted one from direct taxation, from debtors' prison, and from the "dishonor of the gibbet" in the case of a capital crime (ibid.: 40). Taking care of one's outward appearance was utterly significant and not less so among both the lowest ranks of noblemen and impoverished nobles.

Nevertheless, the most respected form of honor was apparently that of sosiego, a kind of inner serenity and calmness of mind in the face of fateful blows. One example that has been given as a demonstration of sosiego was the peacefulness of Philip II at the moment when the news of the disastrous defeat in 1588 of the Spanish armada – considered "invincible" hitherto – reached him (ibid.: 32–33). Another good example is the masterly painting of Velásquez, "las lanzas," or the Surrender of Breda, where the famous Spanish commander Ambrosio Spinola receives the keys of the captured city of Breda (ibid.: 33). Spinola's gestures and expression reflect extreme self-command and serenity instead of arrogance at the moment of victory, before the defeated. (Velásquez's masterpiece is currently in the *Museo del Prado* in Madrid.) Still another demonstration of sosiego was the stoic fortitude of Philip IV upon the loss of his first wife Queen Isabella and of his son only two years later (Darby 1994: 59). Spanish paintings and literature of the Golden Century frequently touch in refined ways the differents elements of la honra and el sosiego. One of the finest literary examples must be the playwright Lope de Vega's words in his La Estrella de Sevilla: "Honour's clear transparent glass; A breath's enough to cloud it over" (quoted in Defourneaux 1970: 34).

6 The Life of the Arts in Seventeenth-Century Spain

6.1 Pictorial Arts, Literature, Architecture and Craftmanship

Simultaneous to the worsening signs of economic and agricultural decline, demographic loss and hardships brought by mutinies and ceaseless warfare was the creation of masterpieces in several fields of the arts in seventeenth-century Spain. Correa's famous contemporaries produced masterly paintings, such as the *Laocoön* by El Greco (1541–1614) and "*las lanzas*," or the Surrender of Breda, by Diego Velásquez (1599–1660), who was called from Seville to Madrid to become Philip IV's court painter. Velásquez summoned another

master, Francisco de Zurbarán (1598–1664), to assist him in decorating the *Buen Retiro*, the new Madrid palace of the Spanish king. Philip IV was a great patron of the arts; he loved the theatre and had a great collection of paintings (Darby 1994: 37).

Another contempory of Correa, Miguel de Cervantes Saavedra (1547–1616), was born in the university town of Alcalá de Henares, where Correa's Facultad orgánica was printed in 1626. Cervantes's Don Quixote was published in 1605 (part I) and in 1615 (part II) in Madrid. The famous Spanish playwrights Gabriel Tellez (1584–1648) – who used the pseudonym Tirso de Molina, Pedro Calderón de la Barca (1600–1681), and Lope Felix de Vega Carpio (1562–1635) were Correa's contemporaries, too. The theatre enjoyed special importance and popularity in the cultural life of seventeenth-century Spain. However, one should not forget the fine achievements of Spanish architecture, of which the beautiful plateresque style is only one example. Depending on the region, numerous vestiges of Moorish influence can be found in the architecture and the style of decoration and ornamentation as well. Perhaps one of the most outstanding examples of such influences is Correa de Arauxo's hometown, Seville. Even Correa's Sevillian place of work, the Church of San Salvador, was a former mosque. In the field of decoration, local traditions of special fine craftmanship are to be remembered, such as the technique of embossing metal entitled Oro de Toledo, the "Gold of Toledo." Mastery of various special fields of art and architecture reached perfection in the Spanish churches, which were regarded as particularly sumptuous by travellers and foreigners and which caused admiration. The Spanish Court was another milieu of brilliance; Philip III has been held as "quite an extravagant king" whose household expenses reached approximately 1.3 million ducats annually (ibid.: 13), a considerable sum in the budget.

6.2 Contemporaries of Correa in the Field of Keyboard Music

During the seventeenth century, there were several significant composers and organists working in different parts of the Peninsula. The celebrated composer Tomás Luis de Victoria (about 1548–1611) was organist and chaplain at the Royal Convent of Barefoot Nuns in Madrid, where he wrote his highly valued masterpiece, the Requiem Mass, *Officium defunctorum* (1605). Upon Philip III's accession to the throne, Diego del Castillo and Hernando de Cabezón still served in the royal chapel. Later, Diego de Castillo was succeeded by his brother Bernardo Clavijo del Castillo (Hoag 1980: 9).

Among other important predecessors and contemporaries of Correa in the field of keyboard music were Francisco Peraza (1564–1598), Sebastián Aguilera de Heredia (1561–1627), and Pablo Bruna (1611–1679). Francisco Peraza was the famous organist of the Cathedral of Seville in the time of Francisco Guerrero (Preciado 1970a: 7). Sebastián Aguilera de Heredia was the first significant figure in the seventeenth-century school of organists around Saragossa in Aragon (Parkins 2004: 326) whose organ compositions reflect

⁶ Plateresque style is a Spanish variation of the Renaissance style of architecture.

the developments of Spanish keyboard music in the period between Antonio de Cabezón (1510–1566) and Francisco Correa de Arauxo (1584–1654). Aguilera was first appointed organist of the Cathedral of Huesca but in 1603 acquired the important post of organist of the Cathedral of *La Seo* in Zaragoza, the position that he held until his death (ibid.). Another notable organist and composer, José Jiménez (1601–1672), succeeded Aguilera to the post at *La Seo* (Hoag 1980: 15). Also Pablo Bruna belonged to the best Aragonese composers of keyboard music, in addition to Aguilera and Jiménez. Bruna has been evaluated later as "undoubtedly the most important composer of Spanish keyboard music between Correa and Cabanilles" (Parkins 2004: 331). Bruna served as organist of the Collegiate Church of *Santa María la Mayor y de los Sagrados Corporales* from 1631 (when he was only nineteen) until his death in 1679. He was much respected by his contemporaries, including Philip IV, who often stopped along his journeys to listen to Bruna's playing in Daroca. Philip IV gave to Bruna the widely known sobriquet *El Ciego de Daroca*, the "Blind Man of Daroca." (Stella [ed.] 1979: VII.) (Bruna had been blinded in childhood by an illness, as had Antonio de Cabezón.)

The Portuguese organist and composer Manuel Rodrigues Coelho (c.1555–c.1635) was another of Correa's prominent colleagues. Coelho worked first as temporary organist in Spain, in the Cathedral of Badajoz (1573–1577), but returned later to his Portuguese hometown of Elvas to serve as cathedral organist (Parkins 2004: 331). Lisbon had a royal chapel of its own, and in 1602 Coelho was appointed to the post of the court organist there (ibid.). In 1620, Coelho's *Flores de música pera o instrumento de tecla & harpa* was published in Lisbon, only six years before Correa's *Facultad orgánica*. *Flores de música* contains twenty-four *tentos*, four *Susanas* (intabulations on Lassus's *Suzanne un jour*), and liturgical music. Coelho's collection was not only an important keyboard music publication contemporaneous to Correa's, but also the first volume of Iberian keyboard music printed since Antonio de Cabezón's *Obras de música* (1578, Madrid).

Although Juan Bautista José Cabanilles's (1644–1712) life did not coincide with Correa's for more than ten years, Cabanilles must be mentioned in the context of my work as a major figure among the Spanish keyboard music composers and organists. He was born in Algemesí, near Valencia (ibid.: 342), and was very productive as a composer. Cabanilles worked in the post of organist at the Valencia Cathedral until his death. His first position was that of the second organist at the Valencia Cathedral in 1665, but already the next year he was appointed to the post of first organist (ibid.).

⁷ Tento is the Portuguese equivalent of the Spanish *tiento*.

⁸ Tentos can be included in the category of larger ecclesiastical works with (ordinarily) freely invented subject matter and could be employed in the services, in addition to such liturgical music which was strictly based on liturgical themes.

6.3 Employers of Musicians; Music in Court, Church, and Everyday Life

The Spanish church and court were two great employers of illustrious musicians in the Spain of the Golden Age and in Correa's time. The role of the royal chapels was significant in the musical life of Spain. There were the Spanish and the Flemish Chapels, both supported by Charles V, the former one having been founded in 1526 (Whiteside 1994: 15). The other royal chapel, the Flemish Chapel, was founded at the time of Charles's coronation and its members were from the sovereign's Burgundian kingdom (ibid.). The staff of the Spanish Chapel consisted entirely of Spanish musicians. The Spanish Chapel remained mostly in Spain and was addressed to serve the Empress Isabella. Charles's Flemish Chapel, instead, accompanied the Emperor on his journeys (ibid.: 15–16). The Spanish and Flemish Chapels remained separate royal chapels as late as 1636, when they were combined into one chapel (ibid.: 18). (As already mentioned, Lisbon had a royal chapel of its own.)

Needless to say, the Spanish church engaged numerous musicians in its service. *Maestro de capilla* took care of the vocal music required; in addition, there was one or several organists, depending on the particular church's needs. The post of church organist was filled through *oposiciones*, occasions where the skills of the applicants were thoroughly tested. The *oposiciones* could last for several days and according to surviving documents, they could be demanding indeed. Even Francisco Correa de Arauxo was turned down upon applying for the post of organist of the Cathedral of Seville in 1613 (Ayarra Jarne 1986: 71–72).

Instrumentalists of varying combinations were also needed on many occasions, both sacred and secular. These *ministriles* could sometimes be hired jointly by the church and the town (Hoag 1980: 35). It is good to remember that many households of nobles employed musicians as well. However, music was not a privilege enjoyed only by certain ecclesiastical, royal, or noble élites but – together with dance – it figured importantly in everyday life. Music in various forms played an essential role in the celebration of religious and secular festivals, in processions, in theatre performances, and in traditional local festivities, *fiestas* of several kinds bearing special characteristics. In the Golden Age of Spain, theatre became a real passion of all classes of the society and was an important part of the intellectual life of the time (Defourneaux 1970: 135). Another extremely popular entertainment and passion for a Spaniard regardless of his social class were the bullfights, *corridas* (or, *toros*), which often took place in the context of other festive occasions, even religious and academic celebrations (ibid.: 169). In the course of the bullfights, a special kind of music was (and is) played at particular moments of the fight.

Besides music, dance was an integral part of most of the secular and also sacred occasions. As a demonstration of the latter, dance could sometimes be seen even in a church, as the tradition of performing the *danse des six* before the High Altar in the Cathedral of Seville shows (ibid.: 129). In this dance which took place in the middle of the liturgy, a

group of six boys or more (called *los seises*) performed in veneration of the sacrament (Hoag 1980: 35). Various forms of masquerade figured as a part of festivities as well, and these, too, could occur in the context of religious celebrations, such as the *Corpus Christi*. During the Golden Age, and in Correa's lifetime, there were years in which "holidays," including Sundays, outnumbered working days in Spain (Defourneaux 1970: 128).

7 The Spanish Academic Life in the Golden Age

The famous *Universidad de Salamanca* was the first Spanish university, retaining its prestigious position until the end of the Middle Ages (Defourneaux 1970: 163). The teaching of organ playing had long traditions at the University of Salamanca, which had an organ teacher on its faculty as early as 1254 (Bovet, handout 1984: 2°). In the middle of the sixteenth century, several universities were founded in both big historical cities such as Toledo, Seville, Saragossa, and Valencia and also in little towns like Baeza, Oropesa, and Osuna (Defourneaux 1970: 163). However, only the University of Alcalá de Henares – founded in the early years of the sixteenth century – was a potential rival to the University of Salamanca. The teaching of the University of Alcalá was focused on theology, philology, and classic literature. (Ibid.: 164.) The University of Salamanca had over 7,000 students in 1584, the year of Correa's birth, while the students of the University of Alcalá numbered about 2,000 at most (ibid.: 165). Francisco Correa de Arauxo must have been familiar with the atmosphere of the university town of Alcalá de Henares, since Alcalá was the very place where his *Facultad orgánica* was printed in 1626.

Spanish universities of the Golden Age had different biases in their teaching. In Valladolid, Roman and Spanish law could be studied, while the University of Valencia focused on teaching medicine. The most fortunate of the university students were admitted to some *Colegio Mayor*. Such 'upper schools' "were founded by prelates or pious people who were anxious to give poor students the opportunity to pursue their studies secure from financial worries" (ibid.: 171). Nevertheless, during the second half of the sixteenth century, the *Colegios mayores* became increasingly aristocratic and their original purpose was fading, causing the numbers of the students entering the *Colegios menores* to expand (ibid.). However, the bulk of the (less well-off) university students lived their student life outside the colleges, in more modest accommodations than their fellows residing in one of the colleges. In some places the minimum standard for the student residences outside the colleges was guaranteed by a regulation, and the landlords were directed to offer students a daily meal, too (ibid.: 171). One such regulation was issued in 1534 in Salamanca, for example (ibid.).

⁹ Guy Bovet's handout entitled "La musique d'orgue espagnole," used as material in a course on organ playing arranged by the University of Oulu, held in June 1984 in Oulu, Finland. There is no date on the handout itself.

The causes for the decline of the formerly flourishing academic and university life in Spain of the early seventeenth century have been said to be mainly intellectual and to be a consequence of the new rise of scholasticism, a scorn for new ideas and a certain introversion following the era of Philip II. Additionally, the Jesuit colleges had become rivals to universities, which was reflected, for instance, in the resistance by many great Spanish universities to the Imperial College of Madrid, founded there in 1625. (Ibid.: 176.)

II CORREA'S LIFE

1 Attempts to Determine Correa's Dates: A Historical Survey

Still at the end of the 1940s, Santiago Macario Kastner wrote that thus far no one had been successful in finding information about the dates of Correa's life span (Kastner 1948: 11). Kastner had scrupulously gone through the list of children baptized beginning in 1560 in the congregation of (San) Salvador without finding Correa's name there (ibid.). In addition, Kastner had checked the books of the deceased from 1630 to 1645 and from 1662 to 1667. Kastner reports that the books of the deceased from 1646 to 1661 were lost. (Ibid.: 12.)

One hypothesis of Correa's date of death is the year 1663, but we do not know, Kastner notes, from where the first biographers of Correa took that date. The same year was also used by Ernesto Vieira in his *Diccionario Biographico de Musicos Portuguezes* (Lisbon, 1900) and by Higinio Anglés in the *Peter Wagner-Festschrift* (Leipzig, 1926). According to Kastner, H. Anglés for one had copied the date from Felipe Pedrell, who had confused Correa with the bishop of Segovia. (Ibid.) Furthermore, the same year was mentioned – with question marks – in the *Contribución al Estudio de la Música española y portuguesa* (Lisboa, 1941; ed. by Santiago Kastner) and in the aforementioned preface to the first edition of the *Facultad orgánica* – although "with maximum reservations" (ibid.).

In his preface to the first Correa edition, Kastner estimated Correa's date of birth to be somewhere between 1575 and 1577 (ibid.). Following Kastner, Dionisio Preciado used the date 1575/77 in his article "Francisco Correa de Araujo (1575/7–1654), ¿organista español o portugués?" in *Tesoro sacro musical*, LV (1972), pp. 99–105, and in his book *Los quiebros y redobles en Francisco Correa de Araujo 1575/77–1654: Estudio sobre los adornos de la música de tecla española de principios del s. XVII (1973).*

The inexactitude of Correa's dates has prevailed in the literature about the composer up to the last two decades or so. For instance, the entries on Correa in different encyclopedias and dictionaries reflect the situation well. In *Die Musik in Geschichte und Gegenwart* (1952, Band 2: 1691), José Subirá sets Correa's birth date to be around 1575–1577 and the date

¹ This is the eleventh (unnumbered) page in Kastner's preface to his edition of Correa's *Facultad orgánica*, first published as volumes VI (1948) and XII (1952) in the series Monumentos de la Música Española. Barcelona: Instituto Español de Musicología.

of his death as 1663. In the *Larousse de la Musique* (1957, tome premier: 231), Correa's birth date is stated to be about 1576. In this particular entry, there is neither any death date nor the name of the author of the given entry. In the *New Grove Dictionary of Music and Musicians* (1980, Vol. 4: 799–800), Barton Hudson writes that Correa was born around 1576–1577 and died circa October 31, 1654. Lastly, according to *Baker's Biographical Dictionary of Musicians*, revised by Nicolas Slonimsky, Correa was born in about 1576 and died on October 31, 1654 (Slonimsky 1984, 7th edition: 502).

In addition to the entries in encyclopedias and dictionaries, a similar phenomenon about the uncertainty of Correa's dates also dominated other literature and research focused on him (or on the performance practice of Spanish keyboard music of the 17th century) until two important research reports by José Enrique Ayarra Jarne were published in 1981 and 1986, followed by an article by Antonio Ramírez Palacios in 1987. For the sake of demonstration, I will give some examples of attempts to determine Correa's dates in sources focused on him.

In 1968, in Robert Stevenson's excellent and lengthy article "Francisco Correa de Arauxo: New Light on his Career" (in the *Revista musical chilena*), many new facts about Correa's life were revealed. In his article, Stevenson states that Correa "could easily have been born as late as 1580" (Stevenson 1968: 13) and that "Correa died shortly before February 13, 1655" (ibid.: 27). Stevenson's comment on Correa's date of birth being possibly as late as 1580 derives from his reasoning that if Correa's earlier-suggested birth year was really between 1575 and 1577, Correa's appointment at Segovia (in 1640) could date as late as from his sixty-fifth year (ibid.: 13), which seems to be rather late. In his article, Stevenson also pays attention to the life span of Correa's contemporary, the bishop of Segovia, whose name was Francisco de Arauxo and whose dates (1580–1663) and name had formerly led many scholars astray (ibid.: 27).

Dionisio Preciado's 1973 book *Los quiebros y redobles en Francisco Correa de Araujo* (1575/77–1654) gives 1575/77 as Correa's year of birth (Preciado 1973: 17) and October 31, 1654, as the year of death (ibid.: 18). Unfortunately, Charles Jacobs's book *Francisco Correa de Arauxo* of the same year includes information which was a setback to the Correa chronology. Jacobs writes that "It is from the information regarding the span of Correa's employment that we calculate that he must have been born c. 1575–80" (Jacobs 1973: 2) and further: "It is not unreasonable to place Correa's date of death at c. 1640" (ibid.: 4). In 1980, Barbara Brewster Hoag in her dissertation "The Performance Practice of Iberian Keyboard Music of the Seventeenth Century" (PhD diss., New York University) names "composers listed by area and period between 1699–1670." In Hoag's chronological presentation, Francisco Correa de Arauxo is classified as a Castilian composer who flourished from 1581 to 1636. (Hoag 1980: 151.)²

² Although Correa's nationality will be discussed further in this dissertation, it is worth of noting at this point that Correa was most probably Sevillian and thus Andalusian by birth.

The publication of José Enrique Ayarra Jarne's books *Sevilla en la vida y la obra del organista Francisco Correa de Arauxo* (1981) and *Francisco Correa de Arauxo*, *organista sevillano del siglo XVII* (1986), was the outcome of Ayarra Jarne's archival research focusing on Correa's dates, among other things. In the first publication, the author writes that "we can already verify that Francisco Correa was born between 1583 and 1584, more specifically, between the September 13, 1583, and the March 23, 1584" (Ayarra Jarne 1981: 18–19). In the same book, Ayarra Jarne states that Correa died at the end of October in 1654 (ibid.: 54). In his second publication, Ayarra Jarne claims that Correa was born in 1584 but adds that if all possibilities are taken into account, maybe in 1583 (Ayarra Jarne 1986: 26). The information concerning Correa's year of death is exactly the same as in the first book by Ayarra Jarne, except for the addition that a serious illness took Correa to his grave (ibid.: 106).

In 1985 Jon Burnett Holland in his dissertation "Francisco Correa de Arauxo's 'Facultad organica': A Translation and Study of Its Theoretical and Pedagogical Aspects" (DMA diss., University of Oregon) refers to Ayarra's first book (1981) and thus gives Correa's dates as 1583/84–1654 (Holland 1985: 13, 26).

Finally in 1987, Antonio Ramírez Palacios in his article "Sevilla, la patria de Francisco Correa de Arauxo" (in *Revista de Musicología*, X/3, Sept.–Dec.) shed further light on Correa's year of birth by claiming that a particular mention of a child's baptism which he had found in the archives of the former parish of San Vicente concerned Francisco Correa de Arauxo. The child was given the name Francisco [Correa] in a baptism that took place in the congregation of San Vicente on the 17th of September in 1584 (Ramírez Palacios 1987: 805). Ramírez Palacios writes that in Correa's time the date of baptism did not usually indicate the date of birth. However, according to the practice prevailing in those days, a child would normally have been baptized only a few days after he was born. (Ibid.) In any case, it seems safe to say that Francisco Correa de Arauxo was born in Seville in 1584 (possibly around the middle of September) and died in Segovia in late October, possibly October 31, 1654.

Since Ayarra Jarne's and Ramírez Palacios's archival research, Correa's dates have been updated in the recent editions of *Die Musik in Geschichte und Gegenwart* (2000, Personenteil 4: 1648) and the *New Grove Dictionary of Music and Musicians* (2001, Vol. 6: 496). According to both entries, Correa was baptized in Seville on September 17, 1584, the New Grove entry mentioning also that Correa was Sevillian by birth. The date of Correa's death has been given as October 31, 1654, in the *MGG*, and as between October 16 and November 3, 1654, in the *New Grove Dictionary*.

³ See also *Documento III* at the end of Ramírez Palacios's article (p. 810) where the author has copied the document concerning Correa's baptism from *Archivo de la parroquia de San Vicente. Sevilla. Libro 8 de bautismos* (1582–1588), f. 132v⁰. Note also that José Enrique Ayarra Jarne had already in 1981 cited the mentioned *Libro de bautismos*, relegating this information to a footnote, presenting it as a mere possibility of really concerning Francisco Correa de Arauxo (Ayarra Jarne 1981: 21).

2 Correa's Early Years and His Family

As already has been seen, Antonio Ramírez Palacios is one of the scholars who has made the information about Francisco Correa's course of life more precise (e.g., the date of Correa's baptism, knowledge about his family and his childhood). With the information gathered by Ramírez Palacios, the debate of several decades about Correa's origin has probably been brought to its end – if we believe that the documents studied by Ramírez Palacios really refer to our organist and his parents. (For a contrary view, see Ayarra Jarne 1981: 21; idem 1986: 28.4)

Ramírez Palacios came across an important document in *El Archivo de Protocolos Notariales de Sevilla*. The discovery brought to light represents a certain type of document that was common in Correa's era. This kind of document was written at a person's request. The contents could prove deeds or situations that were favorable to either the party concerned or his family members. (Ramírez Palacios 1987: 800.)⁵

The particular document that caught Ramírez Palacios's attention was written at Correa's request on the sixteenth of October in 1629 (ibid.). In this request for the needed information, Correa was first identified by his first name (Francisco) and his usual surname (Correa), after which he was presented as "presuitero, organista en la yglesia colexial del señor san salbador desta Ciudad e uecino della" (presbyter, organist of the Collegiate Church of San Salvador of this town and the inhabitant of it) (ibid.: 806). Next, Correa presented the information that he was the legitimate son of Simón Correa, potter, and Isabel de San Juan, who had been inhabitants of the parish of San Vicente in [the street] "Bal Hondillo" [i.e., Calle de Bajondillo] and who were deceased. Correa's father had died between 1598 and 1599 and his mother around 1625–1627 (ibid.: 804).

The next step in the preparation of the document was the statements of witnesses that were to provide the rest of the needed information, namely, that: 1) Correa's parents were legitimately married; 2) during their marriage a legitimate son was born; and 3) Correa's parents were honorable people who led a good life and were good Christians (ibid.: 802–803). Four witnesses were called to testify: Francisco Farfán de los Godos, Juan de Canto, Hernando Rodrigues Escalona and Francisco Sanchez Pedrosa. It is significant that all the witnesses belonged to the world of ceramics in a wide sense. Francisco Farfán de los Godos belonged to the guild of brickmakers and the other three to the guild of potters.⁷

⁴ José Enrique Ayarra Jarne's view concerning the reliability of the information about Fr. Correa de Arauxo and his parents and Correa's origin will be discussed in more detail in *Chapter II*, *3 The Debate on Correa's Origin*.

⁵ The described type of document differs from documents that dealt with "the purity of blood" (*una información de limpieza de sangre*).

⁶ Note that neither of Correa's parents used the surname *Acevedo* (in the Portuguese or old orthography also *Açevedo* or *Acebedo*) or *Arauxo*. Antonio Ramírez Palacios concludes that Francisco Correa had probably taken those surnames from some of his distant relatives from either his father's or his mother's side (Ramírez Palacios 1987: 804).

⁷ See the part *Documentos* in Antonio Ramírez Palacios's article from 1987: "Sevilla: La patria de Francisco Correa de Arauxo" in *Revista de Musicología*, Vol. 10, 3: 806–810.

It was natural to call witnesses that were professionals in the guilds of ceramics because Correa's father belonged to one of those guilds, too. In their testimonies, all four witnesses agreed (with minor differences in counting the time) that they had known Correa's parents some time before Correa was born. The witnesses also testified unanimously that they had known Correa from his birth, the first witness Francisco Farfán de los Godos even claiming that he had assisted in the baptism of Correa which took place in Correa's home. Another witness, Juan de Canto, testified for his part that he had lived with Correa's parents while he was a young apprentice to a ceramics master (ibid.: 804).

The document that Correa had asked for thus offers information about his early years and about his parents. Simón Correa and Isabel de San Juan were married in the Sevillian congregation of San Martín on February 13, 1583 (ibid.). According to the *Archivo de la parroquia de San Vicente. Sevilla. Libro 8 de bautismos (1582–1588)*, Correa was baptized on September 17, 1584, in the congregation of San Vicente (ibid.: 805, 810), as has already been learned in the course of this study. Ramírez Palacios writes that "The colossus of the organ was born and baptized in a Sevillian town. Seville is, therefore, Francisco Correa de Arauxo's homeland." (Ibid.: 805.)

Thanks to the said document, we have some information about the environment of Correa's childhood. His family lived on *Calle de Bajondillo* in a section of the city bearing the same name. Correa's home was located in the vicinity of the monastery of *Santa María la Real*, and it was a combination of residence and workshop for Correa's father. Today *Calle Juan Rabadán* coincides with the old *Calle de Bajondillo*. (Ibid.: 803.)

Correa's principle motive for requesting the kind of document under discussion is not clear. Perhaps the preparation of such a document had something to do with his petition the previous summer for a lengthy absence from his *Cabildo*, ¹⁰ in order to take care of some private matters outside of Seville. In the capitular act of June 29, 1629, Correa is granted permission for a two-month absence. In another capitular act of August 27 of the same year, Correa asks permission in a letter for a further two-month absence. The said capitular act reveals that Correa is in Madrid, taking care of some personal business. (Ibid.: 801.) There is a good possibility that Correa's sojourn in Madrid during the summer and early autumn of 1629 and the document that Correa asked for on October 16, 1629, had to do with his appointment by King Philip IV to the Royal Chaplaincy of the Royal Convent of Incarnation of Madrid¹¹ in the next year, 1630 (ibid.: 802).

⁸ See also *Documento II* on page 810 of Ramírez Palacios's article where he has cited the original document in full (from the *Archivo de la parroquia de San Andrés. Sevilla. Sección San Martín, libro 2 de matrimonios* (1580–1598), f. 37 r⁰).

⁹ Please note that although Ayarra Jarne in 1981 cited the same documents as Ramírez Palacios, the former took a far more sceptical view of those documents, doubting whether the citations mentioned really concern our organist and his parents (Ayarra Jarne 1981: 21). In his publication of 1986, Ayarra Jarne presents a less strict view in regard to the mention of Correa's baptism, admitting that the said document "could well be that about our organist" (Ayarra Jarne 1986: 28).

¹⁰ The chapter or bishop's council.

¹¹ La Capellanía Real de su Real Convento de la Encarnación de Madrid.

3 The Debate on Correa's Origin

Although today scholars are generally unanimous as to the Spanish origin of Francisco Correa de Arauxo, debate continued to some extent until the 1980s. Next I will present a few examples of the arguments – both pro and con – in respect to the native country of Maestro Correa.

As Macario Santiago Kastner pointed out in the prefatory explanations to the first modern edition of the Facultad orgánica, the question of Correa's origin might not have risen at all if the Portuguese Diogo Barbosa Machado had not included Correa in his Bibliotheca Lusitana, published in 1747 in Lisbon (Kastner 1948: 13). The said work represents a species of biographical dictionary dedicated exclusively to celebrated Portuguese and in which Machado listed Correa as "Franciscus Correa de Arauxo, Lusitanus, musicus" (Machado 1747: II, 136). However, Nicolás Antonio in the *Bibliotheca Hispana* of 1672 mentioned Correa (Antonio 1672: I^a edición, vol. II, Apéndices, pág. 323, col. 2.^a) without referring to any nationality (Kastner 1948: 13; Preciado 1973: 21).14 But again, the third edition of the Bibliotheca Hispana in 1787 (probably inspired by Barbosa Machado's work, according to Ernesto Vieira) lists Correa as "Franciscus Correa de Arauxo, Lusitanus, musicus" (ibid.). In addition, in a still earlier edition of the Bibliotheca Lusitana by João Franco Barreto, written between 1650–1660, Correa's name is ignored, although Correa's contemporary Manoel Rodrigues Coelho was mentioned (Preciado 1972: 101). Moreover, the said work was one of the principal sources for Machado's book and was still unedited in 1972, when Dionisio Preciado's above-cited article was published.¹⁵

In the absence of relevant documents that would have proved Correa's date and country of birth, even Santiago Kastner wrote in the *Contribución al estudio de la música española y portuguesa* that "We believe that Correa de Araujo would be Portuguese by birth and that he would have gone to Seville while still very young" (Kastner 1941: 242). One reason which Kastner gave for his claim was that both 'Correa' and 'Araujo' were "very Portuguese" surnames (ibid.). Nevertheless, in the prefatory explanations to volume one of the first modern edition of the *Facultad orgánica*, Kastner initially refers to his *Contribución al estudio* . . . and then admits that with the passing of time and in light of the later investigations "we have had to modify our opinion" [about Correa's origin] (Kastner

¹² Bibliotheca Lusitana (1747) was printed by Ignacio Rodrigues in Lisbon.

¹³ The volume and page are quoted in Stevenson 1968: 11.

¹⁴ The Correa entry in Nicolás Antonio's *Bibliotheca Hispana* (1672) reads: "Franciscus de Correa de Arauxo, laudatur author alicubi Musici operis ita nuncupati. Música práctica y theórica de órgano. Compluti editi in fol." (quoted in Preciado 1973: 21).

¹⁵ Preciado mentioned in his article "Francisco Correa de Araujo (1575/7–1654), ¿Organista español o portugués?" that he had had the chance to glance over the manuscript of the said work in the house of an excellent Portuguese historian (Preciado 1972: 101, footnote 17).

¹⁶ In the prefatory explanations to his edition of Correa's *Facultad orgánica* (1948, 1952, Barcelona), Kastner seems to have changed his view, writing that both 'Correa' and 'Arauxo' are as much Portuguese as they are Spanish. The surname *Açevedo* also used by Correa is common in Galicia and Portugal, according to Kastner (1948: 14).

1948, I: 13–14). He adds that: "Be that as it may, we maintain our view presented there (i.e., in the *Contribución al estudio*...) that 'perhaps Correa would be the most Iberian of all the authors for the keyboard in the sixteenth- and seventeenth-centuries; his spirit is not only Portuguese, Castilian, Andalusian or Catalan, but [it] also involves the essence of the thought of the peninsula. Correa's Iberian mind is not regional but universal...' " (ibid.: 14).

Robert Stevenson considered Correa to be Portuguese, which he expresses clearly in his biography of Correa by writing that: "Moreover, Correa de Arauxo like such other composers contemporary with him in Seville as the two leading Seville Cathedral musicians, Francisco de Santiago (ca. 1577–1644) and Manuel Correa (1593–1645), was of Portuguese birth" (Stevenson 1968: 11).

In 1972, Dionisio Preciado in his article "Francisco Correa de Araujo (1575/7–1654) ¿Organista español o portugués?" argued convincingly for Correa's Spanish origin. Preciado examines closely the opinions of various scholars – both for and against Correa's Spanish origin. There are basically two principal arguments by those whose opinions are inclined to Correa's being Portuguese: first, the aforementioned Diogo Barbosa Machado's listing of Correa in the Bibliotheca Lusitana (1747, Lisbon), and, second, the interpretation that Correa's surnames are more commonly used in Portugal, according to some authors. As far as Machado's claim in his biographical dictionary is concerned, Machado does not mention where Correa was born. In the said dictionary, Machado simply "takes Correa as Portuguese" by including him in a work listing only famous Portuguese (Preciado 1972: 100). As to the issue of Correa's surnames, Hilarión Eslava, for example, represents the view (in Museo Orgánico Español) that the surname Correa is Spanish and Araujo Portuguese. That would lead to the conclusion that Correa was of Portuguese origin on his mother's side. (Ibid.: 99.) Preciado points out that our interest lies precisely in confirming that all Correa's surnames were used in Spain long before Correa was born (ibid.: 101). In addition, the first of his surnames is written in the Spanish way (Correa), the Portuguese form being 'Correia.' According to Preciado, the second of Correa's surnames, Araujo [or Arauxo], is probably Galician rather than Portuguese. (Ibid.)¹⁷

Furthermore, Correa's own words in some paragraphs of the *Facultad orgánica* have been used to support the view of his being of Spanish origin. The first of such places is found in the *PROLOGO EN ALABANÇA DE LA CIFRA* (Prologue in praise of the *cifra*), where the author takes pride in the *cifra* notation, writing that "the ingenuity of us Spaniards invented this species of *cifra* that we have today . . .". :

... el ingenio de nuestros Españoles inve[n]tó este genero de cifra que oy tenemos ... (Correa 1626: § 4).

On the verso of the next folio, that is to say, in the introduction to the long chapter called *ADVERTENCIAS*, Correa states that the *PVNTO TREZE* of his preface mentions two

¹⁷ This reference is made to Preciado's footnote no. 20.

different measures. The first of these contains twenty-four and the second thirty-two notes per measure. According to Correa, this is "a new thing that none of the authors of these Kingdoms has set in print until today":

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\dots cosa nueva y de ningun autor destos Reynos puesta hasta oy en estampa (ibid.: fol. 1^{V}).
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One cannot be sure what Correa means by referring to "these Kingdoms." On one hand, the two above-cited places are found in two consecutive folios, and thus it would be natural to think that the second citation also alludes to the Kingdoms of Spain. On the other hand, the "Kingdoms of Spain" is not a clear concept either. We cannot be sure what geographic area Correa referred to by the Kingdoms of Spain because Portugal, too, was under the Spanish Crown during Correa's lifetime.

Further, Correa opens the *QVINTO Y SEXTO PVNTO* of his *ADVERTENCIAS* with the remark that "When I began to open [my] eyes to music there was not in this Town [Seville] even a trace of organ music with accidentals . . .". :

Quando comence a abrir los ojos en la musica no auía en esta Ciudad rastro de musica de organo, accidental... (ibid.: $3v^{18}$).

The above-cited words clearly refer to the City of Seville since Correa wrote his *Facultad orgánica* while he was living and working there. Correa's comment also implies that he was in Seville as a youth, when he began his music studies. Besides the reference to Seville, there is another place of interest in the *QVINTO Y SEXTO PVNTO*, in connection with accidentals, where Correa acknowledges that he is a successor of "many great players of the Old Castile" [in a particular theoretical issue]:

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... sigo a muchos grandes tañedores de Castilla la vieja ... (ibid.: fol. 4).
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Although here Correa does not state explicitly that he himself is of Spanish origin, at least he is definitely referring to a region that (also today) belongs to Spain proper, thus indicating that he is aware of the musical practices of many great Castilian players.

Coming back to the research of today's musicologists, José Enrique Ayarra Jarne also points out that, among other things, some scholars have based their assumption about Correa's origin on the "Portuguese roots" of the surnames Correa, Arauxo or Acevedo (Ayarra Jarne 1981: 19). After Ayarra Jarne had gone through all the surviving parish registers of the twenty-nine Sevillian congregations that existed in Correa's time, he was able to confirm that the surname Correa was rather common in Seville during the period of time in question (ibid.: 20). Moreover, still in Correa's era, the use of surnames was

¹⁸ Folio 3 is unnumbered in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

inconsistent and capricious; thus any conclusions on that basis only are often bound to be good guesses at best.

By 1981 Ayarra Jarne had found in the Sevillian parish archives the mention of a child of "Ximon Correa and Isabel de Sant Juan" baptized as *Francisco* [Correa] in the parish of *San Vicente Mártir*, on September 17, 1584 (ibid.: 21). The mentioned couple was married about one and half years before the baptism – more precisely, in the church of *San Martín* (belonging today to the parish of *San Andrés*) on February 13, 1583 (ibid.). After having cited both of the above-mentioned documents, Ayarra Jarne emphasizes that because one is not able to verify, for the time being, whether the said mention of baptism concerned Correa, Ayarra Jarne holds the legitimacy of this information as a mere possibility. In addition, still on the same page, Ayarra Jarne supposes that the certificate of Correa's baptism has probably been lost and that even today we have knowledge neither of the names of Correa's closest family members nor of Correa's residence. (Ibid.)

Precisely those two documents taken up by Ayarra Jarne (about Correa's baptism and the marriage of his parents) were cited in 1987 by Antonio Ramírez Palacios (1987: 810), but this time the same information could be used to verify Correa's Spanish origin. Namely, the combined information of the two documents together with a third document presented by Ramírez Palacios finally proved that the former two documents found and cited by Ayarra Jarne truly concern Francisco Correa de Arauxo. As has already been discussed in the previous chapter of this dissertation, the "third document" was a kind of official certificate involving information about Correa and his parents. In that document, Correa identified himself by stating his name and profession, and he then mentioned the names of his parents, which coincide with those Ayarra Jarne had cited as a possibility. As a result, the mention of a child baptized *Francisco* [Correa] in the parish register of San Vicente in the year 1584 turned out to be the one about Francisco Correa, the organist.

In addition to the weighty facts that: 1) in none of the documents about Fr. Correa de Arauxo known to us today is there any mention referring him to be of Portuguese birth; 2) there is no evidence suggesting that Correa's parents had arrived in Seville from elsewhere immediately *after* their son was born; 3) it has been verified that other relatives of Correa besides his parents were also settled in Seville, the document from 1629 presented by Ramírez Palacios appears to be the last word in a long debate on Correa's origin. It is also a final touch to the valuable, thorough and tireless efforts of such eminent musicologists as Macario Santiago Kastner, Robert Stevenson, Dionisio Preciado and José Enrique Ayarra Jarne.

4 Francisco Correa de Arauxo and His Professional Career

Francisco Correa de Arauxo (Araujo) worked in three Spanish towns in the course of his life. First he served at the church of San Salvador in Seville from September 1, 1599, until

¹⁹ This reference is made to footnote 17 in Ayarra Jarne 1981: 21.

March 31, 1636. After his thirty-seven years in Seville, Correa moved to the city of Jaén when he was offered the organist's prebend at the Cathedral. Correa began working at Jaén on Easter Sunday in 1636. Following his quadrennium in Jaén, Correa moved to Segovia, where he served at the Cathedral of Segovia, from 1640 until his death in 1654.

4.1 Correa's Sevillian Period (1599–1636)

Correa began his career at San Salvador, the Collegiate Church of Seville. As edifices, the church of San Salvador and the Cathedral of Seville were very different from one another. San Salvador had formerly been a mosque that was taken later into Christian use. Many skillful organists and chapelmasters served both in the Cathedral of Seville and in San Salvador. It is well to remember that San Salvador was second only to the Cathedral of Seville. In addition, it was customary that the Collegiate Church imitated the church service of the Cathedral (Stevenson 1968: 15). San Salvador could not have been an exception.

Robert Stevenson has reconstructed a list of organists who worked at San Salvador between 1550 and 1650:²¹ Francisco de Villegas, who was appointed on October 29, 1547; Hernando de Tapia, who was named no later than the 1570s and served until his death in 1593; Estacio de la Serna, who succeeded Tapia on October 29, 1593 (he resigned on May 6, 1595, in order to accept the post of Royal Chapel organist in Lisbon); Miguel de Coria, who was appointed on May 13, 1595, and died shortly before September 1, 1599, on which date Francisco Correa de Arauxo took over and served until March 31, 1636. Gaspar de Torres was appointed as interim organist on April 1, 1636, and served only five and a half months before Juan de Espinal was named titular organist on September 1, 1636. Espinal died shortly before August 20, 1649. Finally, Espinal's successor Miguel Galván held the post still in 1655. (Ibid.: 13.)

With such talented musicians both in San Salvador and the Cathedral of Seville, the question of who had given Correa his musical education arises. Of Correa's predecessors, either Tapia, Estacio de la Serna or Miguel de Coria had perhaps taught him. Of the Seville Cathedral organists, the virtuoso Francisco de Peraza could most likely have been Correa's teacher.

As already mentioned, Francisco Correa de Arauxo was appointed organist of the Collegiate Church of San Salvador on the first of September in 1599. At that time, he was only fifteen years old. Getting such an important post at an early age speaks of Correa's exceptional talent. As Robert Stevenson points out, "Correa's presence in Seville during

²⁰ See the first appended picture in José Enrique Ayarra Jarne's book published in 1986: *Francisco Correa de Arauxo: organista sevillano del siglo XVII*. Sevilla: Diputación provincial de Sevilla.

²¹ In Stevenson's own words, his list "includes at least the following eight organists active between 1550 and 1650" (Stevenson 1968: 13). Nevertheless, his footnote 29 cites San Salvador's *Libro 1*⁰ [de Acuerdos] 1540 à 1583, fol. 20v. Consequently, the first year of the time span (1550) given by Stevenson should be 1540.

the entire decade before he began as San Salvador organist can be verified" (ibid.: 14). This deduction derives from the fact that in 1630 several witnesses were asked to offer testimony in order to confirm Correa's exclusive right to the organ keys of San Salvador. One of the witnesses, namely a Sevillian grocer (Francisco Rodríguez), claimed that he had personally known Correa "for over forty years." Many other witnesses said that they had known Correa for "longer than thirty years." (Ibid.) In addition to the testimony of those witnesses, Correa's own words in the *QVINTO Y SEXTO PVNTO* of the textual part of the *Facultad orgánica* (cited also in *Chapter II*, 3 *The Debate on Correa's origin*) imply that he had received his musical education in Seville:

*Quando comence a abrir los ojos en la musica no auía en esta Ciudad [Seville] rastro de musica de organo, accidental*²²... (Correa 1626: 3v, folio unnumbered).

(When I began to open [my] eyes to music there was not in this Town [Seville] even a trace of organ music with accidentals)

Correa goes on to write that the first such music he saw notated in *cifra* was some verses in the eighth mode on *delasolre* by Peraza, and then there were also some others by Diego de el Castillo, a prebendary organist who served at the Cathedral of Seville, and afterwards at the Royal Chapel:

... y la primera que vide puntada en cifra despues de algunos años fueron vno[s] versos de octauo tono por delasolrre de Peraza y luego de ay a pocos mas, otros de Diego de el Castillo razionero organista q[ue] fue de la cathedral de Sevilla, y despues de la capilla Real... (ibid.).

The capitular act of June 2, 1632, mentions the following (adult) musical colleagues of Correa in San Salvador: eight singers and four instrumentalists. The usual number of choirboys was six but their voices began to be reinforced by those of castrati. Gregorio de Merola (*cap[p]on*), the first of the castrati, was appointed in 1630 and another in 1648. (Stevenson 1968: 15.) The *ministriles* – as the instrumentalists (the organ excluded) were called – consisted of *corneta* (cornet), *sacabuche* (sackbut) and *bajón* ([Ger.] dulzian; [Eng.] curtal). All the above-mentioned instrumentalists in San Salvador were on a regular salary. (Ibid.: 14–15.)

Although the capitular acts of San Salvador do not insinuate tense relations between Correa and his other musical colleagues (ibid.: 14), there were some clashes between Correa and his superiors. For instance, folio 899–899v of *Libro 11-de Pleytos Siguiendo los Sin Numero* tells us that Correa once led his *ministriles* downstairs from the organ loft, refusing to play (ibid.: 15). Keeping this "musicians' revolt" in mind, Robert Stevenson

²² Organ music in which accidentals are indicated at the beginning of a piece in a "key signature."

²³ Stevenson has translated bajón as 'bassoon' here.

makes an interesting observation concerning performance practice by asking: "Does such a statement permit our believing that, on occasion, Correa's own organ performances were reinforced by instrumentalists, each playing or glossing²⁴ a ciphered voice part?" (ibid.). This statement naturally has an exciting bearing on the performance practice of Correa's tientos by today's musicians. If it is true that Correa had several instrumentalists playing with the organ (or perhaps alternatively), there is no reason to believe that the custom of the Cathedral of Seville would have been very different from that of San Salvador. As Robert Stevenson expresses it: "... it was always the custom of a collegiate church in such a city as Seville to take cathedral usage as its model" (ibid.). The Seville Cathedral and San Salvador also had another kind of exchange. The same musicians could serve those two churches in turn. Additionally, San Salvador could invite the chapelmaster of the Cathedral to have his say in examining new musicians at San Salvador. Nevertheless, there were also restrictions concerning the musicians of San Salvador. The San Salvador chapter demanded that both Estacio de la Serna and Miguel de Coria promise that they would not accept organ jobs elsewhere, neither in the town nor outside the town (ibid.). These restrictions were imposed on Correa with the exception of two occasions, when the San Salvador chapter granted him permission to compete for an organ prebend outside Seville (ibid.: 15–16).

Because the chapter of San Salvador prohibited its musicians from applying for vacant posts elsewhere, it was difficult for them to get any extra pay. Nevertheless, Correa could earn some extra money by keeping the two organs of San Salvador in tune. (Ibid.: 16.) He was paid 4,488 *maravedís* annually for this job (ibid.). Another way of getting extra pay was through the twelve *fanegas*²⁶ of wheat that belonged to organists' annual perquisites. The wheat could be exchanged for cash if one was prepared to wait until the wheat could be sold. It was also impossible to know in advance the amount of the cash equivalent. To give an example, in 1606, Correa's salary as organist was 37,500 *maravedís*; after his wheat was sold, the salary increased to 44,844 *maravedís* (ibid.). When taking into account the pay for tuning both of the organs of San Salvador (4,488 *maravedís* annually), the cash equivalent for the sold wheat (7,344 *maravedís* per a year) and Correa's regular organist's salary (37,500 *maravedís* annually), his total income for the year 1606 totalled 49,332 *maravedís*. Stevenson, who has thoroughly researched San Salvador's *Quentas de fábrica*, "writes that the year 1606 represents" a typical year" for Correa's annual income. (Ibid.: 17.)

Chapelmasters usually earned much more than organists in Correa's time. However, Correa's salary was bigger than any other musician's in San Salvador. This shows once

^{24 &#}x27;Glossing' means decorating a voice part with diminutions.

²⁵ One of the organs was a large organ and the other a small portative organ (Stevenson 1968: 16).

²⁶ Fanega, the measure for dry provisions (e.g., grain, dried fruit) varied greatly in different regions of Spain. It corresponded to 55.5 liters in Castile (Diccionario de la lengua española by Real Academia Española, 1992. Vigésima primera edición, Tomo I, p. 950. Madrid: Editorial Espasa Calpe). Fanega could also mean a land measure, which was 1.59 acres in Spain and 1.73 acres in the Caribbean (The Collins Spanish Dictionary, 2000. Sixth edition, p. 448. Glasgow - Barcelona - New York: Harper Collins Publishers).

²⁷ Quentas de fábrica were a kind of account book, financial documents.

again that the chapter of San Salvador had great respect for Correa. Even the famous chapelmaster Diego de Palacios was hired by the chapter in 1630 for only 15 000 *maravedís* per year (ibid.).

The *Quentas de fábrica* reveal one puzzling thing concerning Correa's numerous signatures in them. In the *Que[n]tas de fabrica de 1601 a el año de 1608*, Correa has written "fr:0 correa de azeuedo" (ibid.: 18). In addition, Correa signed his name similarly in the *Que[n]t.* de fabrica de 1617 a el año de 1623: fran^{CO} Correa de azeuedo presbitero organista desta yg^a. The name Correa de Arauxo was used for the first time in 1626, the year of publishing the *Facultad orgánica*; in the same year Correa's degree status, *licenciado*, is mentioned in the San Salvador capitular acts. (Ibid.: 18–19.)

Apart from Correa's having received priest's orders "on the strength of his organ playing alone" – a token of esteem for which the canons later considered him ungrateful, the chapter of San Salvador showed its respect for the author of the *Facultad orgánica* in many ways around the year 1626 (ibid.: 19). Apparently, Correa received his priest's orders in 1608, exactly at the age of twenty-four, which was required for the ordination (Ayarra Jarne 1981: 37). In 1626 Correa was also given a lucrative chaplaincy which increased his duties. However, Correa resigned after some years from that chaplaincy; in the same year, 1626, he suffered from health problems. On August 30, 1626, Correa asked for another fifteen days' leave because he had had a relapse during his convalescence. The chapter granted the requested leave. In 1629, Correa asked for two months' leave from Seville in order to take care of some private matters. The chapter gave its permission on the condition that Correa find a capable substitute. Correa's pupil Antonio Carrasco took care of Correa's duties during his two-month absence. (Stevenson 1968: 19–20.)

On November 13, 1629, the San Salvador chapter learned that Canon Alonso Godines of San Salvador had been appointed auxiliary bishop to the Cardinal-Archbishop of Seville, Diego de Guzmán (ibid.: 20). Because the newly named auxiliary bishop wanted to respect his own chapter, he decided to celebrate his first Pontifical Mass in San Salvador.²⁹ This, of course, meant an increased effort by both the chapter of San Salvador and its musicians. The mass must have been a real spectacle. A contemporary account even mentions fireworks, cannonades and tower music.³⁰

As a consequence of Alonso Godines's appointment, the chapter made an effort to raise its services to a higher level. In these plans, music was an important aspect. Without any money to raise salaries, the chapter of San Salvador demanded of its musicians many new duties. These actions of the chapter led to the already-mentioned "musicians' revolt," led by Correa. His shouting in the organ loft his refusal to play added services without added pay resulted in Correa's landing in ecclesiastical prison. (Ibid.) Correa gave the key of the

²⁸ Francisco Correa de Azeuedo [Azevedo], a prebendary organist of this church.

²⁹ The Pontifical Mass took place on January 6, 1630, in San Salvador.

³⁰ The said account is extracted from Justino Matute y Gaviria's *Memorias de los Obispos de Marruecos y demás auxiliares de Sevilla* (Sevilla: En la oficina de El Órden, 1886, p. 34, quoted by Stevenson [1968: 20]).

small organ to Antonio Carrasco, but the key to the big organ could not be found anywhere after Correa's imprisonment. The canons gave the order that the lock of the big organ be broken and new locks put on the door of the organ loft and on the organ. After Correa was released from custody, he had to prove himself worthy of the sole possession of the keys. A long legal process and many witnesses were needed in order to restore Correa's exclusive right to the organ keys. (Ibid.: 20–21.)

In 1626, Correa had also served as Rector of the Brotherhood of San Salvador Clergy (*Rector de la hermandad de los Sacerdotes*).³¹ About thirty priests of the Brotherhood paid twelve *reales* annually to hire a physician, a pharmacist and an undertaker. In 1629, Correa was no longer the Rector of the Brotherhood. From that time on, the duty was given to Andrés Sánchez. In 1629, another disagreement broke out between Correa and the clergy of San Salvador. Namely, Correa together with another priest at San Salvador had hired carpenters to build some new doors that the Blessed Sacrament Confraternity, but not the prior and the canons, had wanted. (Ibid.) Correa and his colleague were fined "for such usurpation of authority" (ibid.).

In 1635 Correa was in need of a grant from the *Hermandad de los Sacerdotes* because he fell very ill that year. (Correa's health had given him trouble already in 1626 [ibid.: 19].) Correa's health improved when he moved to Jaén at Easter in 1636³² to accept the organistship of Jaén Cathedral, 33 succeeding Miguel García.

4.2 Correa in Jaén (1636–1640)

In Jaén, the attitude towards Correa was quite different from in Seville, where virtuoso performances had been demanded of Correa. In Jaén, the canons were primarily interested in Correa's ability to compose. In fact, the very first act of Jaén Cathedral that specifically mentions Correa reflects the Jaén chapter's interest in his creative abilities (Stevenson 1968: 22).

In Jaén – as at other major cathedrals of Spain – the Corpus Christi could not be celebrated without new *chanzonetas*. The Jaén chapter asked Correa to compose the needed pieces of music. However, Correa and other musicians had still not been paid for the music of the Corpus Christi by June of 1636. When the bishop of Jaén, Cardinal Sandoval, ³⁴ heard about the matter, he immediately asked the chapter to take care of musicians' neglected payments. The chapter decided then to pay Correa in kind, while two other musicians of the Cathedral were paid in cash. In other words, Correa was given six chickens for the *chanzonetas* while vihuelist Diego Blas de Guedeja received fifty *reales* and Gerónimo de Guevara thirty *reales* for *chanzonetas*. (Ibid.)

³¹ This post of Correa's is documented on the title page of the Facultad orgánica.

³² More exactly, in early April of 1636 (Stevenson 1968: 22).

³³ Jaén was also an Andalusian town, but it was "not so plague-ridden as Seville" (ibid.: 21).

³⁴ Cardinal Sandoval was "always alert to musicians' needs" (ibid.: 22).

The Jaén chapter had to hire another titular chapelmaster, José de Escobedo, to succeed the aged Juan de Riscos. Escobedo began to develop music in the Jaén Cathedral, engaging new *ministriles*, for instance. During Correa's four years in Jaén, the emphasis was on woodwinds, vihuelas, and guitars (ibid.: 23). Robert Stevenson has found another interesting element in the performance methods in Jaén while Correa was working there. This is documented in the act of January 5, 1640 (*Autos, Cappitulares de los Años de 1640* = 1641–1642). The chapter approved new performance rules: "organ playing can continue replacing the singing of psalms and canticles only if the clergy earning singers' stipends consent to utter in intelligible voice the appropriate scriptural texts while organist and/or instrumentalists play the verses" (ibid.). Moreover, "When organ substitutes for hymns, the hymn text must be read aloud by someone standing in front of a choirbook stand." Because *ministriles* and organist shared responsibilities in psalms and canticles, the organist's opinion was often asked prior to hiring any new instrumentalist (ibid.).

Upon getting an organ prebend in Segovia, Correa wrote a letter of resignation on April 16, 1640. It is possible that this letter was written after Correa had already settled in Segovia. On August 3, 1640, the canons of Jaén rewarded young Antonio de Suria with a fine cassock for having substituted as organist. (Ibid.: 23–24.) It was Francisco de Medina who succeeded Correa and was hired for 2,000 *reales*. In addition, Medina was paid an extra annual sum of 500 *reales* from April 12, 1641, onwards on the condition that he would serve at least three years continuously. (Ibid.: 24.)

4.3 Correa in Segovia (1640–1654)

According to the Segovian capitular acts of April 30, 1640, Francisco Correa de Arauxo took his *ejercicios de oposición* before the jury for the organistship of the Segovia Cathedral (Preciado 1972: 71). By that date, the other three candidates, Pedro Jalón from Burgos, Domingo Serrano from Osma, and Andrés de Ortega from Zamora, had already had their *ejercicios* (Ayarra Jarne 1986: 102). Only two days later, on May 2, 1640, Correa was chosen to the post, and he took possession of his new office on Friday, May 4, 1640 (Preciado 1972: 71), succeeding Juan de Soto, who had come to Segovia from the church of Talavera and who moved to the service of the *Convento Real de la Encarnación de Madrid* after his eight years in Segovia (ibid.: 68). It is puzzling that Correa had apparently already written a letter of resignation to the chapter of Jaén on April 16, 1640. However, the Jaén chapter did not consider the letter before May 22, 1640 (Stevenson 1968: 23). Jon Holland supposes that either Correa's seemingly "prematurely written" letter may have been erroneously dated or else Correa must have been relatively certain of winning the Segovia prebend (Holland 1985: 25).

Another intriguing question is why Correa wanted to leave Jaén and at the same time the Adalusian region, which was his "tierra chica," homeland. Ayarra Jarne offers as

³⁵ This practice was accepted by the chapter at the same meeting on January 5, 1640 (ibid.: 23).

tentative reasons the "interminable duration" of the construction work of the Jaén Cathedral – which must have interfered with church services and Correa's activities as organist – and the probably inadequate quality of the modest and old organ which was at Correa's disposal in Jaén. (However insufficient the organ, it was, nevertheless, regularly serviced by the organ builder Juan Bautista Marín.) Lastly, the obviously positive disposition of the Segovian *Cabildo* towards Correa, even before he officially won the organ prebend, must have had an impact on Correa's decision to leave Jaén. (Ayarra Jarne 1986: 101–102.)

Shortly after Correa had established himself in Segovia, he received a personal invitation to travel to Seville and participate in the *oposiciones* for the vacant organist's post in the Seville Cathedral. Correa rejected the tempting offer, regardless of another two invitations sent to him by the Sevillian *Cabildo*. (Ayarra Jarne 1981: 52–53.) (Correa's last possibility to move to Seville is discussed in more detail in *Chapter II*, 4.6 *Correa's Final Opportunity to Return to Seville*.)

Correa's superior in Jaén had been the bishop of Jaén, Cardinal Sandoval. One of his brothers ruled the Segovia diocese as bishop from 1624 to 1632 (Stevenson 1968: 24), his epoch terminating only less than a decade before Correa was awarded the Segovian organ prebend. The organ-playing tradition of Segovia was among the oldest and best in Spain (ibid.). That Correa began the Segovia prebend at so advanced an age must have been due to his growing fame – as virtuoso organist, as composer, and as the author of the *Facultad orgánica*.

Segovia Cathedral engaged the very best organists. In addition, the Parral Monastery of Segovia employed one of Correa's famous contemporaries, *Fray* Pedro Treviño, who had studied with the court organist and professor of the university, Bernardo Clavijo del Castillo. In the opinion of Pedraza, one of Correa's predecessors on the organ bench of the Cathedral of Segovia, only two organists really existed in Spain around 1630: himself and Treviño (ibid.). *Licenciado* Juan Sanz was the substitute in the Segovia Cathedral before Correa's induction; later, Sanz acted as the substitute for Correa himself when Correa was ill or absent for other reasons. In addition to the first-class organists at the Segovia Cathedral, organist Juan de Soto was considered worthy of receiving a prebend's pay in 1638. (Ibid.)

There were sixty-three cathedral officials in the Segovia Cathedral in Correa's time. In 1651, those officials could raise as much as 86,900 *reales* among themselves in order to continue cathedral building operations. They could also provide a house for an organ prebendary. For example, Correa was offered such a house in December 1640. (Ibid.)

During Correa's fifteen years in Segovia, the proud and well-paid singers and *ministriles* rather often displayed improper behavior. On February 2, 1642, the Segovian chapter ordered that "*ministriles* must stop wearing hats in indoors processions and dangling swords from their waistbands" (ibid.: 25). The canons decided on January 7, 1650, and again on January 11, 1655, that the growing tobacco graze took the musicians too frequently away from their duty hours (ibid.).

In Correa's Segovian period, the singers felt free to drop the old custom of improvising counterpoint above plainsong. The Segovia chapter wanted to revive this tradition, trying

discipline the singers by ordering resolutions on October 4, 1649, and again on January 11, 1655. The latter ruled the following, among other things:

During the psalmody sung at hours on solemn days, the musicians used to garnish the plainsong with contrapuntal tracery, thus endowing Vespers and the other hours with their due importance. But this custom has now fallen into abeyance. The salaried musicians now no longer move up to the choirbook stand, except when singing [written] polyphony. If they are to fulfill their duty, they must stop excusing themselves in order to go out and take tobacco while psalms are being sung (ibid.).

The chapter made it clear that it would be controlling the given orders:

They [the singers] must reform and be warned of fines if they fail to comply. Delegates from the chapter shall require them to sing while they are in the choir enclosure and stop being truant (ibid.).

The chapter also justifies its orders:

They [the singers] have no other duties and it will benefit both the cathedral and themselves for them to sing more. In so doing, their voices will improve (ibid.).

The chapter of Segovia also interfered in another matter to do with performance practice. On August 2, 1650, the canons "agreed that the succentor should always utter intelligibly the words of any psalm verse, whether sung with organ accompaniment or instrumentally performed" (ibid.). Stevenson clarifies this practice by presuming that "the chapter evidently intended for the succentor to read aloud all those psalm verses during which organ and/or instrumentalists substituted for singers" (ibid.). That conclusion seems to be parallel to practice approved by the Jaén chapter (see *Chapter II*, 4.2 *Correa in Jaén [1636–1640]*).

Because the organ and *ministriles* played together, both Correa and the chapelmaster had their say in choosing *ministrile* candidates. When Correa served in the Segovia Cathedral the *ministriles* included players of *cornetas*, *sacabuche* and *bajón*. Cornetts, dulzimers/curtals and sackbuts were characteristic to Spanish cathedral music from 1550 to 1650. (Stevenson 1968: 25–26.) The prebends directed specifically to harpists were not yet very common in Spanish churches but the chapter of Segovia already had prebendary harpists during Correa's epoch there (ibid.: 26).

In his last years in Segovia, Correa was voted a regular prebendary (instead of merely musical prebendary). In this way, the canons of the cathedral showed their respect for the old maestro and thus arranged that Correa could rely on greater charitable assistance from

³⁶ This and the two next quotations are translated by Robert Stevenson (1968: 25). The original Spanish text is given on page 41 in Stevenson's article.

chapter funds. Beginning on December 21, 1653, Correa's physical condition prevented him from taking care of his normal duties. Meanwhile, Juan Sanz agreed to act as Correa's substitute. (Ibid.) According to Ayarra Jarne, Correa died in poverty in late October of 1654 (Ayarra Jarne 1981: 54). Correa was buried in the Cathedral of Segovia, according to his own wishes (Ayarra Jarne 1986: 106–107).

It is interesting that from March 28, 1648, the bishop of Segovia was Francisco de Arauxo (1580–1663) by name (ibid). Probably for this reason, many scholars erroneously give 1663 as the year of the death of maestro Correa.

4.4 Correa Seeking Other Organ Posts

Still in 1970 an eminent Spanish musicologist, Dionisio Preciado, remarked that even those scholars who had thus far studied Correa's life and works in detail³⁷ had failed to mention Correa's attempts to gain organistships other than those that have already been mentioned: 1599–1636 at San Salvador in Seville, 1636-1640 at Jaén Cathedral and 1640-1654 at Segovia Cathedral (Preciado 1970: 6).

During Correa's thirty-seven years at San Salvador in Seville, he applied for three other organ posts. In 1613, Correa entered the competition for the position at Seville Cathedral at the last moment. He competed against Francisco Pérez de Cabrera and Francisco Díaz.³⁸ (Holland 1985: 20.) The majority of the votes were given to Pérez, who was appointed to the position. Díaz received fifty *ducados* to cover his expenses during the competition while, surprisingly, Correa was apparently neither commended nor were his expenses paid. (Ayarra Jarne 1981: 43.) In the same year, 1613, Correa attempted to win the organist's position at Málaga Cathedral. Luis Páez de Malvenda was competing against Correa, who lost again. (Ibid.: 39–40.) Some years later, in 1618, Correa competed for the organist's position in Toledo. This time Correa's rival was Jerónimo de Peraza's nephew, Francisco Peraza II,³⁹ who won the competition. (Ibid.: 40–41.)

Of the three attempts by Correa to secure a new organist's post, the competition for the organistship of Toledo and especially the outcome of it seems to be very peculiar. The competition began on March 6, 1618, and ended the next day (Preciado 1970: 10). The musical competition was a public event that took place in the Cathedral of Toledo. The competitors played "on a small organ that was installed *ad hoc*." (Ibid.) The details of the competition were recorded in the capitular acts of the cathedral: the candidates were asked to play in the fourth mode (*tañer un cuarto tono*), to play certain voice parts and to sing another different voice simultaneously, to play by heart a motet of four voices that had been given to both competitors at a certain hour of the previous day. The candidates were also

³⁷ Namely, Santiago Kastner and Robert Stevenson.

³⁸ Díaz was the organist of the Cathedral of Sigüenza (Ayarra Jarne 1981: 43).

³⁹ For the dynasty of musicians in the Golden Age of Spain with the surname Peraza (or Pedraza), see Dionisio Preciado's article "Francisco de Peraza II, vencedor de Francisco Correa de Araujo" in *Tesoro sacro musical*, 1970, núm. 611: 6–15.

examined in playing *compás ternario* and *proporción mayor* and in "other abilities." (Ibid.) Francisco de Peraza II's winning the post leaves us with many open questions. For example, was there really any organist in Spain superior to Correa, in Correa's epoch? Both Preciado (ibid.) and Ayarra Jarne (1981: 41) suspect that there were "extra-musical" elements besides the examinations of the two competitors. In Preciado's words:

Sospechamos que en la decisión del jurado pesaron razones extramusicales, ajenas al mismo concurso (Preciado 1970: 10).

(We suspect that in the decision of the jury, "extramusical reasons," not pertaining to the competition itself, were influential.)

Francisco de Peraza was surely a talented young man who had already been an assisting organist in the Cathedral of Toledo. Perhaps the *Cabildo* had almost decided to make him the successor of his uncle, Jerónimo. However, the young organist proved to be quite capricious by nature. He was the *organista oficial* for only three years. Within this short period, Francisco de Peraza II disappeared three times without asking permission from the chapter (ibid.: 11). On September 9, 1621, the chapter of the Cathedral of Toledo received a letter of resignation from him (ibid.: 14).

4.5 A Closer Look at Correa's Appointment to the Organist's Position at San Salvador of Seville

After having looked at Correa's attempts to secure other organists' positions during his thirty-seven years in Seville, it is equally interesting to know what happened regarding his appointment to the Collegiate Church of San Salvador. Although the obviously very talented youth impressed the clergy of San Salvador even before any organist's post was officially vacant, the first appointment of Correa's career was not as clear as one is led to believe. Recent research has shed more light on Correa's Sevillian *oposiciones* – in other words, on the competition over the organistships of San Salvador (1599) and the Seville Cathedral (1613). For instance, Ayarra Jarne has presented several original documents concerning Correa. By virtue of Ayarra Jarne's valuable research in the archives, it has been possible to determine that Correa was a substitute organist in San Salvador in July and August of 1599, before the election of a titular organist (Ayarra Jarne 1986: 48).

To have a better sense of Correa's *oposiciones*, it is useful to consult the documents that described the procedure of appointing organists prior to him. Among the capitular acts (*las actas capitulares*) of San Salvador, there are three documents dealing with the appointment of Correa's predecessors: namely, the appointment of Francisco de Villegas, Estacio de la Serna and Miguel de Coria (Ramírez Palacios 1989: 434–435). The appointment of Francisco de Villegas in 1547 seems to have involved just the minimum formalities, whereas

the capitular acts describe the election of Estacio de la Serna more explicitly. The relevant act recorded, among other things, that there was only one candidate trying to gain the post. After playing the organ, Estacio de la Serna was appointed unanimously in October 1593, succeeding the deceased Fernando de Tapia. (Ibid.: 434.)

The last organist before the epoch of Correa was Miguel de Coria, who was chosen in May 1595 after the resignation of Estacio de la Serna (ibid.: 435). The capitular act on the election of Miguel de Coria has no mention of edicts having been published. Furthermore, neither the audition of the candidate nor the request for the acceptance by the *Provisor* are expressed. On the basis of the three above-mentioned cases, one is bound to conclude that the procedure of selecting organists for the Collegiate Church of San Salvador could vary considerably. The appointment of Francisco Correa de Arauxo was very different from the previously described practices, beginning with the fact that this time there were two candidates striving for the organist's position left vacant by Miguel de Coria who died as a consequence of difficult illness between the twenty-second and the twenty-sixth of June 1599 (ibid.). The posters announcing the vacant position of organist were fastened to the doors of San Salvador and the Cathedral of Seville for a period of time between June 26 and the end of August (ibid.: 435–436). The Cabildo of San Salvador was obviously convinced of Correa's aptitude for the post, letting him serve as a substitute until the oposiciones took place. Correa was even paid as if he were a titular organist, getting part of the pay in wheat and part in cash, in *maravedises*. ⁴⁰ (Ibid.)

On September 1, 1599, the day after the announcement of the vacancy had expired, the chapter was assembled in order to test, choose and appoint a new organist (ibid.: 437). There were two candidates for the post: Francisco Correa de Arauxo and Juan Picafort(e). In the secret vote by nine voters, Correa obtained seven votes and Picafort only one. One of the voters, the canon don Gabriel de Valcácer Soto, refused to vote. After the voting, Correa received the official appointment from the *Cabildo*. The *Cabildo*'s decision was then taken to the *Provisor* for final approval. (Ibid.)

Besides Correa's undeniable talents, there was also another factor that could have had an impact on the choice of him: he was already well-known in his home town. In addition, Correa had been a substitute at San Salvador for about two months prior to his appointment. Already then the *Cabildo* of San Salvador seems to have had confidence in him.

Juan Picafort (as he signed himself) – or Picaforte – was Correa's rival for the post of organist at San Salvador. Picafort was forty-nine years old while Correa was still an adolescent. Picafort served as organist in a Sevillian parish (*la parroquia de Santa Ana*) from May 26, 1601, until he accepted the position of organist of the *Real Capilla* in early April of 1605. (Ibid.: 438–439.) The research of the Archives of the Royal Chapel reveals an interesting piece of information: Picafort was English by nationality (ibid.: 439). At first it seems to be surprising. Why would an Englishman try to get an organist's position

⁴⁰ *Maravedises* is one of the three plural forms given to the word '*maravedi*.' The other two forms are *maravedis* and *maravedies*, the latter rarely in use today. (*Diccionario de la lengua española* 1992: Tomo II: 1321.)

in Seville? Picafort's sojourn in Seville can be considered less astonishing by noting that Seville was at the crossroads of trade, different nationalities and ideologies. Itinerant musicians and organ builders were only one example of Seville's cosmopolitanism. Besides, in Seville there was even a small English colony (ibid.).

Following Correa's appointment, legal action was brought against him by Picafort with the lamentable consequence that the *Provisor* could not give Correa "the order and licence" that the Cabildo had asked the Provisor to prepare, following the Cabildo's decision. On December 10, 1599, the *Provisor* of the archbishop's diocese declared that both the election and the appointment in favor of Correa were annulled (ibid.: 440). Above all, the procedure of the election, not the candidates, was subjected to criticism. The Cabildo's positive attitude in regard to Correa manifested itself in its letting Correa serve as a substitute organist while the whole process was slowly brought to its end after a long series of appeals. Finally, on April 29, 1602, Correa was given a favorable verdict by Fr. Juan de Santo Fimia, Comendador de la Orden de la Merced y Juez Apostólico. The judge declared that the said Francisco Correa had been well and legitimately elected. (Ibid.: 441.) Picafort, dissatisfied with the sentence, made a new appeal. However, seeing that the results of his legal actions had been repeatedly unsuccessful, Picafort decided to desist from his appeals altogether on June 19, 1604 (ibid.). Consequently, in September 24, 1605, a judge could finally confirm Fr. Juan de Santo Fimia's earlier verdict, favorable to Correa (ibid.: 442). Ramírez Palacios points out that Picafort's withdrawal could not have been caused by economic gain elsewhere. As organist of Santa Ana, Picafort's annual salary was 7,500 maravedises, while Correa's yearly income was 37,500 maravedises and twelve fanegas of wheat. (Ibid.)

It had taken more than six years for Correa's election and appointment to finally become legitimate. The end of uncertainty was a fine starting point for a magnificent career. However, the paper that officially certified Correa's title and the rights belonging to it was lost a few years later. On May 16, 1608, Correa admitted before the *Provisor* that the said certificate was lost. The organist's testimony few days before this indicates that the reason for the lost title must have been a burglary at Correa's residence. After having received the necessary information (i.e., the date of Correa's appointment) from the secretary of the *Cabildo*, the *Provisor*, doctor Jerónimo de Leiva, gave Correa a new title of "service of the organ" on May 17, 1608. (Ibid.) This new document certified the appointment and the rights belonging to the employment as well as the corresponding salary and extra income (*obvenciones*).

4.6 Correa's Final Opportunity to Return to Seville

Only about one year after Correa had settled in Segovia and had begun working in his new office at the Segovia Cathedral, he received a personal invitation from the *Cabildo* of the Seville Cathedral (in March 1641) to participate in the competition for the vacant organist's post at the cathedral. Similar invitations were sent to the organists of Toledo and Granada.

(Ayarra Jarne 1986: 102–103.) Correa sent his refusal in a letter to the Sevillian *Cabildo*, as he also did for the second letter of invitation by the *Cabildo*, who dealt with Correa's second refusal in a capitular session on November 4, 1642 (Ayarra Jarne 1981: 52–53). Despite Correa's two negative answers, the chapter of the Seville Cathedral decided to write a third letter, encouraging Correa to present himself at the Sevillian *oposiciones*, which had this third time already been taken by four other candidates: Andrés Martínez, the second organist of the Seville Cathedral; Gonzalo de Torres, *maestro de seises*⁴¹; Francisco de Medina, organist of the Cathedral of Jaén; and Pedro Luis de Pastrana, organist of the Guadix. One month later, in December 1642, the Sevillian *Cabildo* received Correa's certainly impatiently expected letter, in which he communicated that he was not coming to the *oposición*, the participation in which would risk his reputation in the eyes of the Segovian chapter and which could have the consequences of losing his students, among other reasons. (Ibid.: 53–54.)

With his definite negative answer to the Sevillian *Cabildo*, Correa turned down his last possibility to return to Seville, his home town, and to finally acquire the post that he had always wanted. I would imagine that this conscious rejection of the chance of a lifetime must not have been easy, especially for a virtuoso who was a native Sevillian. As the *Cabildo* of the Seville Cathedral tellingly stated in the course of repeatedly inviting Correa to come to the *oposiciones*, Correa was "the most eminent that one knows today in this art" (ibid.: 53), and it is easy to understand the eagerness of the *Cabildo* to employ such a great musician. It is obvious that the negative outcome of Correa's earlier competition for this very office in 1613 (and for some other posts as well) had an impact on Correa's final decision.

⁴¹ Los seises was a group of six (or more) boys who performed a dance before the high altar in veneration of the sacrament, in the midst of the liturgy (Hoag 1980: 35).

^{42 &}quot;... el más eminente que oy se conoce en este arte."

III SPANISH ORGANS AND OTHER KEYBOARD INSTRUMENTS

1 Early Spanish Organ Types

1.1 Spanish Organs: General Lines of Development

Generally speaking, at the beginning of the 16th century, the organs in Spain still resembled to a great extent the organs of the rest of Europe. However, in the last third of the century, the Spanish organs gradually began to take a shape of their own, becoming transformed into several local organ types. For this reason, we would be mistaken in talking about the old Spanish organs as if they represented an organ of only one, uniform type.

To begin with, the notion of several local Spanish organ types needs more precise formulation. Although it is true that important centers of organ building in different parts of the Iberian Peninsula developed instruments possessing special characteristics, it should be realized that the fields of activity and influence of these local centers changed to some extent as time passed. There was also an overlap and an often lively exchange of ideas between the localities. Consequently, it appears problematic to talk about a multiplicity of differentiated and contrasting schools of Spanish organ building in any definitive manner (Jambou 1979: 23). One factor which contributed to the inconstancy of the geographical limits of the organ building regions was the work done by various itinerant foreign organ builders and monastic makers of organs (ibid.: 24).

It is not possible within the scope of this dissertation to go deeply into the complicated interrelations of the most important organ building regions of Spain. Keeping the objectives of this study in mind, I will use the generalizing concept of "Spanish organ types," which should not be understood to mean products of totally independent and clearly defined organ building schools with fixed spheres of activity and importance. It is, nevertheless, useful to picture some of the main differences and characteristics particular to certain organ building regions – bearing in mind that interaction between the different "schools" as well as exceptions to the general characteristics of instruments within each area existed. I refer the reader interested in the history and development of Spanish organs to Louis Jambou's impressively thorough and well-documented study *Evolución del órgano español: Siglos XVI–XVIII*, published in 1988.

¹ For an illuminating account of the interrelations of the Spanish centers of organ building between the sixteenth and eighteenth centuries, see Louis Jambou 1979: "El órgano en la península ibérica entre los siglos XVI y XVIII. Historia y estética," in *Revista de Musicología*, Vol. II, no. 1: 19–46.

At the end of the 16th century, the Spanish organs were still rather young, while the impact on organ building by other countries remained great. Of the foreign organ builders settled in Spain, the Germans had dominated during the 15th century and into the 16th century, particularly in Catalonia. During the 16th century, the influence of the Flemish and French increased. (Ibid.) Some of the most influential foreign organ builders in Spain were Leonhard Martin, Spinn von der Noyern, Perris Bordons (alias Pere Flamenc), Maese Jorge [Maestro Jaos, or Jos], Guillaume de Lupe, and Gil Brebos [Brevos] (Blancafort 1979: 136).

Generally speaking, the most relevant organ building centers in 16th-century Spain numbered six: Toledo, Zaragoza, Burgos (identified by their capital cities), and Cataluña-Levante, País Vasco-Navarra, and Andalucía-Extremadura-Portugal (Jambou 1979: 21). It is particularly noteworthy that the activity and influence of the País Vasco-Navarra region extended southward, as far as Segovia and Sigüenza, and westward to Oviedo (ibid.: 23). It is also very important to be aware that three different kingdoms coexisted on the peninsula: Castile, Aragon, and Portugal. The use of the organ became prevalent first in Catalonia; Aragon also featured in these early developments.

It is a surprising fact that the first big organs (of 24 *palmas*, having two or more keyboards, and many registers) were constructed in Eastern Spain nearly a hundred years before any in the center of the country (Blancafort 1979: 136). There was a large organ in La Seo of Barcelona as early as 1459, and other such organs were built in Zaragoza (1469), Daroca and Palma (towards 1490), Valencia (1510), Tortosa (1536), Lérida (1543), Tarragona and Gerona (1567), and Perpinyà (1584), while the first big Castilian organ appears to be the one built in Toledo in 1543, followed by those of El Escorial and Seville in 1579 (ibid).

One of the most crucial local differences at this point was that in the Catalonian, Valencian and Mallorcan organs, there was usually a *Cadereta*, meaning a *Rückpositiv* here. Additionally, there were many "*Rück-caderetas*" found in the Andalusian region. Some Aragonese organs had a *Cadereta*, but Castilian organs did not – with the exception of the organs of El Escorial. (Ibid.: 136–137.) Gabriel Blancafort emphasizes that when there is a second keyboard in a Castilian organ, this division takes the position of *Unterwerk* (ibid.: 137).

By the dawn of the 17th century, the Catalonian organ building already had a clear direction, while the Castilian organ was still at its early stages of development. In the evolution of Spanish organ types, the cultural centers of the Iberian Peninsula – such as Madrid, Gerona, Málaga, Seville, Toledo, Granada, Barcelona, Santiago de Compostela, Valladolid, Valencia, Lérida, and Lisbon (Williams 1978: 236–237) – became increasingly important for the advances in organ building. The independent country of Perpiñán (Perpignan), which was fully part of France after 1659, and which had contacts with the

² *Palma* is an old Spanish unit of measurement which was used to define the length of organ pipes and was equivalent to approximately 8 1/4 inches (Wyly 1964: 313). Organs of 26 palms meant organs built on a 16' basis, those of 13 palms having an 8' basis.

kingdom of Aragon, was a notable meeting point between several cultures, as was Naples, a Spanish possession for centuries (ibid.: 237).

1.2 The Development of the Technique of Organ Building in Spain

The first step in the technical development of the Spanish organ was the gradual differentiation of individual registers from the *Blockwerk*, which also occurred elsewhere in Europe. Little by little, the ambitus of the keyboard expanded to cover more than three octaves and windchests began to be constructed larger, especially towards the bass. The chromatic facade of small organs was developed; meanwhile, the windchests of large organs had the diatonic layout of pipes. The decorative elements of the cases increased. As time went on, it became necessary to separate the *flautado* (principal) rank from the rest of the mixture. This remarkable step forward provided contrasts in combinations of different sonorities, to which the invention of the second manual division also contributed. New families of stops, like the *nasardos* and the *lengüetería*, increased these possibilities still further.

As time passed, solutions were sought for the difficulties of placement and excessive consumption of wind of the big 32' and 16' pipes. Consequently, the building of pedals began. (Blancafort 1979: 135.) A crucial step in the technical advances of the Spanish organ construction was the progressive refinement of the windchest, which was parallel with the increase in the number of individual stops. Finally, the technique of divided registers was introduced, multiplying the possibilities of registration even for a small, one-manual organ. Divided registers began to be built to the Spanish organs in the 1560s, and all other technical developments described above also occurred by the last third of the 16th century. Two separate lines of evolution existed in regard to the increasing versatility of sonorities, namely, adding more keyboards and dividing registers. The latter, as Gabriel Blancafort phrases it, was "much more cunning, ingenious, simple, and economic" (ibid.: 137) and was first and foremost the Castilian way.

The most relevant local centers of organ building – which existed already in the 16th century – were interrelated in various ways in Spain, and the degree of influence of each of these centers changed with time. Many of the centers of the 16th century maintained their position during the 17th and 18th centuries with only slight transformations (Jambou 1979: 34). However, there was one exceptionally radical change: a progressive decrease of importance of the center of Toledo, which resulted – among other things – from the expansion of the influence of the organ builders from Northern Spain (ibid.).

During the 16th century, the zone of influence of the organ building center of Toledo extended even to Catalonia and Andalusia (ibid.: 25–26). During the 17th century, however, the number of workshops by masters of Toledo, such as Sebastián de Miranda and Miguel Puche, was considerably reduced. Despite the succession of organ builders in Toledo (e.g., José Martínez Colmenero, Luis and Pedro Berroxo, Francisco Antonio Díaz, Justo

Llaneza, and Pedro Añeza), the decrease of their influence continued in the 18th century (ibid.: 26).

During the latter half of the 17th century, an important new center of organ building was developed around the city of Cuenca (ibid.: 32). Besides the seven organ builders with the surname Martínez, Cristóbal Villalba, Julián Alcarria and Jaime de Fuentes were active in the flourishing period of Cuenca (ibid.). In addition, two masters of Valencian origin, Roque Blasco and Joseph Bertrán, are known to have worked in the organ building center of Cuenca by that time (ibid.). During the second third of the 18th century, the influence of the organ building center of Cuenca spread towards Madrid and Seville, beginning with Sebastián García Murrugarren. The culmination of influence was reached at the end of the 18th century, when the organ building family of Orden (especially Julián Orden), Fernando Molero, and José Verdalonga flourished, and when the influence of the Cuenca center reached towards Burgo de Osma, Málaga, and Murcia. (Ibid.: 32, 34.)

The invasion of a vast territory by the organ builders from Northern Spain was particularly strong from the latter half of the 17th century on. Many a prominent organ builder was a native of the towns of Yanci, Navarrete, Sangüesa, Oñate, Eibar, or Lerín (ibid.: 28). *Fraile* José Echevarría was from Eibar, his namesake being from Oñate; Pedro Liborna Echevarría was a native of Eibar, Jaime Sola of Sangüesa, and Félix de Yoldi, Juan de Andueza, and Domingo Mendoza of Lerín (ibid.: 30).

In Castile, the positive organ of the 16th century evolved gradually into the larger Castilian organ, which represented an organ type of its own. Blancafort ventures to say that the Castilian organ "is and sounds like a colossal positive" (Blancafort 1979: 138). Several characteristics of the Castilian organ speak in favor of this view.

1.3 A Brief Comparison of the General Characteristics of the Catalonian and Castilian Organ Types

As has already been mentioned, Catalonia as a region was a forerunner in the use of organs in Spain. The golden age of the Catalonian organ type occurred as early as the 1550s. Generally speaking, the instruments were quite large and were frequently built on a 16' basis (*Flautado de 26* = Principal 16'). *Flautado de 26* (made of metal) was a stop frequently included in the Catalonian organs. It was common to have at least two manuals, a *Cadira*, the *Rückpositiv*, included. In Catalonia, there were no divided registers until later on (in the 18th century), and the windchests were large in size and diatonic by arrangement. The majority of pipes was placed above the windchest. The plain cases of the Catalonian organs were typically of either Gothic or Renaissance style. In a facade, the largest pipes were on the sides. It is noteworthy that when divided registers appeared later in the Catalonian organs, the division was made between b and c1, while the division point in the Castilian organs was between c1 and c1-sharp. (Blancafort 1983: 21.)

³ Cadira in Catalonia, Cadereta or Cadireta in Castile.

The florescence of the Castilian organ type was around 1750, considerably later than that of the Catalonian organs. The Castilian organs were commonly built on an 8' basis (*Flautado de 13* = Principal 8'). *Flautado de 26* (made of metal) was rarely found in these organs. There was usually only one manual, but there could be as many as three in exceptional cases. (Ibid.) (For instance, the Gospel organ of the Segovia Cathedral has three keyboards.) There was usually no *Cadereta* (ibid.), with the exception of the Escorial organs (Blancafort 1979: 137). The registers were divided, and the windchests were small and chromatic. There were a lot of pipes laid outside of the windchest proper. The splendid Baroque cases very often had extensive decoration in relief. The largest pipes were placed in the center of a facade, and there was usually a horizontal *trompetería*. (Blancafort 1983: 21.)

1.4 The Affinity of the Castilian Organ Type with the Positive Organ

Gabriel Blancafort discerns several features of the Castilian organ type which reveal its close resemblance to the positive organ. Some of them will be taken up here. First of all, the windchest of the Castilian organ always maintains its chromatic structure, which is the origin for other special characteristics of this organ type (Blancafort 1979: 138). The dimensions of the windchest, consisting of one single piece or of two pieces, are often small. There are usually forty-five channels (for four octaves, the short octave included), of which twenty-one are for the left-hand side and twenty-four for the right-hand side – if the windchest is made of two pieces. The structure of the organ permits a different number of registers for each hand, always more for the right hand. It is necessary in many cases to place the majority of the big bass pipes outside of the windchest, due to its restricted dimensions. This has, for one, contributed greatly to the development of the techniques of conducting wind to the facade, and later, to the trompetería de batalla. (Ibid.) The *Tablones*, channel boards (occasionally called the "Spanish mystery", distribute wind to different parts of the facade and are one of the ingenious inventions of the Spanish organ builders to cope with the tricky problems of guaranteeing wind to all the pipework. The action is always suspended, creating a touch that, according to Blancafort, is "the most sensitive and subtle that exists" (ibid.: 138-139). The mechanism of the draw stops is simple.

Both the very asymmetry in the arrangement of the windchest, which increases disproportionately towards the lowest pipes, and the layout of the facade have the tendency

⁴ Another exception is the Gospel Organ of the Catedral Nueva (the New Cathedral) of Salamanca. The instrument dates from 1743 (Blancafort 1983: 22) or 1744 (Williams 1978: 252) and was built by Pedro Echevarría (Blancafort 1983: 22).

⁵ Divided registers began to appear in Spanish organs in the 1560s.

⁶ The probable first exemplars of horizontal *Clarines* date from 1625 (Medina del Campo) and 1636 (Cathedral of Burgos), although the use of such stops did not become prevalent before the last quarter of the 17th century (Blancafort 1979: 140).

⁷ Orgelwoordenboek, 2000, p. 234. Nieuwkerken: CEOS v.z.w. - Wilfried Praet.

to favor the persistence of the short octave (ibid.: 139). The facade is most commonly composed of one central tower, with the first five diatonic pipes of the *flautado*. This arrangement was favorable to the air conduction as well as to the symmetry of the facade. When there are big lateral towers in the facade, with four pipes in each, they belong to the *Contras* register (the rank of pipes played by the pedals), which was almost always made of wood rather than of metal in Castile. (Ibid.)

Several structural features particular to Castilian organs – such as the reduced dimensions of the windchest and of its channels, valves, and wind box, as well as the length and abundance of *tablones* – all have their impact on the "difficult equilibrium of the respiratory system of the Castilian organs" (ibid.) that many an organ builder has experienced upon the substitution of the original bellows. To minimize the effects caused by this particular characteristic, the art of proper registration is of utmost importance with these sensitive instruments.

1.5 Two Central Elements of the Spanish Organ Building: Divided Registers and the Evolution of the *Trompetería de Batalla*

Divided registers began to appear in Spanish organs in the 1560s. It is possible that this technique was first used in the organ built in 1567 by the Frenchman Guillaume de Lupe for the *Parroquía de la Sta. Cruz* in Zaragoza, where one register out of seven was divided. The divided stop was a *dulzaina*, which was a solo stop *par excellence*. Only a year later, Maese Jorge built an organ for the Seville Cathedral that had two manuals and all of its nineteen stops divided. (Ayarra Jarne 1981: 32.) Although examples of divided stops exist elsewhere in Europe – in Brescia, Italy, in 1580, for example – "Spain certainly seems to be the first country to have used them systematically for colourful solo effects" (Williams 1978: 245). One should be aware, though, that between the appearance of the divided registers and their becoming prevalent in new instruments, there was a considerable lapse of time, which has been estimated to be from one half to three quarters of a century (Jambou 1979: 40).

The principle of the divided registers is simple and ingenious. The keyboard is divided into two halves, both of which possess a variety of stops. Because the discant and bass halves can be registrated independently, even rather small one-manual organs offer versatile and rich possibilities for registration. It is common to find a few of the same stops on both halves of the keyboard, but the majority of registers belong exclusively to the discant or to the bass half. In Castile, the registers were divided between c1 and c1-sharp, while in Catalonia the division point was in between b and c1. The growing popularity of the divided registers gave birth to a new type of organ composition, namely, the *tiento de medio registro*, in which either one or two solo voices figured in the soprano (*tiento de medio registro de tiple/de dos tiples*), or in the bass (*tiento de medio registro de baxón/de dos baxones*), against a softer accompaniment, which was played on the other half of the keyboard. I consider the

technique of divided registers to be one manifestation of the Spaniards' love of fanciful, colorful sounds, contrasts, and variety in sonority.

By far the most spectacular consequence which the technique of divided registers brought forth was the development of the horizontal trumpets. According to Gabriel Blancafort, these reed stops were spectacular in two ways: acoustically and visually. He adds that they are the most particular consequence which the divided registers created in the Spanish organs. (Blancafort 1979: 139.) Horizontal reed stops – and horizontal trumpets especially – are perhaps the most well-known element commonly associated with the Spanish organs. Although this celebrated invention was thoroughly Castilian in origin, it later spread much beyond the geographical limits of Castile. The whole 17th century was a time of forceful expansion of Castilian politics and culture, and in regard to organs, these influences extended as far as Portugal, Aragon, Andalusia (ibid.) - and Catalonia. Besides the origin of the horizontal reed stops, it is important to keep in mind that the fully developed trompetería de batalla division was a product of the very late Baroque era, and that it had gradually evolved from other types of reed stops, the "ancestors" of the horizontal trumpets, such as *dulzainas* and *regalías*, having short resonators. These stops appeared in large organs towards the end of the 16th century (ibid.: 140). Because dulzainas and regalías required constant tuning, they found an ideal placement outside the case, where they were within the reach of the organist.

The dating of the first *Clarines* (trumpets) is more problematic than that of the reeds with short resonators. Among the probable first exemplars of horizontal *Clarines* are the ones constructed for the city of Medina del Campo in 1625 and for the Cathedral of Burgos in 1636 (ibid.). Nevertheless, these stops did not begin to become prevalent until the last quarter of the 17th century (ibid.). Among the first appearances of exterior horizontal trumpet stops around that time (even before 1670) were the *Clarines* in an organ of San Diego in Alcalá de Henares by *fr.* J. Echevarría, and in 1677 in an organ at a parochial church in Mondragón, also built by *fr.* J. Echevarría and his pupil, who was his namesake (Jambou 1979: 42).

Another important question of its own is the motivation for building horizontal trumpets. Gabriel Blancafort comments on various attempts by foreigners to explain the essence and reasons for building horizontal trumpets. He observes that most of the non-Spaniards who have produced articles or taken the floor at conferences about the matter focus on researching what the *trompetería de batalla* is like – rather than asking *why* it was built in the first place (Blancafort 1979: 140). Those few who have pondered the why of the phenomenon give reasons such as esthetic motivation, preferences of timbre, racial or temperamental features (ibid.). However, in Blancafort's opinion, those reasons are not exactly the case in point; instead, he sees the principle motivation for building such stops as strictly technical and, above all, bound directly to the existence of the divided keyboard (ibid.). To illustrate his point, Blancafort stresses that in Catalonia, and even in Mallorca, the popularity of the horizontal trumpets, around the middle of the 18th century, did not not take place until the practice of the divided registers had been accepted there (ibid.). Blancafort

argues further – with weighty reasons, I believe – that the success and distribution of the horizontal trumpets in European countries other than Spain constitute more an ornamental novelty, and a pure effect of sonority, rather than the particular function that the genuine Spanish *trompetería* possesses (ibid.).

Regarding the nomenclature of the horizontal trumpets as a part of non-Spanish organs, a couple of remarks might be justified here. First of all, I consider it doubtful to call any horizontal register built for non-Spanish organs "a Spanish trumpet" (with the exception of style copies, perhaps). Secondly, the label *en chamade*, commonly connected to the horizontal trumpets, should – correctly speaking – not be used in this connection. The term is French, and it was either invented (ibid.: 139) or popularized (Williams 1978: 245) by Aristide Cavaillé-Coll. According to Williams, Cavaillé-Coll used the phrase "to describe those Spanish reeds he heard as a boy" (ibid.). Originally, *en chamade* designated a trumpet call "whereby opposing forces were summoned (Lat. *clamare*) to a parley" (ibid.). The phrase was not necessarily used by the *regalía* and *trompetería* makers at all (ibid.). The term is particularly misleading in that it seems to imply a French origin of the horizontal reed stops, or of their denomination. Blancafort, too, writes about the term as "a French name that some Spanish organ builder has unnecessarily spread around in Spain," unnecessarily despite the fact that the name was originally given by such an illustrious person as Cavaillé-Coll (Blancafort 1979: 139).

It is generally not realized profoundly enough how the appearance of the horizontal *trompetería* changed the Spanish organs, and especially the Castilian organ type. The consequences caused by the emergence of the *trompetería* are comparable with those triggered by the coming of the slider windchest (*el secreto de correderas*) about a century and a half earlier (ibid.: 140). In both cases, the majority of the old windchests were renovated, and the dispositions were updated. Many times the keyboards were enlarged towards the treble, and the short octave of the bass was replaced by a "normal" one. (Ibid.: 140–141.) The above-mentioned changes have, unfortunately, decreased considerably the number of old organs preserved in their original state. Even the cases – which frequently were the only entirely original part of the organs left – suffered many mutilations upon enlargement or the addition of *trompetería* (ibid.: 141). In many instances, the oftendecorative doors, which ought to protect the facade from dust, can no longer be closed as a result of the added horizontal trumpets, as in the case of the Epistle organ of the Catedral Nueva in Salamanca.

Besides all the changes made to old organs described above, the most essential consequence was, nevertheless, the effect of the *trompetería* in the context of sonority. Paraphrasing Blancafort's important statement, the *trompetería* hoards the whole attention at the cost of the pleno, which has always been the backbone of the organ (ibid.). The *trompetería* can never replace the pleno; furthermore, if the pleno disappears or weakens, the organ takes its first step towards decadence (ibid.).

1.6 Other Features Typical of Historical Iberian Organs

As discussed in the previous chapter, regarding the horizontal reed stops of the Spanish organs, the old instruments are rather seldom in an entirely original state. (Luckily, we are not totally deprived of original exemplars, though.) Nevertheless, besides the already-examined specialities of the historical Spanish organs – the divided registers and the *trompetería* – there are several other features that can be considered to be either typical of the Iberian instruments in particular or characteristic of historical European organs in general.

One factor which creates the pleasant and soft sonority of the old Iberian organs, and the remarkable lightness of action, is the low wind-pressure (45–70 mm); the lightness of the suspended action is also due to narrow, light pallets, narrow channels (the bass included), and the often direct connection without rollerboards that is possible because the pipes are frequently placed in straight chromatic order (Williams 1978: 265).

If one sees a full lowest octave in a historical Iberian organ, one can almost always be certain that the short octave of the bass has been replaced at some later stage of renovation, modification, or restoration. In some regions, short octaves were in use until at least the 1840s (ibid.). The lower keys are relatively short, and the keyboards do not usually project as they do these days. It is also common that the player's seat is immovable and that player's knees come in contact with the front panel of the organ. Furthermore, the music stand – if there is one – is often positioned relatively high in regard to the level of the (upper) keyboard. Additionally, at least some – if not all – stop knobs are impossible to operate by oneself while sitting on the player's bench. However, already in remarkably early Iberian organs, various ingenious and practical devices for changing registration, and for producing swell and echo effects, which will be discussed shortly, are often found. On one hand, some of the above-mentioned aspects can cause discomfort and strangeness to a player who is not yet used to old instruments. On the other hand, when one is accustomed to playing on historical organs, one cannot but sincerely admire the excellent, exact, light and "obedient" touch of these unique instruments.

If there is a pedal, it is in most cases rather primitive, consisting normally of from four to twelve keys, the most common number of pedal keys being eight: C D E F G A Bb B. Nevertheless, there were exceptions, such as the double pedalboard in the organ of 1796–1797 by José Verdalonga in the Toledo Cathedral. In this instrument there were two rows of pedal-knobs to be played separately or together, which were "copied from those in the 1755 organ" (ibid.: 260). Usually the pedal notes were pulldowns that were permanently "on," as in early Italian organs. The early Spanish pedals are toe pedals, the keys of which can also be shaped like knobs. *Contras* is sometimes used to refer to the pedalboard; more commonly, it implies a rank of pipes played by the pedal. Some organs have *Contras* of

⁸ As already mentioned, in Castile the windchests were chromatic and in Catalonia diatonic, as a rule.

⁹ All music stands are not necessarily original and may have been added to the instruments at some later stage.

several ranks of pipes. Occasionally, there are two stop knobs: one for *Contras de 26* (16'), and another for *Contras de 13* (8'). It is also possible for the two ranks to be connected and to have one stop knob in common. It was still rare, towards the end of the eighteenth century, for separate registers of the pedal division to be more generally used; if there were any, they appeared exclusively in important instruments (Wyly 1964: 283).

Different devices for registration changes, for producing swell and echo effects, and for operating toy stops, were mostly ahead of their time in the Iberian organ building. For instance, reed stops could be furnished with a second set of sliders under them, which made it possible to draw their stop knobs, but prevent their sounding until the desired moment (Williams 1978: 265). These kinds of registration aids usually took the form of hooks or brackets for the right knee, which operated the device by lateral movements (ibid.). One example of a very sophisticated system of registration aid is found in the Portuguese Coimbra where the various keys of the pedalboard call for several different combinations of stops, such as *Lleno, Lengüeteria*, or *Corneta* with accompaniment.¹⁰

The obvious Iberian fondness for variety, contrasts, colorfulness, and surprises is reflected in possibilities to produce impressive swell and echo effects. By 1680 – only some decades after Correa's time – one could find occasional swell devices in Spanish organs that were first in the form of one or two stops enclosed in a "swellbox," which was usually placed on the floor of the organ, below the main chest. An example of such a stop was the *Corneta en eco*, the echo Cornet. In the Epistle organ of the Catedral Nueva in Salamanca, for instance, there is a shoe for switching from *Corneta* to *Corneta en Eco* (Echo cornet), and another one for operating the *Caja de ecos* (Echo cornet swellbox). The register labelled *Corneta en eco* is in fact comprised of two 8' *Cornetas*. One of these is enclosed in a swellbox, and the switching between the enclosed Echo cornet and the other cornet can be done by the organist while playing a piece. In addition, it is also possible to operate the swellbox itself; thus the organist is able to influence the dynamics of the echo effects even further. (For the evolution of the registers *en eco*, see also the next chapter, *1.7 The Contrast-generating Families of Stops in the Spanish Organs.*)

Other factors that contribute to the possibilities of creating a variety of surprising special effects are the different toy stops which especially large Baroque organs contained. It is ordinary to have *Tambores* or *Timbales* in the pedal, providing a timpani effect. *Tambores* often include D and A. *Pajaritos* (little birds) produce a twitter resembling the *Usignoli* (nightingale) of the early Italian organs. (Many times this bird sound seems astonishingly real.) There are also a variety of accessories generating sounds of (sleigh) bells. One is a *Cymbelstern*-like apparatus. For instance, in the Castilian locality of Támara, there is an organ whose front facade has two wheels (which look a little like paddle wheels or old-fashioned rotors) that are rotated gently by the wind to create a beautiful, tinkling sound. (In this organ, a birdcall effect is also available.) The most original and amusing application of the bell effect which I have seen and heard myself is the one in the Epistle organ of the

¹⁰ The information about the Portuguese registration aid was acquired from Guy Bovet through e-mail, dated April 13, 2008.

Catedral Nueva in Salamanca. There are two men's heads carved out of wood and placed rather high up on the front facade of the organ. They can be operated by a shoe close to the pedal keys, with the result that the jaws of the heads move and the little bells that are hidden in the beards of the heads jingle. Sometimes it it also possible (from the console) to make a trumpet call – or should I say, a blare – that comes out of the resonator of a pipe, which is held by a statue fastened to the facade of the organ. It is noteworthy that, with the exception of the timpani, the special effects of the Spanish organs are not only aural but also visual.

Along with the versatile and often startling sonority, the double facades and the position of the Iberian organs – especially in larger cathedrals – are original and are matters of interest. In important churches, it was common to have several organs. An extreme example must be the Cathedral of Seville, where there were fourteen organs by 1795; Guadalupe had eight organs shortly after 1650 (ibid.: 238). Organs could be found practically anywhere in the church, but one of the most usual positions was on one or both sides of the choir (coro). If there is a pair of organs, their front facades are normally facing the enclosed choir, and thus each other, their back facades facing the side aisles. In other words, the two organs are placed on the longer sides of the rectangular choir, each usually between two pillars. The main entrance to the choir is from one of the shorter sides, through a gate, which is part of an ordinarily decorative fence of wrought iron (reja). Because the Iberian coro is an enclosed unit within the interior of the church, the main facades of the organs facing the coro can be seen fully only from within it. If there are horizontal reeds, they can often be found on both sides of each organ. Besides the solemn and impressive sight created by the double facades (with their possible horizontal reeds), several kinds of unique acoustical effects, like echoes produced as an interplay of the two facades, can also be rendered. As with early Italian organs, two Iberian organs situated in the choir are referred to as Gospel and Epistle organs, according to their placement. From within the choir in the direction of the main altar, the organ of the right-hand side is the Epistle organ (*órgano de epístola*) and that of the left-hand side the Gospel organ (*órgano de evangelio*).

1.7 The Contrast-generating Families of Stops in the Spanish Organs

As numerous researchers, travellers and connoisseurs of the Spanish culture repeatedly have pointed out, Spain is a land of contrasts in many respects, and at many levels. This applies equally to the sonority of the old Spanish organs. The great variety of fanciful solo registers and strongly profiled families of stops are one demonstration of the obvious affection of effective contrasts in combinations of stops, regardless of their size.

The principal chorus of the Spanish organs consists of *Flautados*¹¹ of different pitches. It is common that the name of the main *Flautado* is combined with the number of *palmas* (palms), specifying the length of the longest pipe – for instance, *Flautado de 13* (8'), and

¹¹ Note the term, which can easily mislead one to think of flutes instead of principals.

Flautado de 26 (16'). If some other figure appears (instead of the ordinary Flautado de 13), like Flautado de 14, that figure gives the exact length of the pipe, Flautado de 14 thus being a little lower in pitch than Flautado de 13. Flautados, which correspond approximately to the modern 8' pitch, have speaking lengths from 12 to 14 palmas (Wyly 1964: 292).

What fascinates me most in the quality of the Spanish *Flautados* is the combination of singing softness and gentleness, nevertheless with a tonal effect of clarity and liveliness. Due their special, gentle sound, *Flautados* could fulfill several functions: as part of the pleno (*lleno*) or as accompaniment for other stops; with a tremulant, or alone. The 8' *Flautado(s)* with a 16' *Flautado* together make a combination of impressive profundity, without the clarity of sound suffering, while *Octava* (Octave 4'), adds body to the sound of the 8' *Flautados*.

In connection with the terminology associated with *Flautados*, the denomination *Flautado mayor* (or *Flautat major*, in Catalan) was sometimes used for the 16' *Flautado* (ibid.). *Flautado tapado* refers instead to a stopped flute, as do *Flauta tapada*, *Tapado*, *Tapadillo*, *Octava tapada*, *Violón*, and *Bordón* (the Portuguese equivalent is *Bordão*) (ibid.: 315). One matter likely to cause terminological confusion is that *Flauta* could mean either flute or any flue pipe. *Flautadillo*, for one, was an open 4' stop of principal scale.

Nazardos (or Nasardos) of the Spanish organs were open metal flue pipes, wider in scale than the Flautados. Nazardos developed into complete choruses, equal in importance to the *lleno* (pleno), the Nazardos division normally being used as "a pyramid," or a family of stops, which serves as an element of contrast in regard to the *Lleno*. These stops were usually found at pitches of 4' and higher. Although Nazardos could sometimes appear as a compound stop (Nazardos compuestos), it was typical that all Nazardo ranks had their own stop knob.

Those *Nazardos* that could be drawn individually were most commonly found at the following pitches: 2 2/3', 2', 1 3/5', and 1 1/3'. In addition, there are examples of *Nazardos* at pitches of 5 1/3', 4', 3 1/5', and 1' (ibid.: 309). The term *Nazarte* (or *Nasarte*) was sometimes used of a single rank of *Nazardos* (e.g., *Nazarte en 12.^a* [2 2/3']). The pitch for a single rank of *Nazardos* could also be expressed with an ordinal number, written out: a twelfth is *Dozena* (or *Docena*, 2 2/3'), a fifteenth is *Quinzena* (or *Quincena*, 2'), a seventeenth (i.e., a *Tierce*) is *Diezisetena* (or *Diezysetena*, or *Diecisetena*, 1 3/5'), a nineteenth is *Dezinovena* (or *Diezynovena*, or *Decinovena*, 1 1/3'), and a twenty-second is *Veintidozena* (or *Vintydozena*, or *Ventidozena*), which could have more than one rank of pipes, sometimes sounding the same pitch, and sometimes being a mixture whose lowest rank was at 1' (ibid.: 321).

The larger compound stops made of *Nazardos* pipes fall into three main types: the *Nazardos* (usually 3x–5x), the *Clarón*, and the *Corneta* (ibid.: 309). The last of these was of utmost importance in the Spanish organs, and several variants of it existed. The stop appeared in Spanish organs in the sixteenth century, towards the end of which even the smallest organs usually had a *Corneta*, except in Catalonia, where it was ordinarily employed only in the largest instruments (ibid.: 283). The Spanish *Corneta* is a compound solo stop

for the right hand which always has a *Tierce*, and even up to twelve ranks (Williams 1978: 267). Sometimes it was balanced by another compound stop of *Nazardos* pipes for the lower part of the keyboard (*Clarón* or *Nazardos*) (Wyly 1964: 283).

That the sound of the Spanish *Corneta* differs considerably from the French *Cornet* cannot be overemphasized. Peter Williams characterizes the tone of the *Corneta* as "light, rather delicate" (Williams 1978: 267). I think, however, that this description by Williams is unlikely to refer to the loud, big main *Cornetas* of those organs that have several *Cornetas*. Large *Cornetas* were occasionally called *Corneta real* or *Corneta magna*, and they commonly had at least six ranks: unison, octave, twelfth, fifteenth, seventeenth, and nineteenth (Wyly 1964: 284). The loudness of the large *Cornetas* of the main division (*órgano principal*) derives partly from the fact that during the seventeenth century, it was usual to place them above the level of the main chest, toward the front of the case (ibid.: 283).

The *Cornetas* of divisions other than the main work were much more delicate in tone and had less sound volume. It was not uncommon, either, to place such a *Corneta* in a swellbox, like the already-mentioned *Corneta en eco* of the Epistle organ of the Catedral Nueva in Salamanca. Louis Jambou discerns two different phases in the development of the echos. According to him, the registers *en ecos* (or *Corneta real en eco*) were preceded by a technique of setting the *Corneta magna* in its own separate windchest (*un secreto aparte y elevado del principal*). Although the latter could well have been the source of inspiration for the makers of the registers of the *Eco* proper, these techniques could occasionally be found even in same instrument, like the one in Pastrana in 1703. (Jambou 1979: 41.)¹² In general, I believe that the essence of the Spanish *Corneta*, which is an example of the compound stops of *Nazardos*, *par excellence*, is contained in its special colorfulness, pliability of tone, and refined charm.

The sound and composition of the Spanish mixtures is also of a special nature. Generally speaking, they are surprisingly light and delicate. The description of their sound by Peter Williams is rather apt: "The effect of these light-blown Mixtures is as a shimmer, a gentle glitter" (Williams 1978: 266).

The term *Lleno* has (and has had) several meanings. Formerly, it was used of the undivided *Blockwerk*. *Lleno* can also signify the entire flue chorus of the organ, the organo pleno, so to speak. In addition, the term can be used of registers that extend throughout the keyboard (*registros llenos*, or *registros enteros*), opposed to stops to be found only in either half of the keyboard. Lastly, *Lleno* is employed to mean the lowest mixture, composed of principal-scaled pipes.¹³ A higher mixture was called *Címbala*¹⁴ (or *Zímbala*), and a still

¹² For a comprehensive study of the *secreto aparte y elevado del principal*, see Louis Jambou 1981: "La corneta en secreto aparte y elevado del principal: tanteos y creación," in *Actze di I Congreso Nacional de Musicología*, Vol. I: 327–330. Zaragoza: Institución "Fernando el Católico."

¹³ The corresponding term (for the main *Lleno* of the organ) was *Mistura*, *Plé*, or *Alemanya* in Catalonia (Wyly 1964: 298).

¹⁴ Cimbalet, Simbalet, Cimbolet, or Simbolet in Catalan (ibid.: 275, 315).

higher one (in large organs) either *Sobrecímbala* (*Sobrezímbala*) or *Recímbala*. Although, according to Williams, *Címbalas* were (as a rule) not as high as the Dutch-German *Zimbeln*, and usually avoided the *Tierce* rank (ibid.), this avoidance of the seventeenth was by no means absolute, as is demonstrated by the Aragonese *Chirumbelas*, for instance.

Although the horizontal reeds have already been discussed, the Spanish reed chorus and its history merits attention here as a major family of stops which is so essential to the unique sound of old Spanish organs. The colorful reed sections stand out impressively against the lighter mixtures and *Nazardos*. However, this standing out is not a matter of sheer overpowering dominance, but rather a matter of interesting, sometimes even curious, and always original difference of color.

The development of the Spanish reed division had its germ in the Dutch style regals and trumpets, first introduced around 1550 (ibid.: 268). One of the oldest and most common reed stops was the *Dulzaína* (or *Dulzayna*). These short-resonator reeds, almost without exception made of short-length trumpet pipes, were suitable for horizontal positioning, and by the late seventeenth century, this placement was already an established usage (Wyly 1964: 286). The usual position of the *Dulzaína* results in certain aggressiveness of tone. Moreover, the rapidly speaking pipes, together with the shortness (and shape) of their resonators, create a special tone which Wyly describes tellingly as "a curious crackling effect." (Ibid.: 287.)

The *Orlo* (or *Orlos*) was a regal which was ordinarily placed in the facade of the organ, and which had a pitch of either 16' or 8'. This stop could be found inside the organ in the sixteenth century. The design of the resonators varied greatly (see an illustration in ibid.: 313), but generally speaking, the *Orlo* can be considered to be a more "sophisticated" version of the *Dulzaína* (also somewhat softer in sound). The denomination *Regalía*, meaning regal, was often more generally used than *Dulzaína* or *Orlo*, and in this generic meaning referred commonly to various short-resonator reeds like *Dulzaína*, *Orlo*, *Saboyana*, *Viejas*, or *Viejos*. Occasionally, the term *Regalía* was also used specifically for one kind of regal, which had short tubular resonators. (Ibid.: 314.) An amusing detail is the name *Viejas*, which literally means "old women"; analogously, *Viejos* means "old men." The original snarling sound of these stops proves their label to be very fitting.

By far the most common trumpet stop was the 8' *Trompeta real*, which was placed (vertically) inside the case. The name of the stop refers to the "real" length of a pipe, rather than to a "royal" trumpet (as one sometimes hears speculated). The volume of sound of the *Trompeta real* is moderate, but the stop carries sound well. On the contrary, the usually exterior reed, *Clarín*, was rather loud, and it was typically a solo stop for the right hand. If the name of the *Clarín* does not indicate a higher pitch (e.g., *Clarín en octava*, 4'), it is nearly always a full-length 8'-reed. Although *Clarín* as a facade reed appears to have been invented about 1670, possibly by Joseph de Echevarría, the same name was already in use as early as 1544, the organ of the Cathedral of Lérida having stops entitled *Claríns de Mar* and *Claríns de galera* (ibid.: 275). It is likely that they both referred to regals.

Clarínes could be either vertical or horizontal. In other divisions besides the mainwork, Clarín was ordinarily the strongest solo reed and was usually only for the right hand, located inside the organ case (ibid.). Clarín could also be enclosed for producing echo effects; in this case, it was called Clarín en eco. The first Clarínes en eco were probably constructed in 1665 for the organ of the convent of San Francisco of Vitoria by fraile José Echevarría (Jambou 1979: 41). Because there was little space for the enclosed or other interior Clarínes, the pipes could be of about half their normal length. These kinds of Clarínes had special names, like Clarín bastardo, Trompeta bastarda, or Trompeta Recortada. (Wyly 1964: 276.) If there were Clarínes for both halves of the keyboard, it was usual to have one more Clarín for the upper half, in order to balance the sound well between the treble and bass (ibid.). Although the name Clarín was used in several contexts, it came to mean almost exclusively a facade stop (when used in the first manual) during the eighteenth century (ibid.: 275).

The denomination *Trompeta [de] batalla* belongs to the group of the largest *Trompetas* at 8' pitch. The name could refer to *Trompeta* of 8' of the back facade, or to a trumpet stop which was found in lieu of the *Clarín* either throughout the keyboard or in the left hand (ibid.: 320). *Trompeta de batalla* is a horizontally positioned reed stop. *Trompeta magna* is a 16' *Trompeta* which can be either vertical or horizontal and is frequently the loudest reed of the Spanish organs. It is usually in the facade, and is [hence] a stop for the treble half only (ibid.). *Trompeta imperial* is likewise a right-hand facade reed, of 32' pitch, which has a strong sound (ibid.).

Chirimía is a trumpet stop at 4' pitch. Although its name originally referred to some stop more or less like Schalmey, it later became a common term for one of the 4' stops of the facade. Practically, Chirimía was interchangeable with Bajoncillo, except that the designation Bajoncillo referred exclusively to a left-hand stop. (Ibid.: 274–275.) Although Chirimía was typically a 4' (or 2') reed for the left hand, it could also appear in the treble half. The epithet Chirimía alta was sometimes used to mean either a facade trumpet of the left hand at 2', or even at 1' pitch, or a right-hand 4' reed (ibid.: 275). The denomination Bajoncillo was reserved for a 4' (sometimes 2') reed for the bass, which was usually horizontal. However, it can occasionally be found inside the organ case, in some subsidiary division (ibid.: 273).

One feature particular to the Spanish (and Iberian) organs is the special nature and function of the pleno of the full-developed reed chorus of Baroque organs, the *Lleno de lengüetería*. The said pleno of reeds included several horizontal reed stops, which began to appear in Spanish organs approximately from 1670 on. (Hence that such horizontal reeds are thus not relevant in registrating Francisco Correa de Arauxo's works.)

The basic element of the *Lleno de lengüetería* is the vertical, interior 8' reed stop, *Trompeta real*, which was usually found in both the treble and bass halves of the keyboard.

¹⁵ Louis Jambou has made the valuable observation that the development of the horizontal *trompeteria* was parallel to the evolution of the registers *en ecos* – both chronologically and geographically (Jambou 1979: 43).

To the *Trompeta real* were added, for instance, horizontal reeds at 4' and 2' pitch of the bass, and a couple of 8' horizontal reeds of the treble (or alternatively, a reed of 16' and 8', in which case the 16' reed could be either vertical or horizontal). As a result of this combination of pitches, the richest reed sound was built in the middle register of the organ, and the arsenal of reeds functioned as a repetition of a mixture. Knowing this, the initially surprising combination of pitches (e.g., 4' and 2' reeds for the left hand, and a 16' reed for the right hand) becomes a characteristic of utmost practicability, instead of a seeming oddity. Moreover, the particular combination of pitches also contributes to the solutions of wind distribution, often problematic in the Spanish organs. (Low bass pipes would consume wind excessively.) Besides, the 4' and 2' reeds of the bass half provide possibilities for greater agility of touch than would the slower speaking pipes.

The term *Contras* can mean either pedal "keys" or ranks of pipes played by the pedals, which could be either at 16' and/or at 8' pitch and were ordinarily pulldowns. In large organs, *Contras* is usually a combination of 16' and 8', which is always "on," meaning that when any key of the pedalboard is played, both the 16' and 8' pitch are sounded.

In the next chapter (1.8), I will give three exemplary dispositions of historical Spanish organs from different centuries.

1.8 Three Exemplary Dispositions of Historical Spanish Organs

I have chosen three organ specifications from different centuries to draw a general outline of how the facilities of registration developed in the Spanish organs, being aware that the said overview takes me outside of the chronological confines of this dissertation. I want to emphasize to the reader that all three organs to be discussed have gone through major changes during their history. However, as the result of an expertly done third restoration, the third of the said organs has – fortunately – recently been returned close to its original state.

The first specification is an example of the Castilian organ type from about 1550. The organ is currently located in the *Catedral vieja* (the Old Cathedral) of the City of Salamanca; it is called the "Salinas organ," after the famous Spanish theorist Francisco Salinas (1513–1590), who was a professor at the University of Salamanca from 1567 until 1587 (Stevenson 1961: 244) and who at some point possibly possessed the mentioned instrument, although naturally not in its present form. The organ was restored rather recently and has divided registers between c¹ and c¹-sharp. The exact date of restoration and the changes made to the instrument then are not known to me. It seems obvious, though, that the divided registers are not from the original year of construction. The lowest octave is a short octave

Example 1 "Salinas organ," restored; originally about 1550 (?), Catedral Vieja, Salamanca¹⁶

Flautado abierto (open)	4'
Flautado tapado (stopped)	4'
Octaba	2'
Docena	1 1/3'
Lleno (2x)	
Címbala (2x)	
Orlos (Regal)	8'
Dulzaína (Regal)	8'

This relatively small, single-manual instrument based at an 4' pitch offers possibilities for varied registration despite its having only eight stops. The foundation stops involve both open and stopped flue pipes, and the two different mixtures (*Lleno* and *Címbala*) give variation to combinations of *lleno*. The two reeds, *Orlos* and *Dulzaína*, are both regals and are typical of Correa's time and earlier.

The second specification is an example of a Catalonian organ type and belongs to the organ of *La Basílica de Nuestra Señora de los Reyes* (Barcelona). The specification is the result of the expansion of the 1540 organ (Wyly 1964: 47).¹⁷ The *Cadireta* of the instrument was added before 1650 since repairs were made on it in that particular year (ibid.). Some more repairs were made in 1691 by Agustín Lliñás who had then noted the following disposition (ibid.: 47–48)¹⁸:

Example 2 La Basílica de Nuestra Señora de los Reyes, Barcelona (1650–1691)

Orgue (54 notes, C1 (short octave)–a ²	
Flautat mayor (2 ranks, in facade)	8', 16'
Octava (2 ranks)	4'
Dotsena y alemanya (7 ranks)	
Alemanya (8 ranks)	
Simbalet (3 ranks)	
Flautat de fusta [wood]	8' or 4'
Cadireta (probably 42 notes, C (short octave)–a ²	
Flautat de fusta (14 palmas, inside case)	8'
Cara de 7 palmas ¹⁹	4'
Octava de la cara	2'
Quinsena	1'
Dotsena nasarda	1 1/3'
Quinsena nasarda	1'
Desinovena	2 2/3'
Vintidozena (2 ranks)	1/2'
Simbalet (3 ranks)	

¹⁶ I played this organ in Salamanca in 1995, 1996, and 1998 and wrote down the disposition then.

¹⁷ James Wyly is referring to the article "Los Organos de la Basílica de Nuestra Señora de los Reyes (Pino) de Barcelona," in *Anuario Musical* IV (1949) by Francisco Baldelló.

¹⁸ The 1691 version of this disposition is also found in Williams 1978: 250.

¹⁹ Wyly's text reads "Cara de 7 palms" (Wyly 1964: 48).

The organ of *La Basílica de Nuestra Señora de los Reyes* has two manual divisions, *Orgue* being the mainwork. *Cadireta*, which was characteristic to the Catalonian organs, was likely to have been a *Rückpositiv*. The stops were undivided, as was customary in the Catalonian organs of the time, as was the short octave. The disposition of the organ involves a notable number of mixtures of several kinds. The *Alemanya* is the largest principal-scaled mixture of the main work in the sixteenth- and seventeenth-century Catalonian organs (ibid.: 273). The *Octava de la cara* refers to a principal whose pipes are in the facade. It draws attention to the fact that there are no reed stops in this middle-sized instrument, which is actually one example of an "updated" Renaissance organ (ibid.: 47).

The third specification to be discussed here is an example of a Castilian Baroque organ, namely, the organ located in the *Catedral Nueva* (the New Cathedral) in Salamanca, built by Pedro (de) Echevarría in 1743. The organ is placed at the "Gospel side" of the *coro* and has been restored three times: in 1890 by Juan Otorel, in 1973 by *Organería Española*, and in 2005–2006 by Joaquín Lois. The organ is an example of a Castilian Baroque organ, namely, the organ located in the New Cathedral) in Salamanca, built by Pedro (de) Echevarría in 1743. The organ is placed at the "Gospel side" of the *coro* and has been restored three times: in 1890 by Juan Otorel, in 1973 by *Organería Española*, and in 2005–2006 by Joaquín Lois.

The recent restoration of the Gospel organ of the New Cathedral of Salamanca was a complete one, including the restoration of the windchests, action and pipes, and the construction of new wedge bellows and keyboards. The original voicing was returned and the tuning changed into a modified meantone tuning. In the process of restoration, a *Trompeta Magna* 16' was added to the treble half of the *Cadereta*.

The Gospel organ of the New Cathedral of Salamanca represents a fully developed Castilian Baroque organ of a relatively large size having two manual divisions and sixty-three divided registers. *Organo mayor* (at the 16' basis) is the mainwork, the *Cadereta* (which was exceptional in the Castilian organs) functioning as an *Echo*. The instrument makes possible a big plenum and a great variety of colorful solo combinations, with its *flautados*, *nasardos*, *llenos*, and numerous reeds. The impressive reed section consists for the most part of different kinds of trumpets at 16' to 4' pitches. The arsenal of trumpets involves both interior and exterior reeds, some stops being found only in the treble or in the bass half (e.g., the *Trompeta magna* [16'], which is [normally] exclusively an exterior reed for the right hand). The double facade of the organ renders possible fine acoustical effects, in the producing of which the exterior *Trompeta de batalla* (8'), being located in the back facade, figures importantly. There is also a pedal, consisting of eight keys, with which it is possible to play pedal ranks of *Contras* 16' and *Contras* of 8'.

²⁰ This date is given both by the organ builder Joaquín Lois (in an e-mail message to the author dated April 13, 2008) and Blancafort (Blancafort 1979: appendix; Blancafort 1983: 22) while Williams (1978: 252, 267) gives the year 1744 as the date of construction of the "Gospel" organ of the New Cathedral of Salamanca.

²¹ The information about the former restorations and about the details of the most recent restoration of the Gospel organ of the New Cathedral of Salamanca was provided by organ builder Joaquín Lois through e-mail, on April 13, 2008.

Example 3 *Catedral Nueva*, Salamanca/Pedro Echevarría (1743) two keyboards with sixty-three divided registers (c^{1}/c^{1} -sharp), 49 notes ($C-c^{3}$) 2,410 pipes

ÓRGANO MAYOR (II, GREAT)			
Mano izquierda (left hand)		Mano derecha (right hand)	
Flautado de 26	16'	Flautado de 26	16'
Flautado de 13 1 ^o	8'	Flautado de 13 1 ^o	8,
Flautado de 13 2º (back facade)	8'	Flautado de 13 2 ^o	8'
Octava	4'	Octava	4'
Docena	2 2/3'	Docena	2 2/3'
Quincena	2'	Quincena	2,
Lleno IV (Mixture)	1 1/3'	Lleno IV	
Címbala IV	1'	Címbala IV	
Sobrecímbala III	1/2'	Sobrecímbala III	
Violón de 13	8'	Violón de 13	8'
Tapadillo	4'	Tapadillo	4'
Nasarte en 12 ^a	2 2/3'	Nasarte en 12 ^a	2 2/3'
Nasarte en 15 ^a	2'	Nasarte en 15 ^a	2'
Nasarte en 17 ^a	1 3/5'	Nasarte en 17 ^a	1 3/5'
Nasarte en 19 ^a	1 1/3'	Nasarte en 19 ^a	1 1/3'
		Corneta 7H	
Trompeta Real (interior)	8'	Trompeta Real (interior)	8'
Lengüetería de fachada (facade reed	s).	Lengüetería de fachada:	
Trompeta de Batalla (back facade)] 8'	Trompeta de Batalla (back facade)	l 8'
Clarín (main facade)	8,	Clarin 1 ⁰ (main facade)	8,
Bajoncillo	4'	Clarin 2 ⁰	8'
Dulzaina	8,	Trompeta Magna	16'
2 dizama		Dulzaina	8'
CADERETA (I)			
Mano izquierda (left hand)		Mano derecha (right hand)	
Flautado de 13	8'	Flautado de 13	8,
Tapadillo	4'	Tapadillo	4'
Nasarte en 12 ^a	2 2/3'	Nasarte en 12 ^a	2 2/3'
Nasarte en 15 ^a	2'	Nasarte en 15 ^a	2'
Nasarte en 17 ^a	1 3/5'	Nasarte en 17 ^a y 19 ^a	1 1/3'+
108	1.1/2.		1 3/5'
Nasarte en 19 ^a	1 1/3'	Lleno	
Lleno III	1'	Címbala	42
Címbala III	2/3'	Corneta V	4'
Trompeta Real	8'	Trompeta Real	8'
Bajoncillo	4'	Trompeta Magna	16'
		Obué	8'
PEDAL C D E F G A BB B			
Contras de 26 (back facade and interior; wood)	16'		
Contras de 13 (back facade; metal)	8'		
- tracker action			
- mechanical stop action			
- pitch 429 Hz			
- a modified meantone tuning			
- five wedge bellows			
nve weage beliews	1	l	ı

2 The Other Keyboard Instruments

For the Spanish sixteenth- and seventeenth-century organists, the organ was not the primary practice instrument. Practice hours at the unheated cathedrals were probably limited, especially since playing the organ in those days required someone to operate the bellows as well. There is some evidence that even as harpsichords became more common in Spain, the clavichord (*monacordio*) continued to be the usual practice instrument for organists. This is shown, for instance, by the advice on tuning the clavichord included in many keyboard music collections and theory books of the time (one example is the last chapter of the textual part to Correa's Facultad orgánica, namely, the MODO DE TEMPLAR EL MONACORDIO [the way to tune the clavichord, folios 25v-26]). Furthermore, it is very likely that organ lessons were given mostly at the keyboard of a clavichord or a harpsichord. In addition, playing techniques idiomatic to different keyboard instruments began to develop properly as late as the sixteenth century. Girolamo Diruta's keyboard tutor, Il Transilvano (1593, Venice), was among the first to differentiate to some extent between the playing of the organ and of the harpsichord and/or the clavichord. The titles of the collections of Spanish keyboard music are revealing in reflecting the process of differentiation of keyboard techniques. Venegas de Henestrosa entitled his collection of 1557 Libro de cifra nueva para tecla harpa y vihuela, 'tecla' being a general term for 'keyboard.' The same is true of Antonio de Cabezón's *Obras de música para tecla, arpa* y vihuela printed in 1578. On the contrary, Francisco Correa's Libro de tientos y discursos de música práctica y theórica de órgano intitulado Facultad orgánica, published in 1626, was designated specifically for the organ. The gradual differentiation of playing techniques for different keyboard instruments – being interrelated with the development of idiomatic repertoire for these instruments – was often demonstrated first by explanations of ornaments special to a certain keyboard instrument. For instance, Correa recommends ornaments specifically for either the organ or the clavichord (or the harpsichord).

2.1 The Sources of Information

It is curious that in a country of several local organ types, there apparently was not a Spanish school of harpsichord constructing that would equal in importance the national schools of France, Italy, Flanders and Germany. What is more, there is surprisingly little information available about the clavichords and harpsichords used in Spain both in Correa's era and in general. However, some recent research has shed light upon the stringed keyboard instruments in Spain. Two articles are particularly informative and interesting, namely, "Clavicordios and clavichords in 16th-century Spain" (1992) by Beryl Kenyon de Pascual and "Iberian discoveries: six Spanish 17th-century harpsichords" (1999) by Andreas E. Beurmann. Until recent discoveries of surviving instruments, the inventories of the possessions of the Spanish royalty, nobility and the rich bourgeoisie, along with

the old music theory books and keyboard music collections, were the principal sources of information about the historical stringed keyboard instruments in 16th- and 17th-century Spain.

2.2 The Use of Terminology

What immediately strikes the reader of the catalogues of musical instruments is the ambivalent nomenclature associated with different stringed keyboard instruments. While 'clavicordio' basically meant a plucked keyboard instrument, for several hundred years 'monacordio' (with its various spellings)²² meant a clavichord. Nevertheless, these days 'clavicordio' is commonly used for the clavichord, and the harpsichord is usually called either 'clave,' 'clavicémbalo' or 'clavecín.' However, ambiguity exists in the modern use of terminology, too. According to the dictionary of the Spanish Royal Academy [of Language] of 1992, the term 'clavicordio' refers to a stringed keyboard instrument, the mechanism of which is reduced to a lever whose front end, which forms a key, is depressed by the finger, while the distal end of it ascends abruptly, striking a string from the back with a piece of brass that the lever has at its point (Diccionario de la lengua española 1992: Tomo I: 489), the 'espineta' being a "clavicordio pequeño," a small clavichord (ibid.: 897). In the same dictionary, the meaning of the term 'clavicémbalo' is given to be a stringed keyboard instrument that is characterized by the way of striking the said strings from the back by ["]bills["] of feather, which serve as plectra (ibid.: 489). In the Oxford-Duden Pictorial Spanish and English Dictionary of 1995, clavichord is accordingly designated as 'clavicordio,' and 'clavicémbalo' and 'clavecín' are given as synonyms for the harpsichord. 'Espineta'²³ is taken to mean the spinet, the synonym of which – according to the mentioned dictionary – is the virginal (Sp. el virginal). (Oxford-Duden 1995: 560-561.)

Discussing Pablo Nassarre's explanations of musical instruments, Kenyon de Pascual points out that, when the terms 'clavicímbalo' and 'clavicordio' were both used in the same text in the 16th century, a distinction was made between the harpsichord (clavicímbalo) and the other types of plucked keyboard instruments (clavicordio) like virginals (Kenyon de Pascual 1992: 612). However, if only 'clavicordio' was used, its meaning is not as clear, because the term could be used in two different ways: generically or specifically (ibid.). This distinction is a crucial one to keep in mind when studying the old inventories, theory books and other texts that concern the stringed keyboard instruments in Spain.

²² For example, monachordio, monocordio, manicordio, manacordio, manocordio, manucordio.

²³ Note that 'espineta' was used in Spain to also mean the 4' register of harpsichords (Kenyon de Pascual 1992: 611).

2.3 Makers of Stringed Keyboard Instruments

Not very many Spanish makers of keyboard instruments, other than the organ, have been identified by name. In the 16th century there was the family Mofferriz which was associated with the construction of stringed keyboard instruments. The most famous member of this family was Mahoma Mofferriz, who was a Moor known to have worked in Saragossa.²⁴ M. Mofferriz (fl. 1484–1545) built a small *clavicordio* that was included in the inventory of Cardinal Tayera's estate (1545); another small *clavicordio* in walnut by him was mentioned in the list of Philip II's possessions (Kenyon de Pascual 1992: 612). Another master builder, Pedro Bayle, also worked in Saragossa at the beginning of the 16th century (ibid.). Both Mahoma Mofferriz and Pedro Bayle constructed clavicímbalos and organs. In Spain, too, a relation between making stringed keyboard instruments and making organs clearly existed. Often it was the organ builder who tuned and repaired the other keyboard instruments, in addition to the organ. These services were needed likewise in churches, chapels, monasteries, the royal court and probably, to some extent, private houses of the nobility and the wealthy bourgeoisie. The majority of the Spanish builders of musical instruments belonged to a branch of the carpenters' guild. For example, in the Valencia of the late 15th century, woodwind instrument makers, stringed instrument makers and makers of organs and other keyboard instruments represented different branches of the carpenters' guild. It is not clear, however, whether all keyboard instrument makers really belonged to one and same branch or whether the organ builders formed a branch of their own. In the Seville of the early 16th century, for one, the branch of string instrument makers covered the construction of stringed keyboard instruments. (Ibid.: 614.)

2.4 The Popularity of the Clavichord and Its Many Functions

It may well be that the harpsichord was held in greater esteem than the smaller clavichord. Regardless of this, the surviving documents about the keyboard instruments of the 16th- and 17th-century Spain seem to reflect the wider use of the clavichord; the important Spanish theory books like Juan Bermudo's *Declaración de instrumentos* (1555) and *Fray* Tomás's *Arte de tañer Fantasía* (1565) are sources of this point. Both works involve instructions on clavichord technique. In addition, in Francisco Correa de Arauxo's *Facultad orgánica* (1626), there is one chapter about the tuning of the clavichord. It is rather curious that Spanish theorists and composers from the 16th and 17th centuries write hardly anything about the harpsichord.

One reason for the obvious popularity of the clavichord must have been its general usefulness – in other words, its many functions. First of all, the clavichord certainly served as a practice instrument for professional organists and for beginners – were the latter

²⁴ Another member of the Mofferriz family with a known first name was Braham Mof[f]erriz, who was Mahoma's brother (Beurmann 1999: 206).

professional musicians of the future, members of the nobility, other rich layman or members of the royalty. Secondly, the clavichord was also certainly used as a teaching instrument. Thirdly, the clavichord was used to some extent as an instrument for testing candidates applying for posts of professional keyboard players, and it was used in performing music, too. For example, when Bernardo Clavijo applied for a chair of music at the University of Salamanca in 1593, the instrument at the keyboard of which Clavijo demonstrated his abilities was a clavichord (Kenyon de Pascual 1992: 616). Evidently, the clavichord was a commonly used keyboard instrument having several different roles in 16th- and 17th-century Spain, even though the larger and decorative harpsichord, which also had a richer and stronger sound, may have possessed greater social prestige.

2.5 Types of Information

As already mentioned, the main sources of information about the stringed keyboard instruments in Spain are old music theory books, keyboard music collections (often with prefaces) and inventories of belongings of the royalty or individual persons. Thus far, the information about harpsichords has principally derived from royal inventories and has primarily concerned the decoration, measurements and prices of instruments. (See, for example, the complete list of Philip II's musical instruments, worked out by Beryl Kenyon de Pascual [1992: 625–626].) On the contrary, the knowledge about clavichords in Spain comes almost exclusively from theory books or keyboard tutors and deals mainly with different technical details like compasses, tuning and fretting systems. The "prototype" of the clavichord used in Spain, the *monacordio común* (the common clavichord), is depicted by Juan Bermudo in his *Declaración de instrumentos* and is confirmed by the other Spanish 16th-century theorists. This instrument had 42 keys, was fretted and had a compass of C/E–a2 (Bermudo 1555: lxii). We have hardly any information about the appearance of the Spanish clavichords due to the lack of discoveries of surviving clavichords, as well as the extreme scarcity of the iconographical sources of both clavichords and harpsichords.

2.6 The Claviorgana

In addition to clavichords and harpsichords, the claviorganum (*claviórgano*) was a familiar musical instrument, used both in the Spanish court and in churches. On the list of Philip II's twelve stringed keyboard instruments, there were two *claviórganos*, plus one small and triangular *clavicordio*, "like a *claviórgano*" (Kenyon de Pascual 1992: 625–626). The latter has been interpreted to probably mean a 2'- or 4'- strung instrument which had organ pipes, too (ibid.: 612).

Because the *claviórgano* was a combination of a harpsichord and an organ, which could also be played separately when necessary, it could fulfill various functions in the

church service. For instance, the Chapter of the Seville Cathedral directed the *claviórgano* (whose donation was mentioned in the capitular acts in 1676) to be used in the octaves of Corpus Christi, in the Immaculate Conception, and in solemn matins (Hoag 1980: 187). Before a *claviórgano* was purchased for the Cathedral, the motets of Corpus Christi were accompanied by a *clavisímbalo* (borrowed especially for that purpose), and alternatim verses of the psalms and hymns on the same occasion were played by a small organ, a *realexo* (ibid.). Naturally, after a *claviórgano* was bought, it could serve both of these purposes.

2.7 The Import of Keyboard Instruments

Regarding the Italian and Flemish dominions of the Spanish reign, it is more than likely that most of the imported keyboard instruments arrived from those countries. It was only natural to import keyboard instruments from Flanders, just as many Flemish musicians were in the service of the Spanish court. There were also various Flemish organ builders in Spain in the 16th and 17th centuries. The most famous example is probably the Brebos family. It is also possible that at least some German and French stringed keyboard instruments were brought to Spain. There is evidence that one claviorganum (*claviórgano*) from Germany was given to Prince Philip in 1596 "from a great prince" and that Philip II's third wife, Elizabeth of France, bought a *clavicordio* in Paris (Kenyon de Pascual 1992: 617).

At least two Flemish instruments imported to Spain still exist. One is a virginal that is situated in the monastery of Santa Clara in Tordesillas and the other is the remains of a harpsichord having one manual (8', 4') found in a side chapel of the Cathedral of Segovia (ibid.). The virginal was made in the 1570s by Hans Bos in Antwerp. This instrument is the earliest-known example of the use of Flemish paper with the 'dolphin' motif. It is also unique (as a Flemish instrument) in that it has gilt masks (in relief) on the far end of the sharp key plates. The single-manual harpsichord, probably built by some member of the Ruckers family, was found on a pile of rubbish in the cloisters. The somewhat unclear date that appears on the soundboard has been interpreted as 1602. The decoration of the instrument is typical of the Antwerp school. (Ibid.: 617–618.)

The mother-and-child type virginal was also known in Spain, at least in the Spanish court. One royal keyboard instrument was repaired by Flemish organ builder Mateo Langhedul in 1597; this instrument was described to have had another *clavicordio* inside it (ibid.: 618).

2.8 The Earliest Surviving Spanish Harpsichords

Beryl Kenyon de Pascual reported in 1992 that "The earliest signed and dated Spanish harpsichord known to the author" was the one made by Ludovicus (Luís) Muñoz in Toledo in 1644 (Kenyon de Pascual: 620). Continuous research on the keyboard organology of

the Iberian peninsula has been done since by scholars such as Cristina Bordas, Andreas E. Beurmann, Gerhard Doderer, Beryl Kenyon de Pascual and John Henry van der Meer, and some considerable discoveries have been made. Regarding the questions about the existence of Spanish harpsichord making and its features – if there really was such a national school – the greatest step forward and most exciting news from this field recently has to be the finding of six Spanish harpsichords from the 17th century, assuming, for the time being, that these instruments are genuine. The instruments are presently all in the formerly private Beurmann collection, which was recently donated to the City of Hamburg by Professor Andreas E. Beurmann (2000: 329). Beurmann's article of 1999 gives a rather detailed description of these important instruments that are apparently all in remarkably good condition. Unfortunately, Beurmann does not provide the background information about the purchase of his instruments. A very general idea is given, nevertheless, when he writes: "I ask the reader's indulgence for the fact that I cannot yet publish details of the diverse sources of the instruments, which were mainly found in cloisters and private houses" (Beurmann 1999: 206, footnote 5).

The said six harpsichords are from the period 1624–1691. One of the instruments is the single-manual harpsichord made by Ludovicus (Luís) Muñoz that was also mentioned by Kenyon de Pascual (1992: 620). The other five involve three double-manual harpsichords by Fray Raymundo and Fray Antonio (1624), Fray Pedro Luis de Bergaños (1629) and Fray Bartomeu Angel Risueño (1644), one single-manual harpsichord by Domingo de Carvaleda (1676) and lastly, a rare *vis-à-vis* harpsichord by Roque Blasco (1691) (Beurmann 1999: 183).

2.9 The Issue of Authenticity of the Early Spanish Harpsichords of the Beurmann Collection

Shortly following the publication of Beurmann's article (May 1999), an article by Professor John Koster, "A contemporary example of harpsichord forgery," was published (*Early Music*, February 2000). In this article, Koster (2000: 91–97) proves that a harpsichord which the Shrine to Music Museum at the University of South Dakota recently had an opportunity to acquire is not a genuine old instrument. The inscription on the nameboard of the harpsichord reads LVIS DE CARBALLEDAME FECITA.D. 1641 (ibid.: 91). However, careful scrutiny of this instrument by various methods brought to light incontrovertible evidence that the harpsichord in question is in fact a product of the late twentieth century. In his article, Koster makes the point that the (supposed) 1641 Carballeda ". . . bears a striking resemblance to the instruments of similar origin and date described in Andreas E. Beurmann's recent article" (ibid.), questioning thereby the authenticity of at least the harpsichord supposedly built in 1676 by Domingo de Carvaleda, presently belonging to the collection of the City of Hamburg.

In the correspondence column of the magazine, in which both Beurmann's and Koster's articles were published, Professor Beurmann emphasized in his response to Koster (May 2000) that: "Certainly, I have always taken care to try and establish the authenticity of my instruments" (Beurmann 2000: 329). Beurmann also wrote that "Careful scrutiny by methods of radio-carbon dating (¹⁴C), UV-VIs-reflectography, dendrochronological and pigment researches, together with many others as shown in John Koster's article, will be carried out as soon as possible" (ibid.). According to Beurmann, that process cannot be started, though, before the harpsichords have found their places in a new museum where the Beurmann collection will be placed, following the donation of the collection to the City of Hamburg – thus, not before September 2000 (ibid.).

Until additional information about the presumed six Spanish harpsichords in the Beurmann collection is received, the final affirmation of their authenticity must be postponed. However, for the lack of a final, decisive word, we have reasons to believe that at least some of these instruments are genuine in date and origin.

If the six harpsichords – claimed to be authentic by Beurmann – appear to be genuine, they will help to fill in the gap in our knowledge about the harpsichords built and played in Spain in the 17th century. According to Beurmann, there are far more surviving exemplars of Spanish harpsichords from the 18th century; citing B. Kenyon de Pascual, he reports their number to have grown to at least sixteen (Beurmann 1999: 184). Hopefully, Professor Beurmann will produce detailed background information in the near future concerning the six Spanish harpsichords and the two Portuguese harpsichords which also belong to the Beurmann collection.²⁵ That information would be essential to the continuous search for forgotten keyboard instruments of which there most probably are still various exemplars to be found. In addition, the results of investigation of the six harpsichords by different scientific methods, such as radio-carbon dating (14C) and dendrochronological research, promised by Beurmann, will be absolutely essential, in order to exclude the possibility of harpsichord forgery and to learn more about the materials and details of construction of these instruments. Thorough knowledge about the still surviving historic clavichords and harpsichords is equally necessary to makers of keyboard instruments, to performers and to scholars.

²⁵ Beurmann claims in his article that the harpsichords built by Jeronimo Bocaro in c. 1650 and by Antonio Oliveres in c. 1730 are "the two oldest Portuguese harpsichords" (Beurmann 1999: 206, footnote 4).

IV THE *FACULTAD ORGÁNICA*

1 The Structure of the Book

The *Facultad orgánica* is divided into two main parts. The first one is theoretical and the second is musical. The theoretical part consists of the title page, one unnumbered folio + § 2–§ 4 + 1–26 folios. After the title page, the first (unnumbered) folio is an errata page. Folios § 2–§ 3r contain a table of the musical pieces of the *Facultad*. On folio § 3v there is a dedication poem in Latin by Juan Alvarez, which is followed by *PROLOGO EN ALABANÇA DE LA CIFRA* (A Prologue in praise of *cifra*) on folio § 4. The prologue is followed by 26 folios, which receive a new set of numbers (from 1 to 26). These numbers appear on the upper corners of the recto of the folios.

The textual part of the book is divided into two main chapters: *ADVERTENCIAS* (Warnings or Reminders, fols. 1–12), and *SIGVESE EL ARTE DE PONER POR CIFRA* (Follows the art of playing from *cifra* [or, reading *cifra*], fols. 13–26). Both of these main chapters are further subdivided. *Advertencias* consists of a prologue of one folio, followed by seventeen *PVNTOS* (points). *El Arte de poner por cifra*, for one, consists of ten *CAPITVLOS* (chapters), plus *CAPITVLO DECIMO DE LAS ADVERTENCIAS para perfectamente poner por cifra* (The tenth [sic] chapter of the *Advertencias* for reading *cifra* perfectly), *E[X] CEPCION* (An Exception), *ADVERTENCIA* (A Warning or A Reminder), and *MODO DE TEMPLAR EL MONACORDIO* (A Way to tune the clavichord).

The musical part of the *Facultad orgánica* consists of sixty-nine organ pieces written in tablature notation called *cifra* (fols. 1–204r). This part, too, has its own set of numbers, printed on the upper corners of the recto of the folios. Folio 204v is the last printed page of the book; it contains this text: *ALABADO SEA EL SANTISSIMO SACRAMENTO*, *Y LA Inmaculada Concepcion de la Virgen Maria Nuestra Señora Concevida Sin mancha de pecado Original* (Praised be the Holy Sacrament, and the Immaculate Conception of the Virgin Mary, Our Lady conceived without the stain of original sin).

¹ The numbers § 2–§ 4 appear on the bottom right corners of the recto of the folios.

² The description of the structure of the book in this chapter refers to the facsimile edition of the Brussels exemplar of the *Facultad orgánica* (1980: Genève: Minkoff Reprint). The main difference between this exemplar and the two Madrid exemplars, which are described in detail in *Appendix C* of this study, is the errata folio, which is not included in the Madrid exemplars.

³ When I mention the different chapters of the *Facultad orgánica* by name for the first time in a chapter, I use the original spelling and capitalization.

All the organ pieces of the *Facultad orgánica* have brief prefaces. It is noteworthy that they are really meant to be prefaces, although they have been relegated to footnotes in Kastner's edition of the *Facultad orgánica*, contrary to Correa's original intention. In the *Capítulo decimo de las Advertencias*, Correa asks one to ". . . read and understand the preambles at the beginning of each *tiento*":

Item, que lea, y entienda, los preambulos puestos al principio de 4 cada tiento, . . . (Correa 1626: 25r-25v).

2 The Contents of the Textual Part of the Facultad orgánica: General Outline

2.1 Information Given by the Title Page About the Type and Function of the *Facultad orgánica*

The textual part of the *Facultad orgánica* begins with the title page, the errata, the table of the organ pieces, and a dedicatory poem. These are followed by the textual part proper: a brief prologue in praise of the *cifra* tablature notation and two lengthy main chapters.

When studied carefully, the title page offers some useful information about the function and the author of the work. The entire title of the book is *LIBRO DE TIENTOS Y DISCVRSOS DE MVSICA PRACTICA, Y THEORICA DE ORgano, intitulado Facultad organica* (A Book of *tientos* and *discursos* of practical and theoretical organ music, entitled *Facultad orgánica*). The title reveals the twofold nature of the book: it contains both theory and "practical organ music," in other words, compositions. One possible translation of the actual title of the book the *Facultad orgánica* would be "The Art of the Organ." "Facility in Organ Playing," "Facility in Polyphony (Organum)" (Holland 1985: 123), and "Skill of the Organ" (Schrader 1987: 6) have also been suggested. Although Correa calls his compositions both *tientos* and *discursos* in the title, examination of the use of these terms in the course of his book shows that they seem to be synonymous in most cases, both pointing to an imitative, *Ricercare*-like composition.

After the title comes a short description about the function of the book or, should I say, a promise given to readers. According to Correa, with the *Facultad orgánica*, ". . . and with moderate study and perseverance, any average player can take advantage of it; knowing how to sing *canto de Organo*⁶ skillfully, and, above all, playing with natural disposition":

⁴ Folio 25v begins here. Folio 25r is unnumbered in the original.

⁵ The change of capitalization in the original edition marks the beginning of the following line.

⁶ Although the literal translation of Correa's text is "to sing *canto de Organo*," the alternatives "to play organ music," or "to play polyphony" are also feasible in this context, as some scholars have suggested (Bovet 1985: No. 1: 6 and *TI*: 2; Holland 1985: 123).

... Facultad organica: con el qual, y con moderado estudio y perseverancia, qualquier mediano tañedor puede salir aventajado en ella; sabiendo diestramente cantar canto de Organo, y sobretodo teniendo buen natural (Correa 1626: title page).

In other words, the work at hand is meant to help organ players to develop their skills, besides offering new repertoire. Correa's remark that "any average player" can benefit from studying his book seems to imply that both his compositions and theoretical and practical advice are primarily meant for those who already possess some skills in organ playing. However, Correa also takes beginners, as well as very advanced players, into account. For instance, he characterizes some of his *tientos* as easy and suitable for beginners (e.g., *Segundo tiento de primero tono*, fols. 42–43r, *Quinto tiento de quarto tono*, fols. 51v–53r, and *Tiento de quinto tono*, fols. 53v–53v [54v]), while he asks one to leave the playing of his technically most demanding works, which have a lot of *glosas*, for those who have the needed skill and ability (ibid.: 167).

The term *canto de órgano* is frequently used in Spain to mean polyphony, opposed to *canto llano*, plainchant. I do not consider it impossible that Correa literally meant (or at least hinted) that with the aid of the *Facultad orgánica* one would also learn "to *sing* polyphony," in addition to, or besides, being able to play it. First of all, in light of early Spanish treatises, keyboard tutors, and forewords to collections of keyboard music, the skill of singing was considered the foundation of all musical education. It was customary that those who wanted to become instrumentalists learned plainchant and vocal polyphony before they began to learn to play their instruments. Secondly, the early sources emphasized – for obvious practical reasons – the importance of the ability to read music well. Thinking of beginners, differents clefs, note values, pitches of notes, and changes of *compás* [tactus] – not to speak of natural phrasing, articulation, and keeping the beat steady – could be introduced far more easily through the means of singing than by trying to play some instrument immediately. Thirdly, Correa's above-cited words of "*cantar canto de Organo*" could simply mean music-making in general.

2.2 Information Given by the Title Page About the Author of the Facultad orgánica

In addition to describing who would benefit (and how) from studying the *Facultad orgánica*, the title page gives some information about its author:

COMPVESTO POR FRANCISCO CORREA DE Arauxo, Clerigo Presbitero, Organista de la Iglesia Collegial de san Salvador de la Ciudad de Sevilla, Rector de la Hermandad de los Sacerdotes della, y Maestro en la Facultad, &c.

⁷ Correa makes this remark in the preface of the last of the four works having *glosas* in thirty-second notes, namely, the *Canción Susana* (fols. 167–173r).

(Composed by Francisco Correa de Arauxo, Cleric Presbyter, Organist of the Collegiate Church of san Salvador of the City of Seville, Rector of the Fraternity of its Priests, and Master in the Faculty, etc.)

Correa was ordained as a priest most probably in 1608 (Ayarra Jarne 1981: 37). *Clérigo presbítero* means that he was authorized to say mass. Next Correa's post as organist of the Collegiate Church of San Salvador in Seville and his position as Rector of the Fraternity of the priests of San Salvador are mentioned. Correa began working at San Salvador in 1599, at the early age of fifteen. He stayed in that post for thirty-seven years, during which the *Facultad orgánica* was published, in 1626. Lastly, Correa is said to be "Master in the Faculty, etc." The Spanish word *Facultad* means both a faculty of a university and a faculty in a sense of a skill, an ability. On the basis of the title of the work, the *Facultad orgánica*, it is likely that the title page refers to Correa's mastery of musical skills.

2.3 Other Elements of the Title Page: An Armorial, A Licence, Details About Printing

After Correa's name and titles comes an armorial, depicting a crown-headed eagle, holding a fish in its beak, placed above the actual coat of arms, which has a shell design in each of its four corners and a checked lozenge in the center. Thus far I have come up with only one attempt to identify the armorial of the *Facultad orgánica*, namely, that of Macario Santiago Kastner. In his commentary written for the first volume of the first modern edition of the *Facultad orgánica*, Kastner mentions having consulted two heraldry experts: a Spaniard, Marquess of Ciadoncha, and a Portuguese, Armando de Mattos. According to Kastner, both experts agreed that the armorial belonged almost certainly to Correa's patron, whose identity is not known today. (Kastner 1948: 15.)

Below the armorial is *CON LICENCIA*, with license. Finally comes the text *Impresso en Alcala*, *por Antonio Arnao*. *Año de 1626* (Printed in Alcalá, by Antonio Arnao. The year 1626). Alcalá refers to the famous Castilian university city, Alcalá de Henares. Apparently, no details about the printer, or the process of application for and granting of the license for the *Facultad orgánica*, are currently known. Sometimes the title page of an early Spanish source includes some information about the license for printing. For instance, the title page of *Fray* Tomás's *Arte de tañer Fantasía* mentions the place and date of printing, the name of the printer and his title (printer of His Majesty), and the fact that the work has a royal license and privilege for a period of ten years (Tomás 1565: title page).

Before 1480 there were no privileges granted to protect a printed work for a certain period of time in Spain (Ruiz Jiménez 1993–94: 3). In about 1480 the printing privilege became a document which gave authorization for the printing of a work to guarantee exclusive publishing rights and to restrain others from publishing the same material. The

⁸ For the nature of this fraternity, see Stevenson 1968: 21.

printing privilege was granted for a specific number of years and for a specified geographic area, by petition to the king. (Ibid.) For a printing privilege covering all of Spain, one had to apply separately in each of the Spanish kingdoms (ibid.: 4).

2.4 Errata Folio

The unsigned errata folio, which has been inserted in the Brussels and Leipzig exemplars of the *Facultad orgánica*, is missing from the two Madrid exemplars, which I have studied. Dionisio Preciado, who has studied the third Spanish exemplar – the exemplar of Bueu – in detail, does not report having seen such a leaf in the exemplar of Bueu, either (see Preciado's article on the exemplar of Bueu, 1975). Similarly, the replies from different libraries to my inquiries concerning the other exemplars that I have been able to track down (besides the above-mentioned Spanish exemplars and the Leipzig exemplar) do not mention an errata leaf. It is possible that the errata folios of the Brussels copy and the Leipzig copy are the only such folios surviving. However, upon studying the Madrid exemplars in Biblioteca Nacional of Spain, I noticed that after the folio signed § 2 of R.14069 there was a torn piece of paper (of about 0.5 x 7.0 centimeters) which could be a remnant of an errata folio.

Correa's errata consists of one folio printed recto verso. On the recto is first an introductory text to the actual errata list. The length of the introduction is a little less than half a page. In the introduction, the author brings out his concern that the readers of the Facultad orgánica might think that certain parallel fifths have been unintentionally written. He points out that, of the parallel fifths which one finds in some places of the book, one is perfect and the other one imperfect. Furthermore, these fifths appear together with "diversidad de figuras" (a diversity of figures/notes/numbers) that is "permitted, and much used by many serious authors." Similarly, in the first *Tiento de quarto tono*, in folio 12 (measure 28¹⁰), there appears to be two parallel octaves between the soprano and alto. Correa remarks that one voice "has an R, which says [means] redoble [a trill], with which one is saved from this inconvenience" (Correa 1626: the first, unnumbered folio). The author justifies his statement by writing that one should consider not the *redoble* but, on the contrary, the canto llano [the plain melody, which is the base] of the reduplicating voice 11 (ibid.). In other words, in the above-mentioned place, the three written-out notes of the *redoble*, notated between longer note values, are not to be taken as part of a seemingly forbidden movement of parallel octaves but rather as ornamenting notes – not involved in the counterpoint.

⁹ The existence of the errata folio in the Brussels exemplar was confirmed by Elly Cockx-Indestege, keeper of old and rare books at the Bibliothèque Royale Albert 1^{er}, in a letter to the author dated November 27, 1997. As regards the errata folio in the Leipzig exemplar, the information was provided by Brigitte Geyer at the Musikbibliothek Leipzig in a letter to the author dated November 13, 2007.

¹⁰ Staff 1, measure 1, in folio 12 in the original.

^{11 &}quot;Reduplicating voice" means the ornamenting voice here.

Correa ends his introduction to the errata by asking the reader to understand that, if any other [parallel] octaves or fifths in addition to the already-mentioned cases should be found, they are not the fault of the author's carelessness, but are rather printing errors, and [the fault of the] original, which was made from drafts, in which there were many doubtful numbers 12 (ibid). Correa adds that for the remedy to this problem – which is "so common in impressions" – and the work to remain as perfect as its author composed it, the following errors should be corrected (ibid.). Next comes Correa's list of printing errors, which has the title *Erratas* [sic] (see *Appendix A*). In this context, I refer the reader to the useful list of corrections to Kastner's complete edition of the *Facultad orgánica*, compiled by Guy Bovet and published in several issues of *La Tribune de l'Orgue* in 1997–1998. (Another list of "Suggested Revisions to the Kastner Edition" is included in *Appendix C* of Jon Holland's dissertation "Francisco Correa de Arauxo's 'Facultad orgánica': A Translation and Study of its Theoretical and Pedagogical Aspects" from 1985.)

Some of the errors which appear in Correa's list have already been corrected in the original, 15 namely, those on folios 9, 15, 20 (the third correction), and 146 (the second correction). Perhaps there was time for some places to be corrected just before the printing was done, although those places had already been included in the errata folio, which was probably also ready for printing. That would explain why the corrected places still appear in the errata. In most of the cases, the same places have been corrected, or remained uncorrected, both in the original and in Kastner's edition. The exceptions are found on folios 9, 146 (the second correction), and 176v. The correction of folio 9 has been made to the original, but not to Kastner's edition. On the contrary, the corrections suggested by Correa for folios 146 (the second correction) and 176v have not been made to the original, but were made to Kastner's edition. The fact that Correa's correction for folio 9 has been made to the original, but not by Kastner, raises some questions. It is possible that this place has simply gone unnoticed by Kastner. The other explanation would be that he has used at least one original copy different from the Brussels exemplar. 16

In the preface to his edition of the *Facultad orgánica*, Kastner reports having used three exemplars: R.14069 of the Biblioteca Nacional of Spain, *Reservados*, 377 of the Biblioteca Nacional of Portugal (Lisbon), and R.B.A 38-XII-27 of the royal Biblioteca da Ajuda (Kastner 1948: 69; Kastner 1980: VII). Since I have compared the Minkoff facsimile and the two Madrid exemplars (R.9279 and R.14069) and found the corrections made to these – or left out of them – identical, the possibility remains that one or both of the other two exemplars used by Kastner differ from the Brussels exemplar and also from the Madrid exemplars. Although the perhaps different Portuguese exemplars are known to be from the

¹² That is, numbers of cifra.

¹³ See also Bovet 1985: No. 1: 6–7, No. 2: 3–7 and *TI*: 2–7 (for a French translation of Correa's errata), and Bovet 1997: No. 2: 3 (for some revisions of the said translation); see Holland 1985: 125–135 (for an English translation of Correa's errata).

¹⁴ More specifically, in No 2–No 4 (49e année) in 1997, and in No 1–No 4 (50e année) in 1998.

¹⁵ The "original" meaning here the Brussels exemplar and the Minkoff facsimile based on it.

¹⁶ This supposition has also been made by Bovet (1985: No.1: 7; TI: 3).

original year of print, 1626, this does not exclude the possibility that there had been another printing in the same year.¹⁷

2.5 Table of Contents

Correa's table of contents consists of folios § 2–§ 3r of the *Facultad orgánica*. First comes an introduction of a few lines, followed by the actual list of *tientos* contained in the musical part. The most notable feature of the table of contents is the arrangement of the pieces of music in order of difficulty, which was exceptional in Correa's time. The author presents the principle of arranging his *tientos* in the introduction thus:

TABLA DE LOS TIENTOS, Y DISCVRSOS DE MVSICA DE ORGAno contenidos en este libro, los quales van segregados en seis repartimientos, a quien llamo grados, començando por los mas faciles y de menos estudio en primer grado, y assi consecutiuamente añidiendo grados, como se ua añiniendo dificultad y cuydado, en la ordenacion de los dichos discursos, hasta llegar al quinto y vltimo; el qual grado denota la mayor dificultad y perfeccion, de los discursos que caen en el (Correa 1626: § 2).

(Table of the *Tientos*, and *Discursos* of organ music contained in this book, which are divided¹⁸ into six divisions that I call *grados* [degrees, or grades], beginning with the easiest, requiring least study, in the first grade, and then consecutively adding grades, as one is adding difficulty and precaution, in the arrangement of the said *discursos*, until coming to the fifth and last, which grade denotes the greatest difficulty and perfection of the *discursos* that fall into it.)

Between the introduction to the table of contents and the beginning of the table proper is one separate line of text stating that "The second [actually the sixth] grade¹⁹ does not mean quality, but it separates the *versos*²⁰ and the *tientos*" (ibid.). Correa's comment is followed by a list of pieces with references to folio numbers of the *cifra* part.²¹ The pieces are divided into six main categories (grades, or degrees), in increasing difficulty from the first to the

¹⁷ It is not impossible, either, that the title page – bearing the original year of print – could have been used for a second printing. The temptation of doing so is naturally greater if the year of printing is included in the plate prepared for printing, instead of the leaving of a blank space, on which the year could later be added by hand. The year 1626 appears to have been *printed* on the title page of the *Facultad orgánica*, whereas Venegas de Henestrosa's *Libro de cifra nueva* could be given as an example of the other procedure (see Venegas 1557: title page).

¹⁸ Literally, "separated into."

¹⁹ It reads "segundo" (the second) on folio § 2, but Correa has corrected this to "sexto" (the sixth) in his errata

²⁰ Pieces based on liturgical material.

²¹ Curiously, Correa's references to folios are often incorrect. See Bovet (1985: No. 2: 8–11; *TI*: 8–11) for right folio numbers, and for references to Kastner's modern edition as well.

sixth. Except for the sixth degree of pieces, based on liturgical themes, each category is subdivided into two groups according to the same principle. The first group consists of pieces composed for registro entero ("full," i.e., undivided, registers), and the second group consists of pieces meant for *medios registros* (divided registers). Both subgroups have their own titles in Correa's table of contents, and the denotation about the level of difficulty of the pieces is always attached to the first of these two titles. The titles of the degrees are the following: Primer grado, y el mas facil (the first degree, and the easiest), Segundo grado mas dificultoso, o perfecto q[ue] el passado (the second degree, more difficult, or perfect, than the previous one). TERCERO GRADO MAS DIFICVLTOSO, o perfecto que los dos passados (the third grade, more difficult or perfect than the two previous ones), DISCVRSOS DEL QVARTO GRADO superior a los passados (Discursos of the fourth degree, superior to the previous ones), and, DISCVRSOS DEL QVINTO Y VLTIMO grado superior a todos (Discursos of the fifth and last degree, superior to all). The sixth degree, consisting of pieces based on liturgical material, has only one title, which is: PROSA DE EL SS. SACRAMENTO, Y CANTO llano de la Immaculada, co[n] tres glosas sobre el mismo ca[n]to llano (Prosa²² of the Holy Sacrament, and plainsong of the Immaculate [Conception], with three glosas on the same plainsong).

Each of Correa's six degrees consists of from three to seventeen pieces, the titles of which offer the reader information about the type of the piece (compositional type, and/ or type of registration), the mode of the piece, and the smallest note values included in the piece. For example, the title *Tiento de registro entero de prim. [primero] por desolrre de ocho al cop. [compás]* (referring to a piece beginning on f. 42) states that the said piece is a *tiento* for *registro entero*. In other words, it is meant to be played with the same registration in both hands – as opposed to *tientos de medio registro*, to be played with a different registration for each hand. Second, the title mentions the mode, which is *primero [tono]* (the first mode) in this case. Third, the title defines the final note of the mode. This is expressed by "*por desolrre*," ("on D"). Fourth, the title lets the reader know that the piece is "*de ocho al compás*," eight notes to the measure. Thus Correa describes the movement in eighth notes, which is typical of the piece in question. (Correa's theoretical terminology will be discussed in *Chapter V* of this dissertation.)

²² The general meaning of the word is prose. More specifically, *prosa* is a sequence which is said or sung in a mass after the hallelujah or *tractus* on certain solemn occasions (*Diccionario de la lengua española* 1992: Tomo II, p. 1680).

²³ See an analysis on the problemacy of translating the word *por* in this context (Bovet 1985: No. 2: 8; *TI*: 8)

²⁴ That is, in this case each rhythmical unit (tactus) consisting of a whole note commonly bears a movement in eighth notes.

2.6 Dedication Poem

Folio § 3v consists solely of a dedicatory poem by *LICENTIATI IOANNIS ALVARES DE ALANIS*, ²⁵ *IN laudem Auctoris* (In praise of the author). The poem has been written in Latin, and it contains mythological and rhetorical references. Bovet describes the poem as a difficult Latin text which is not always correct and which bears a hyperbolic eulogy resembling the classical era (Bovet 1986: No. 1: 2; *TI*: 11). In the words of the poet: "Noble, with the favorable omen of a gently flying bird, Correa has brought a book forth into the light" (Holland 1985: 148). Further, addressing his words directly to the author of the *Facultad orgánica*, the poet proclaims "your fame will give you entry into heaven" (ibid.: 149).²⁶

2.7 Textual Part and A Summary of Its Contents

The textual part proper of the *Facultad orgánica* involves a brief prologue in praise of the *cifra* tablature notation (folio § 4r–v), followed by two lengthy main chapters, *ADVERTENCIAS* (Warnings/A Foreword, folios 1–12v) and *SIGVESE EL ARTE DE PONER POR CIFRA* (Follows the art of playing from *cifra* [or, reading *cifra*], folios 13–26r). Both main chapters are subdivided into shorter chapters. These are called *puntos* (points, chapters) in the *Advertencias* and *capítulos* (chapters) in *El Arte de poner por cifra*. The first main chapter has seventeen *puntos*, the second one ten *capítulos*. In addition to the ten *capítulos*, *El Arte de poner por cifra* has four other brief chapters with their own titles. These chapters come immediately after the ten *capítulos*, their titles being: *CAPITVLO DECIMO DE LAS ADVERTENCIAS para perfectamente poner por cifra* (The tenth chapter of the *Advertencias*, for reading *cifra* perfectly), *E[X]CEPCION* (An Exception), *ADVERTENCIA* (A Warning), and *MODO DE TEMPLAR EL MONACORDIO* (A Way to tune the clavichord). The four together compose the last three and half pages of the second main chapter of the book (folios 24v–26r). Next I will summarize the contents of the textual part of the *Facultad orgánica*.

2.7.1 Prologue in Praise of Cifra

On folio § 4, printed recto verso, is *PROLOGO ENALABANÇA DE LA CIFRA* (A Prologue in praise of *cifra*). The chapter *Advertencias*, which receives its own set of numbers, begins after this folio. I consider the prologue in praise of *cifra* as a brief independent chapter,

²⁵ The name has been translated as "The Licenciate Juan Alvares of the Alans" by Holland (1985: 148), and as "JOHN ALVARES DE ALANIS, the Licentiate" by Schrader (1987: 4).

²⁶ For a French translation by Paul Flückiger, see Bovet 1986: No. 1: 2; TI: 11. In addition, Bovet's complete edition of the Facultad orgánica involves a translation of the poem in English (Bovet 2007: XI), in French (idem: XXXIII), and in German (idem: LV). For another translation in English, see Schrader 1987: 4–5.

by which the author gives reasons for using *cifra* in notating his compositions. Correa presents several advantages of *cifra*, and – as the title of the chapter insinuates – praises this particular system of notation.

2.7.2 ADVERTENCIAS, the Introduction (f. 1–1v)

As has already been mentioned, the first of the two main chapters, *Advertencias*, has been divided into seventeen *puntos*. They are preceded by an introduction in which Correa gives a short overview of what he discusses in the *puntos* to follow. A set of printed numbers, referring to each *punto*, runs in the right margin.

2.7.3 PVNTOS 1-17 (fols. 1v-12v)

PRIMERO PVNTO, First Point (fols. 1v-2)

The first *punto* of the *Advertencias* deals with the *apuntamientos de manos*, "pointers," or indicative signs, in the form of little hands, which have been printed in the *cifra* part of the *Facultad orgánica*. By means of these tiny hands, Correa indicates special features in the music – dissonances, for instance.

SEGVNDO PVNTO, Second Point (f. 2–2v)

The second *punto* concentrates on the importance of indicating the *género* of the piece, in other words, of telling the number and kind of accidentals in a piece. Among other things, the awareness of the *género* is necessary for being able to improvise well (*tañer buena fantasía*).

TERCERO PVNTO, Third Point (f. 2v)

Correa gives reasons for using twelve *tonos* (tones, or modes) instead of eight. According to the author of the *Facultad orgánica*, this practice conforms to the opinion of the "moderns" (*los modernos*).

QVARTO PVNTO, Fourth Point (fols. 2v-3v)²⁷

Correa emphasizes that the declaration of this *punto* depends on the understanding of the previous one. The fourth point focuses on the twelve *diapasones* and their characteristics. By *diapasones* Correa means scales. The difference between *diapasones* is created by the position of a semitone (*mi/fa* in the old terminology), which, for one, depends on the mode of the piece. Correa describes his *diapasones* in the old hexachord terminology, using the syllables from *ut* to *la*. Note that in the fourth point Correa gives a table of *diapasones* which were used in the plainchant, rather than in instrumental music.

QVINTO Y SEXTO PVNTO, Fifth and Sixth Point (fols. 3v-4)

Correa has combined his fifth and sixth points, which have one title in common. The main point of these *puntos* is to introduce the practice of indicating accidentals at the beginning

²⁷ The third folio of the Advertencias has no number in the original edition.

of a piece, instead of writing them individually for each note to be altered. In other words, Correa is recommending the use of "key signatures." Correa indicates the use of F-sharps by writing a big sign, resembling our natural sign (a "square B," *vna be quadrada*) right after the time signature. To indicate F-sharps and C-sharps, there are two "natural signs." If G-sharps are also to be used, there are three "natural signs" in the clef. [There is only one piece in the *Facultad orgánica* with three sharps, *Tiento de noveno tono* (Correa 1626: 27–29v; Kastner's edition 1980, I: 55–61; Bovet's edition 2007: 73–81).]

Below the "natural sign(s)" written at the beginning of a work, Correa advises writing corresponding numbers of *cifra*, referring to notes which have to be chromatically altered in the course of a piece. In the case of three sharps, these numbers are 1, 5, and 2.

Correa indicates the use of one B-flat by putting a capital letter B (*B redonda*) after the time signature. Two similar signs signify the use of B-flats and E-flats, three signs referring to the use of B-flats, E-flats, and A-flats – theoretically. However, in actual practice, Correa never uses more than one 'B' in the key signature of his compositions.

SEPTIMO PVNTO, Seventh Point (f. 4–4v)

The seventh point is about Correa's system of tempo and meter signatures. The author of the *Facultad orgánica* disapproves of the indifferent use of \mathbf{C} (*tiempo imperfecto*) and \mathbf{C} (*tiempo partido*) in "many works of very great Masters." Correa himself addresses \mathbf{C} to pieces having sixteenth notes and to \mathbf{C} pieces having eighth notes. In Correa's opinion, there also has to be a *compás* in between these two [which, theoretically, are in a 1: 2 proportion with each other]. This medium *compás* is called the *tiempo perfecto de por medio*, which has a symbol of its own: \mathbf{C} . For ternary pieces, the same signs are used, followed by a '3.' Compositions with thirty-second notes have the \mathbf{C} (*tiempo perfecto*) as their sign – that is, a full circle without any additional signs.

OCTAVO PVNTO, Eighth Point (fols. 4v-5)²⁸

In the *Octavo punto*, Correa makes a reference to his fourth and ninth points. The eighth point concerns two kinds of *diapasones*, which are 'arithmetic,' belonging to the master (authentic) tones/modes, and 'harmonic,' belonging to the disciple (plagal) modes.²⁹

Correa remarks that he uses first one [simpler] system of indicating the two kinds of *diapasones* "until halfway through this book," when he begins to count both kinds of diapasons from their final point. From folios 112 and 113 on, Correa switches to "the most perfect order" of indicating the *diapasones*, attributing the arithmetic diapasons to the master tones/modes, and the harmonic diapasons to the disciple tones – "as by law one should." In other words, the *diapasón* of a mode is now given from the note which is the actual first note of the range of the voice. Although Correa is aware that the more complicated, second system is the "legitimate" one, he is at the same time concerned that the students

²⁸ The folio number 5 is illegible in the Brussels exemplar (see the Minkoff facsimile) and unclear in the Madrid exemplar R.14069.

²⁹ This terminology will be explained in *Chapter V* of this dissertation.

would easily be confused by it. This is the reason for him to introduce the diapasons first with the simpler system.

In the context of his description of the two kinds of *diapasones*, Correa defines the ambitus of master tones and disciple tones. The legitimate ambitus for the master tones is eighteen notes, to which may be added one note above, and two below, which extends the ambitus of the master tones to twenty-one. The legitimate ambitus for the disciple tones, for one, is nineteen notes, to which can be added one note above, and one below, giving a total of twenty-one notes as well. There are also some special circumstances which allow exceptions to the given ambiti – the passages involving *glosa*, for instance.

NOVENO PVNTO, Ninth Point (f. 5-5v)

The main subject of the *Noveno punto* is related to the one of the previous *punto*. Correa discusses the terminology associated with the *diapasones*. According to him, when the bass part (of the four voices in the *canto de órgano*, polyphony) is 'arithmetic,' the tenor is 'harmonic,' the alto 'arithmetic,' and the soprano 'harmonic.' In a case where the bass part is harmonic, the whole system works vice versa.

In this *punto*, Correa also states that it is not possible to have a piece for divided registers with a soprano solo in the first mode on D (*medio registro de tiple de primero tono por desolrre*). Rather, such a piece should be in the second mode, or in the seventh, irregular mode; the second mode is preferable, though. Correa's statement has to do with the division of the keyboard, which prevents the use of certain modes in composing *medios registros*.

DECIMO PVNTO, Tenth Point (fols. 5v-5 [6])³¹

The tenth point is about different proportions in music. First Correa asks the reader to take note of the table of proportions, "which they say is from Pythagoras." According to Correa's definition, one speaks of a proportion when one number is compared to another number. The author names several proportions, such as: equal, duple, triple, quadruple, quintuple, sextuple, and septuple. Correa's main consideration is to explain how to "divide" notes into different proportions. By this, he means subdivisions of notes into beats within a measure. In such a *compás* (a measure, tactus), which can be divided into two equal halves, one has to play/conduct³² in an equal and binary manner. In measures, which can be divided into three equal parts, one should give the beat³³ in an unequal and ternary way, giving the downbeat to the first [part], resting on the second, and giving the upbeat to the third.

In cases where the figures [notes] can be divided neither into two nor into three equal parts, the larger part should be given to the downbeat and the smaller to the upbeat. As

³⁰ This terminology will be explained in Chapter V.

³¹ This folio has been erroneously numbered 5 in the Brussels exemplar (see the Minkoff facsimile edition).

³² The original reads *llevar*, which – besides playing – may refer to the beating of time. The word also means 'to carry.'

³³ The verb is *llevar* in the original text.

examples of such groups of notes, Correa gives those of five, seven, eleven, thirteen, fifteen, and seventeen notes. For example, in a group of five, one should have three notes on the downbeat and two notes on the upbeat; in a group of seven, four notes on the downbeat and three on the upbeat. Correa gives some advice on how to calculate the number of notes for each of the two parts of a measure, writing that this is to be accomplished "mentally" (*mentalmente*). However, Correa's explanation leaves it somewhat unclear whether he would like one to show the said subdivisions of the measure in one's playing, too.

VNDECIMO PVNTO, Eleventh Point (f. 5 [6]–5v [6v])

In his *Undécimo punto*, Correa deals with two ways of playing the same number of notes in *proporción sexquialtera*,³⁴ having six, twelve, nine, or eighteen notes to the *compás*. The first – "and easier" – way is to play the notes equally without lingering oneself more on one than the other. Correa describes the first manner to be like the one of *proporción mayor* [\$\partial 3\]. The second way is to play the notes somewhat unequally, with *ayrezillo* and grace of the *proporción menor* [\$\partial 3\]. Correa writes that although *ayrezillo* is difficult, it is [the manner] most used by organists. In this second manner, one stays longer on the first note than on the second and third; similarly, one stays longer on the fourth note than on the fifth and sixth. (This example applies, of course, to a piece with six notes to the *compás*.)

Correa explains that he indicates the first manner with a '2' in his music, the second manner having a '3' as its sign – whatever the meter. According to Correa, a '3' was used for the same purpose by Cabezón, Manuel Rodriguez Pradillo, and many others. Correa's description of the *ayrezillo* provides grounds for several interpretations, which will be discussed in the course of this dissertation.

PVNTO DVODECIMO, Twelfth Point (fols. 5v [6v]-8)³⁷

Correa's twelfth point focuses on *falsas*, dissonances. Correa states that "all the *falsas* of the music" fall into two main categories: *falsas de número*, and *falsas de género*. He explains that a *falsa de número* [number *falsa*/note *falsa*] is formed between two contiguous and contrary numbers, or signs. By numbers and signs, Correa refers to the numbers of *cifra* tablature. In other words, the *falsa de número* is formed between two contiguous notes. A *falsa de género*, on the other hand, is committed between two voices of contrary *género* or property, like *fa* against *mi*, the latter being basically a kind of cross relation. (This issue will be discussed further in *Chapter V*, on Correa's theoretical terminology.)

Punto duodécimo also involves a lengthy discussion about the nature of the interval of the fourth, which Correa asserts not to be a *falsa*. (The nature of the fourth was largely

³⁴ This is old orthography used by Correa, instead of the more modern sesquialtera.

³⁵ Proportions will be discussed further in this dissertation, in *Chapter VI*.

³⁶ *'Ayrecillo'* in the modern orthography. This important concept of Correa's will be discussed in detail in *Chapter VI* of this dissertation.

³⁷ The folio number 8 is unclear in the Madrid exemplar R.14069.

³⁸ The original reads *genero*, *o propiedad contraria*, which could also be translated as 'contrasting,' or 'different' *género*, or property.

disputed and discussed in Correa's time.) In connection with his explanation of the *falsa* de género, the author of the *Facultad orgánica* refers interestingly to another book by him, on *punto intenso contra punto remisso*, a dissonance resulting from a note sounding simultaneously with its chromatic alteration. It is possible that this book was never written. Alternatively, the putative manuscript and/or surviving exemplars have not yet come to light, have been destroyed or have been lost.

PVNTO TREZE, 39 Thirteenth Point (f. 8)

This *punto* is about measures [Sp. *compases*] with twenty-four or forty-eight notes. According to Correa, one may very well practice these note values if one has "such fast hands on the keyboard and a reed in the *chirimía*⁴⁰ which can pronounce them in one measure." Correa writes that his composing *tientos* of *compás ternario*⁴¹ with twenty-four notes to the measure is not newly invented – although is new its being printed. In Correa's opinion, it is not unfounded, either, to play works of thirty-two notes to the *compás*. Correa concludes his *punto* with a warning that those players who do not have the sufficient technique should stick to their own way of playing. In other words, they should not play *tientos* with the described *compases*; otherwise, they will "lose their touch."

PVNTO CATORZE, 42 Fourteenth Point (f. 8–8v)

In the fourteenth point of his Advertencias, Correa brings up the issue of the number of voices in *medios registros* having two solo voices (either in the treble or in the bass). Correa mentions first that some masters of the organ have composed some *medios registros* doblados (i.e., with two solo voices) for nuns⁴³ and, to facilitate their playing, have created the compositions in four voices. Correa objects strongly to this by observing that, in reality, one soon comes to realize the inconveniences and imperfections that such works have – inconveniences, which "are not small ones." Among other things, Correa bases his opinion on the argument that if the whole texture of the said pieces consists of four voices, there would be only two voices left if the solo voices had rests. Also, the two accompanying voices are bound to be very far apart and distant from each other, something which, according to the author of the Facultad, one disapproves of in good music. Another weighty reason presented by Correa is the fact that in the case of pieces with two bass solos, the accompanying voices cannot be heard well against the "noise of the two basses" [ruydo de los dos baxones] (Correa 1626: 8v). (In the preface to his Discurso de medio registro de dos baxones de segundo tono, Correa uses the expression "corpulence" [corpulencia] to describe the sound of the two basses [ibid.: 143].) Consequently, the tientos de medio registro with two solo voices definitely have to be composed in five voices, in Correa's opinion.

³⁹ *Trece* in modern orthography.

⁴⁰ Correa might refer to such a reed stop of the organ which is capable of producing fast notes.

⁴¹ Compás mayor ternario (proporción mayor), ¢3, with three whole notes to the measure.

⁴² Catorce in modern orthography.

⁴³ This is not the only time when Correa criticizes the playing skills of nuns.

PVNTO QVINZE, 44 Fifteenth Point (fols. 8v-11v) 45

This *punto* is by far the longest of all points of the *Advertencias*. The reason is obvious: the subject is the much disputed (nature of) the interval of the fourth, the *Diathesaron*. Correa opens the discussion by stating that there would be so much to say about this interval that "about it alone, one could write a lot of books." Correa's wordy explanation involves various allusions to antiguos ("ancients"), modernos ("moderns"), especulativos (meaning theoreticians), and *prácticos* (practising musicians). Correa refers to Francisco de Salinas, Doctor Bergamasco, Francisco de Montanos, the "Venetians and Greeks of Naples," Josquin de Pres, Vuolico Barroducense, and the cantollanistas, those who know the plainchant. Correa gives both theoretical and practical reasons of several kinds to support his main argument that the fourth is a partially perfect consonance by nature. Correa calls the fourth "a monster in music," or "a monstrous consonance." Besides the very nature of the fourth, Correa writes about the augmented fourth, stating that in some instances it is possible to have a consecutive perfect fourth (or fifth) and an augmented fourth. He warns that this "license" presented by him is "to see, but not to imitate," advising that new composers and common *romancistas* 46 would leave this and the other licenses (which he is going to introduce) until they are sufficiently well-learned to evaluate them. Correa mentions as well that in the passages involving glosa, parallel fourths and fifths may be permitted.

PVNTO DIEZ Y SEYS, 47 Sixteenth Point (f. 11v)

The sixteenth point discusses certain parallel movements in music. Correa writes that in counterpoint, and even in good composition, one cannot move two voices either upwards or downwards to a perfect consonance. However, some of the jumps (either up or down), ending in a perfect consonance – called "virtualities" (*virtualidades*) – are permitted by composers, while some others are prohibited. Correa claims to have seen examples of "all, or almost all" such virtualities, practised by various authors on diverse occasions, most commonly in texture from two to four voices.

Correa's main point is that in organ music "all or almost all" virtualities can be practised – if used with prudence, for compelling reasons, and on appropriate occasions. According to Correa, this is so because organ music enjoys all the licenses, faculties, privileges, and prerogatives of vocal music – and "many more." In the same context, Correa refers once again to his treatise about the *punto intenso contra [punto] remisso*.

⁴⁴ Quince in modern orthography.

⁴⁵ The folio number 9 is unclear in the Brussels exemplar (see the Minkoff facsimile edition) and in the Madrid exemplar R.14069.

⁴⁶ By romancistas, Correa probably means the composers or singers of romances. The romance was an extensively cultivated form in Spanish folk music (Holland 1985: 202, footnote 111), a poetic composition based on a literary romance (Diccionario de la lengua española, 1992, Tomo II, p. 1807).

⁴⁷ Dieciséis in modern orthography.

PVNTO DIEZ Y SIETE, 48 Seventeenth Point (fols. 11v–12v)

The seventeenth and last *punto* of the *Advertencias* focuses on one of Correa's favorite subjects, the dissonance which he calls the *punto intenso contra [punto] remisso*, of which there are basically two species: the diminished and the augmented octave. In other words, Correa means a cross-relation, a simultaneous appearance of a note and its chromatic alteration. The author opens the discussion and defense of the said dissonance by writing (ironically) that the sole reason for him to commence writing "this article" (i.e., the *punto* in question) was "to satisfy some masters in the faculty," for whom it was a new thing to see the mentioned dissonance in his works. According to Correa, there was so much offered in defense of this dissonance that he wrote a treatise about it, which could be printed as a book, and "not a small one." The author of the *Facultad orgánica* decides to leave most of the theoretical argumentation for another occasion and to concentrate instead on some practical examples of the *punto intenso contra punto remisso*.

Correa gives three main examples of the use of this dissonance by citing works of Francisco Montanos (one example) and Nicolas Gombert, an "excellent musician" (two examples). In connection with the example by Montanos, the author points out that it "ties the hands and closes the mouth" of those who have felt badly about his use of the said dissonance. Correa emphasizes that both Montanos and Gombert used an accidental sign expressly to indicate the *punto intenso contra punto remisso* – as does Hernando de Cabezón, who has made *glosas* on the same *canción* used by Gombert whom Correa cites. Thus the view of those who (skeptically) have considered such dissonances as mere printing errors is proven false. Correa finishes his *punto* by stating that because such qualified witnesses as Iosquin [Josquin], Gombert, Montanos, and Hernando de Cabezón have proven his intents, he may well end this treatise.

2.7.4 ELARTE DE PONER POR CIFRA, Capítulos 1–10 (fols. 13–24v) Capítulo primero, the First Chapter (f. 13–13v)

As has been previously mentioned, the second main chapter of the textual part of the Facultad orgánica, SIGVESE EL ARTE DE PONER POR CIFRA, is subdidived into ten shorter chapters called capítulos, plus CAPITVLO DECIMO DE LAS ADVERTENCIAS para perfectamente poner por cifra (The tenth chapter of the Advertencias for reading cifra perfectly), E[X]CEPCION (An Exception), ADVERTENCIA (A Warning), and MODO DE TEMPLAR EL MONACORDIO (A Way to tune the clavichord). Because the second main chapter of the textual part discusses several aspects of playing – such as fingerings and ornaments – which will be analyzed in detail further in this dissertation, I will present only the general outline of the contents of the chapter at this point.

One tentative translation of *Siguese el Arte de poner por cifra* would be: "Follows the art of playing from *cifra* [or, reading *cifra*]," the other one being "Follows the art of

⁴⁸ Diecisiete in modern orthography.

⁴⁹ *Canción* means a song, a *chanson*. Correa writes that the *canción* which he cites begins with the words "Ay me qui voldra."

⁵⁰ In the corrections for his French translation of the Facultad orgánica, Guy Bovet has the title Suit l'art

writing (composing) in *cifra*." Correa's presentation of various practical elements in this chapter speaks in favor of the first alternative.

The first subchapter, Capitulo pri.[mero] de los signos del Organo del genero diatonico, o natural (The first chapter on the signs of the organ of the diatonic, or natural, género) clarifies those signs of the cifra tablature notation which indicate the notes of the natural género (having no accidentals). Correa's explanation involves the names and signs of the five ranges of the compass used in cifra (see Chapter V, 1 Cifra).

Capítulo segundo, the Second Chapter (fols. 13v-14)

The full title of the second chapter is *CAPITVLO SEGUNDO DE LOS SIGNOS DEL Organo de el genero Cromatico* (The second chapter on the signs of the organ of the chromatic *género* [having accidentals]. This chapter deals with the signs used for indicating the chromatic *género*. These signs consist of the two flat signs (indicating B-flats and E-flats) and the two sharp signs (indicating F-sharps and C-sharps). Flats belong to the 'soft' chromatic *género*, and sharps to the 'hard' chromatic *género*. (These concepts will be explained in the chapter about Correa's theoretical terminology.)

Capítulo tercero, the Third Chapter (f. 14–14v)

The entire title of the third chapter is *CAPITVLO TERCERO DE LOS SIGNOS de el organo, del genero Enarmonico* (The third chapter on the signs of the organ of the enharmonic *género*). The only sign which Correa presents in the context of the (hard) enharmonic *género* is a sign which indicates G-sharps. ⁵² He also explains having intentionally omitted the two flat signs belonging to the soft enharmonic *género* (indicating A-flats and D-flats) because the organ does not have them. ⁵³ Correa expresses his disagreement with *Maestro* Francisco de Salinas concerning the kind of *género* which includes G-sharps. He writes that although in many matters he follows *Maestro* Francisco de Salinas, his opinion nevertheless differs from Salinas's in that a G-sharp "most certainly" belongs to the enharmonic *género*, and not to the chromatic *género*, as Salinas claims. Correa also writes in disagreement with the opinion of a "*cierto moderno*" (a "certain modern"), meaning some contemporary of his.

Capítulo quarto, 54 the Fourth Chapter (fols. 14v–15v)

The entire title of this chapter is *CAPITVLO QVARTO DE EL MODO DE DISponer los dedos*, *y de poner por cifra* (The fourth chapter on the manner of placing the fingers and

de jouer d'après la Cifra (déchiffrer) (Bovet 1997: No. 2: 4). In the two English translations, Holland gives "Following is the art of making notations by means of *cifra*" (Holland 1985: 209), Schrader's translation being "Here follows the art of writing in tablature" (1987: 59).

⁵¹ Note that sharps in the key signature are actually indicated by signs in the form of our natural signs, while in the *Facultad orgánica* the sign for any sharp used in the course of a piece is a kind of cross. In *cifra* the accidental signs are normally placed *after* the note to be chromatically altered. These signs can also appear above or underneath the figure indicating a note.

⁵² Correa means to say that the hard enharmonic *género* has three sharps.

⁵³ Correa refers to the tuning system of the organs.

⁵⁴ Capítulo cuarto in modern orthography.

playing from [or reading] *cifra*). Although the fourth subchapter of *El Arte de poner por cifra* focuses on fingerings, Correa also discusses some rudiments of reading the *cifra* tablature.

Before giving his specific advice on fingering, Correa explains the basic elements of *cifra*: each horizontal line corresponds to one voice part, vertical lines indicate measures, short diagonals signify rests, and notes which are written above the staves show note values. In addition, he numbers the fingers from one to five, the thumb being number one.

After the basic knowledge, necessary for reading and playing *cifra*, Correa gives fingerings for such a beginning of a piece, in which only one voice enters first. For instance, if the soprano voice enters alone, one should begin with the third finger of the right hand, making a *quiebro* or a *redoble* (that is, an ornament). At the end of the chapter, Correa recommends that one play a *quiebro* on the organ, and a *redoble* on the clavichord. (For Correa's fingerings, see *Chapter VI*, 2, and for his ornaments, *Chapter VI*, 1.4.)

Capítulo quinto, the Fifth Chapter (fols. 15v–16v)

The complete title of the fifth chapter is *CAPITVLO QVINTO*, *QVE SEA QVIEBRO Y redoble*, *y en quantas maneras sean?* (The fifth chapter; What are *quiebro* and *redoble*, and in how many ways do they exist?). This chapter concentrates entirely on ornaments: their structure and nomenclature, their signs, fingerings, and use.

Correa describes in detail four different ornaments: two *quiebros* and two *redobles*. To generalize, *quiebros* are shorter than *redobles*. A 'simple' *quiebro* (*quiebro senzillo*)⁵⁶ is mordent-like, while a 'reiterated' *quiebro* (*quiebro reiterado*, or *quiebro doblado*) resembles a turn. *Redobles* are a kind of trill. A 'simple' *redoble* (*redoble senzillo*)⁵⁷ has a three-note "prefix" before the trill proper follows on the main note, while a 'reiterated' *redoble* (*redoble reiterado*) has a prefix of four notes. Both *redoble* types have a mordent-like ending.⁵⁸

According to Correa, both *quiebros* and *redobles* are to be played fast. Correa explains that he uses a capital 'R' as a sign for a *redoble*, in order to avoid notating the ornament fully in *cifra*. Correa mentions that some masters have invented "other *redobles*," which he leaves to the discretion of his readers.

Correa's chapter on ornaments offers useful, practical information for performers of his pieces. Besides the structure of the ornaments, Correa gives right- and left-hand fingerings for all the four ornaments described. He also specifies where *quiebros* and *redobles* can be used. To mention a couple of examples, he advises one to play a *quiebro senzillo* in the beginning of short works, and also in the course of them, on *semibreves* and *mínimas*, when one's hand is not occupied with *glosa* (diminution). A *redoble*, for one, may

⁵⁵ Correa refers once again to the "promised book of *Versos*," in which he intends to discuss the different note values and/or measures.

⁵⁶ Quiebro sencillo in modern orthography.

⁵⁷ Redoble sencillo in modern orthography.

⁵⁸ The basic structure of the two *redobles* is demonstrated by Correa in two examples in *cifra*. In these examples, note values are not specified.

be played on the leading notes of all plain cadences which have a duration of one measure or more. One is warned never to play a *redoble* "between two tones." In other words, a *redoble* has to involve a half step. On the contrary, *quiebros* do not necessarily need a half step in their structure. (For a detailed discussion of the form, use, and performance of Correa's ornaments, see *Chapter VI*, 1.4, and 2.8.)

Capítulo sexto, the Sixth Chapter (fols. 16v–17v)

The full title of this chapter is *CAPITVLO SEXTO DEL MODO DE DISPONER los dedos*, para poner en el Organo, qualquier obra con perfeccion (The sixth chapter on the way to place the fingers, for playing on the organ any work with perfection). The sixth chapter deals with the issue of dividing the voices of a texture from two to four voices between the left and the right hand.

In the case of two voices entering together at the beginning of a piece, each hand plays one voice. If three voices enter, it is most common to take the highest voice with the right hand, and the two other voices with the left hand. This is done in order to free the right hand for executing a *quiebro* or a *redoble*. Correa adds, though, that if the two highest voices are close to each other, one may also take those voices with the right, and the lowest voice alone with the left hand. In the case of four voices entering, one usually plays two voices with each hand.

After explaining the basic cases, Correa gives several exceptions, which are demonstrated with notated examples. For instance, in a four-voice texture one can also play the three lowest voices with the left hand, if all voices are within an octave (or sometimes within a tenth). However, if in such a case the tenor voice forms a cadence – with *glosas* (*cláusula glosada*) or without *glosas* (*cláusula llana*) – one is advised to play two voices with each hand. Correa emphasizes that whenever possible, one should "leave free" the hand which is playing *glosa*, in order to form the *glosa* "with more force, touch, velocity, and cleanness":

... siempre que pudiere ser, se a de dexar libre la mano que glosa, para que mejor, y con mas fuerça, toque, velocidad, y limpieza, forme la glosa (Correa 1626: 17v).

For a detailed discussion of Correa's fingerings, see Chapter VI, 2.

Capítulo setimo, 59 the Seventh Chapter (fols. 17v–18v)

The entire title of the chapter is *CAPITVLO SETIMO DE COMO SE PROSIGVE qualquier obra, con que mano y dedos* (The seventh chapter on how one continues [playing] any work, [and] with which hand and fingers). The seventh chapter includes two topics: 1) how to divide from two to four voices between the right and the left hand, either in texture without or with *glosas* and 2) where to place the 'giving' (*dar*, thesis, the downbeat) and the 'raising' (*alçar*, arsis, the upbeat) of the *compás*.

⁵⁹ Capítulo séptimo in modern orthography.

First Correa summarizes his instructions (of the previous chapter) on dividing voices and comments that those principle rules were intended for *música llana*, that is, for a texture without *glosas*. Then he goes on to give advice for music involving *glosas*. As in the previous chapter, Correa's main point of concern is to leave the hand which plays a voice part with *glosas* as free as possible. For instance, if there are *glosas* in the soprano, it is advisable to play it alone with the right hand, while the left hand takes care of the other voices. However, if there are *glosas* in the tenor, one cannot free the left hand completely for playing that voice only. In this case, Correa recommends that one play the bass voice with the fifth finger of the left hand, thus reserving the other four fingers for playing the line with diminution. If there are still "fingers missing," one may help out with the first and second fingers of the right hand.

Correa's second task in the seventh chapter is to explain where the downbeat and upbeat are placed in different *compases*. The *compases* discussed are 1) *compasillo* (**C**) of eight notes to the measure; 2) *compasillo* (**C**) of sixteen notes to the measure; 3) *sesquialtera* of six notes to the measure with the sign '3'; 4) *sesquialtera* of six notes to the measure with the sign '2'; 5) *sesquialtera* of nine notes to the measure; 6) *sesquialtera* of twelve notes to the measure with the sign '3'; 7) *sesquialtera* of twelve notes to the measure with the sign '2'; 8) *sesquiquinta* of five notes to the measure; and 9) the 'double' of *sesquiquinta* of ten notes to the measure. (Correa's *compases* will be examined in *Chapter VI*, 3.)

Capítulo otavo, 61 the Eighth Chapter (fols. 18v–21)

The complete title of the eighth chapter is *CAPITVLO OTAVO*, *CON QUE DEDOS DE CAda mano se an de dar las posturas dellas* (The eighth chapter, with which fingers of each hand one has to give their [different] positions). In other words, Correa is going to explain which fingers of each hand one has to use in order to be able to play all the needed different "positions" of the fingers – namely, the different intervals (*intervalos*), which Correa also calls "consonances" (*consonancias*).

The author of the *Facultad* introduces intervals from the unison to the tenth. Then he gives three different fingering systems for all the mentioned intervals. The first system is to be applied if there are no compelling reasons which prevent one from using it. Correa names four such reasons, which are: 1) the necessity to make a *quiebro* or a *redouble*; 2) the necessity to move a finger (playing an interval) suddenly to another note while the other finger of the same hand stays in place; 3) one finger remaining stationary while the other fingers of the same hand play *glosas*; and 4) the avoidance of playing two different keys with the same finger. Correa then addresses a second system of fingering intervals for these special cases.

Correa introduces his third fingering system by writing that it is for players who are no longer beginners, those who "are already licensed to command any organ of any solemn parish, who, in difficult music that demands it, can use other fingerings":

⁶⁰ Correa uses both the spelling sexquialtera and sesquialtera in his seventh chapter.

⁶¹ Capítulo octavo in modern orthography.

... advierto, que es para tañedores que an salido ya de minoribus, y que estan ya licenciados para regentar g[sic]ualquier organo de qualquier parrochia graue, . . . (Correa 1626: 19v).

Correa writes that he will not get down to particular cases in his discussion of the third order, to avoid creating a large volume. Instead, he gives only one general rule about the matter and leaves the rest to the good judgement of his readers. Correa's rule is that one may play – on certain occasions, and especially in *glosa* – any interval with the same two fingers, namely, the first and second (of both hands). To demonstrate his point further, Correa gives eleven notated examples, where little hands, *manezillas*, refer to the fingerings of the third order. (See *Chapter VI*, 2.10 of this dissertation.)

After the examples, the author adds that some such "tight" occasions might also occur which make it necessary to play seconds with either the first and second fingers of the right hand, or with first and third, first and fourth, or first and fifth fingers — when the first finger remains still (the other voice moving), or sometimes when both voices of an interval are struck simultaneously. The same fingering is applicable to the left hand as well. In addition, one can encounter situations where one has to play intervals with either the fourth and fifth, third and fifth, second and fifth, or first and fifth fingers of both hands. These occasions derive from the fifth finger having to remain in place.

After all his examples, exceptions, and explanations, Correa concludes the eighth chapter by stressing the importance of studying. In his words:

Todas las quales y otras muchas... las a de enseñar el co[n]tinuo y largo estudio, que es el que vence estas y otras mayores dificultades (ibid.: 21).

(All these [i.e., the intervals] and many others . . . will reveal the continuous and long study which overcomes these and other major difficulties.)

Capítulo 9.,62 the Ninth Chapter (fols. 21–22)

The original title of this chapter is *CAPITVLO 9. DE LAS CONSONANCIAS CERradas y abiertas, por otros llamadas, llenas y vazias, que todo es vno* (The ninth chapter on the closed and open consonances, called full and empty by others, which is the same [thing]). The ninth chapter continues the discussion of fingerings, giving advice on the fingerings of chords. According to Correa, the interval is 'open' (or 'empty') when it consists of only the two extreme notes, while a 'closed' (or 'full') interval involves a third, intervening voice. In Correa's opinion, there are principally four consonances, which can be played closed or open: the fifth, the sixth, the seventh, and the octave. To these may be added the ninth and the tenth, whose fingerings are reduced to those of the closed octave.

The alternative fingerings are based mainly on the size of the interval between the upper and the middle voice in a chord and on the fingering chosen for the outer voices. There

⁶² Correa uses a numeral here, instead of a written-out number (as in most of his titles).

are also some additional factors affecting the fingering, such as the amount of *glosa* and the execution of ornaments. For instance, in a case where the outer voices are a fifth apart, where there is a third between the upper and middle voices, and where one has chosen to play the lowest voice with the thumb and the upper voice with the fifth finger, the middle voice is played with the third finger "for playing a *quiebro* with it." According to Correa, this manner of playing is used "among masters." The ninth chapter involves three notated examples of the different ways "to close a seventh." For these, and other advice on Correa's fingerings of chords, see *Chapter VI*, 2.11.

Capítulo 10.,63 the Tenth Chapter (fols. 22–24v)

The full title of the tenth chapter is *CAPITVLO 10. DE LAS CARRERAS ASCENDENtes*, y descendentes de ambas manos, para los que ya comiençan a ser Maestros (The tenth chapter on the ascending and descending scales of both hands, for those who already begin to be Masters). The entire chapter deals with different scale fingerings, and thus completes Correa's discussion of fingerings.

The title already shows that the advice is intended for advanced players. Correa opens the chapter by writing that "The impossibility of all impossibilities is that someone would play *glosados*⁶⁴ with accidentals well in the highly diminuted scales of *glosas* if one does not use the art of changing fingers"⁶⁵ (that is, replacing normal fingers/fingerings with others ["extraordinary fingerings"]):

Impossible es de toda impossibilidad, que alguno taña bien accide[n]tales glosados, si en las carreras de glossa muy diminuida, no vsa de la industria de trocar los dedos, . . . (Correa 1626: 22).

Correa specifies that the said skill differs from the ordinary one, which uses scales on white keys only. Logically, he then calls the diatonic scales 'carrera ordinaria' (an ordinary scale), the scale using both black and white keys being 'carrera extraordinaria' (an extraordinary scale), which is played with two main types of fingerings. In the third category, 'carrera mixta,' the 'mixed scale,' some features from both of the abovementioned fingering systems are used.

In the *carreras ordinarias*, pairs of fingers are used (right hand, ascending: 34 34, etc., descending: 32 32, etc.; left hand, ascending: 21 21, etc., descending: 34 34, etc.). ⁶⁶ In

⁶³ Correa uses a numeral, instead of a written-out number, again here.

⁶⁴ Works which involve glosas.

^{Holland has translated the original "trocar los dedos" as "changing finger positions" (Holland 1985: 248), and Schrader as "crossing the fingers" (1987: 90). Bovet gives "troquer les doigts" (1997: No. 2: 4) as a correction for his French translation (1989: No. 4: 13; TI: 57) where he used "déplacer les doigts."}

⁶⁶ I have left spaces between repeated groups of fingerings in this chapter in order to clarify Correa's fingering patterns. These spaces are not used by Correa, and they should not lead to any specific way of articulating scale passages.

carreras extraordinarias, for one, repeated groups of either three or four fingers are used. In the first type, Correa advises using the second to the fourth fingers of the right hand (ascending: 234 234, etc., descending: 432 432, etc.), and from the first to the third of the left hand (ascending: 321 321, etc., descending: 123 123., etc.). In the second type, one is to use the first to the fourth fingers of both hands (right hand, ascending: 1234 1234, etc., descending: 4321 4321, etc.; left hand, ascending: 4321 4321, etc., descending: 1234 1234, etc.). Although the fingerings of *carreras extraordinarias* are meant for scales involving black keys, Correa advises one to practise these fingerings first on white keys only.

Correa mentions special reasons which justify also using the fingers from the second to the fifth. Three such cases are: 1) the last note of a *glosa* finishes exactly on the fifth finger; 2) a tied note is played with the fifth finger while the other four fingers of the same hand are occupied by playing *glosa*; and 3) the last note of a *glosa* falls to the fifth finger, from which an octave leap towards the first finger of the same hand is played.

As already mentioned, one uses "mixed" fingerings for the *carreras mixtas*. Correa presents two different kinds of such fingerings. In the first type, groups of three and two fingers alternate (right hand, downward movement: 432 32 432 32 in Correa's example⁶⁷), whereas the second type consists of alternating groups of four and three fingers (right hand, downward movement: 4321 321 4321 321; left hand, upward movement: 4321 321 4321 321 in Correa's examples⁶⁸). In addition to the three examples of the mixed fingering patterns, Correa presents six other notated examples in his tenth chapter. (For details of Correa's scale fingerings, see *Chapter VI*, 2.12.)

2.7.5 Capítulo décimo de las Advertencias, E[x]cepcion, Advertencia, the Tenth Chapter of the Advertencias, Exception, and Warning (fols. 24v–25v)⁶⁹

The previous *Capítulo 10*. on scale fingerings is curiously followed by another tenth chapter, the complete title of which is *CAPITVLO DECIMO DE LAS ADVERTENCIAS* para perfectamente poner por cifra (The tenth chapter of the *Advertencias* for reading cifra perfectly). Although the name of the chapter could be interpreted to mean that this chapter is in fact the tenth chapter of the first of the two main chapters of the *Facultad orgánica*, it seems obvious, nevertheless, that the second tenth chapter should in fact have been numbered the eleventh (of the *El Arte de poner por cifra*). Two facts are in favor of the latter interpretation. First of all, the first main chapter, the *Advertencias*, already

⁶⁷ This right-hand fingering in Correa's example consists of three measures, each of which has two groups of triplets (i.e., six notes in each group, except for the first measure, which begins with a rest). The last note of every group of six notes is tied to the first note of the next group (of six notes). Each group of six notes is in a downward movement.

⁶⁸ This right-hand fingering in Correa's examples is for a repeated group of seven notes (following a rest on the downbeat), in a descending movement. The left-hand fingering is also for a repeated group of seven notes (following a rest on the downbeat), in an ascending movement.

⁶⁹ Note that folio 25 is unnumbered, in at least the two Madrid exemplars and in the Brussels exemplar of the *Facultad orgánica*.

^{70 &}quot;Poner por cifra" could be translated here also as "playing cifra" or "writing in cifra."

has its own tenth chapter, which is called *DECIMO PVNTO*. Secondly, Correa's second tenth chapter indeed summarizes the main points of the second main chapter, the *El Arte de poner por cifra*. Moreover, the title of the chapter can be understood as "The tenth chapter on/of the warnings [for readers/performers]," and not as the "Tenth chapter of the *Advertencias*" (referring to the first main chapter).

Correa's tenth chapter thus gives an account of important "warnings" to performers. Before giving nine pieces of advice – each of them comprising a brief chapter of its own, except the seventh and eighth points, which are combined – Correa lists several factors which are among the first to be taught and studied in learning the *cifra* notation. Among these are: 1) the numbers of *cifra*; 2) which notes are to be played simultaneously; 3) the place of *dar* (downbeat) and *alçar* (upbeat); 4) understanding that the commas written on staves of *cifra* signify tying a note; and 5) *sustenidos* and *bemoles* mark the accidentals. Correa remarks that those who think that the knowledge of the above-mentioned factors equals perfect playing of *cifra* are mistaken. He goes on to give nine "warnings," the observance of which can turn one into "*vno perfecto positor de cifra*" (a perfect player – or user, interpreter – of *cifra*). Correa's nine points are the following:

- 1) One must be a skillful singer of polyphony, from which is born the knowledge of giving the legitimate *ayre* and value to all binary, ternary, quinary, senary, septenary *glosas*, etc. [and to] dots, aspirations, syncopations, etc.
- 2) One must take care not to release a note before the next one (or, alternatively, a rest) follows on the same line.
- 3) One must know how to "accommodate" one's fingers and hands, that is, using the necessary fingerings, ordinary and extraordinary.
- 4) One must avoid mixing one voice (part) with another.
- 5) One must not add or remove notes.
- 6) One must play in tempo [a compás], knowing the places of downbeats and upbeats.
- 7) One must avoid playing two consecutive keys with the same finger in a rapid *glosa*, and
- 8) playing the black keys with one's thumb in *glosa*.
- 9) One must read and understand the preambles of each *tiento*.

In connection with the fifth point, Correa – once again – expresses his resentment of the bad playing of those who learn their art in convents.

The nine warnings are followed by two brief paragraphs, each of which has its own title (*E[x]cepcion*, An Exception, and *Advertencia*, A Warning). These can be taken either to belong to the tenth chapter or to be individual units. In the "Exception," Correa writes that those who can already sing in *compasillo* (**C**) reasonably well may begin with the easiest *tientos* of the *Facultad orgánica*. In the "Warning," Correa asks one to be wary of printing errors, which are the result of either a defect of the type or the ink. One should be cautious especially with those figures of *cifra* which have one or two *rasgos* (strokes). Also, if one

sees two "difficult jumps" (presumably meaning large jumps) close to each other in the same voice, it has to be an error, because only one such leap is allowed at a time.

2.7.6 Modo de templar el monacordio, A Way to Tune the Clavichord (fols. 25v-26)⁷¹

Correa's chapter on tuning the clavichord ends the second main chapter of the *Facultad orgánica*. At the same time, it is the end of the textual part of the book, the second, musical part consisting of sixty-nine compositions in tablature with prefaces, in folios 1–204.

Correa mentions that some people had asked him to include a brief and concise way of tuning the clavichord in his book. According to Correa, there is no better way than to tune the clavichord by octaves, and to begin with the highest notes. Correa's advice is clearly meant for a fretted clavichord.

In the last two sentences of the chapter, the author assures his readers that by observing the precepts already given and the advice which will be given, one will gain a great advantage, "All of which is for the honor and glory of God, the augmentation of his divine worship, and for our spiritual benefit, Amen."

3 Prefaces of the Tientos of the Facultad orgánica

In addition to the textual part proper of the *Facultad orgánica*, Correa's prefaces to the *tientos* compose another substantial portion of text. The author of the *Facultad* really meant these brief preambles to be introductory prefaces to the musical pieces of the collection. Correa specifically asked one to "read and understand" the prefaces before playing the *tientos*. The introductory role of the preambles is easily overshadowed by the fact that they have been treated as footnotes in the edition of the *Facultad orgánica* by M.S.Kastner, which was the only modern edition of Correa's works until the publication of the second Spanish edition by Miguel Bernal Ripoll in 2005⁷³ and Guy Bovet's new *Urtext* edition in 2007. In the original edition, Correa's notes have been placed at the beginning of each *tiento*. Translations of all these prefaces can be found in English (Holland [diss.] 1985 and Bovet, in his complete *Urtext* edition of the *Facultad orgánica* [2007, Bologna, Ut

⁷¹ Folio 25 is unnumbered, in at least the two Madrid exemplars and in the Brussels exemplar of the *Facultad orgánica*.

^{72 1948–1952:} Libro de tientos y discursos de música práctica y theórica de órgano intitulado Facultad orgánica. (Alcalá, 1626). Transcripción y estudio de Macario Santiago Kastner. Published in the series Monumentos de la Música Española, Vol. VI (1948), Vol. XII (1952). Barcelona: Instituto Español de Musicología. The musical part of this edition was reprinted in 1974 and in 1980–1981, likewise in two volumes. Madrid: Unión Musical Española. Kastner's first edition also contains the textual part of the Facultad orgánica, which has been left out of the two later editions.

⁷³ Francisco Correa de Arauxo (1584–1654). Libro de tientos y discursos de musica practica, y theorica de organo, intitulado facultad organica. Estudio y transcripción por Miguel Bernal Ripoll. Madrid: Sociedad Español de Musicología.

⁷⁴ Facultad orgánica. (Alcalá, 1626). Edited by Guy Bovet. Bologna: Ut Orpheus Edizioni.

Orpheus Edizioni]) and in French (Bovet 1985–1992 in TDLO and in TI^{75}). There is also another English translation of the first twelve prefaces (Schrader [D.M. doc.] 1987).

Each piece of the *Facultad orgánica* has its own preface. In addition, some prefaces have been extended to contain information or comments concerning a group of pieces. There are six such instances in the *Facultad orgánica* (Correa 1626: 39v, 65, 132, 143, 153v and 173v). For example, in connection with the preface addressed particularly to the thirteenth *tiento*, there is this sentence: "Here follows another group of *tientos* for undivided registers in the eight vulgar [i.e., common] modes [which are] easier than the previous ones" (ibid.: 39v). Immediately after this comes that part of the preface which is directed to the thirteenth *tiento* in particular. Examples of more informative prefaces common to several pieces would be the one in folio 65, where Correa praises the undivided registers, "a celebrated invention," and a preface in folio 153v, where the author gives advice on playing his works involving thirty-second notes.

Correa's prefaces contain a lot of cross-references, which is one demonstration of the careful and conscientious preparation of his work. In two instances there are also brief postcripts besides the prefaces (ibid.: 63 and 195v). The two postcripts have been treated as such in Kastner's edition, too.

In his prefaces, Correa discusses a great variety of issues, both theoretical and practical. Among his topics are modes (including the use of accidentals and mixtures of modes), diapasones (different "scales"), géneros ("key signatures"), tempo signs and their tempo connotations, the relation of **C** and **C**, the dissonance called punto intenso contra punto remisso, various elements of notation, praise of cifra tablature, characteristics of good composing, ornament signs and advice on executing ornaments, playing with ayrezillo, some registration instructions, remarks on performance tempi, and comments on the technical difficulty of some tientos.

Nearly all of Correa's prefaces involve a description of the *diapasón* of the mode (given in solmization syllables), the function of the final note in the two hexachords used in a piece, and the *género* of the piece. As a rule, I have left these considerations out of the following summary of the main contents of each preface because these issues are discussed in detail in the chapters on Correa's modes (*Chapter V*, 4.1–4.7). The purpose of the summary is to introduce the various topics taken up by Correa in his prefaces. I will analyze the most important points of the prefaces in the course of my work.

⁷⁵ TDLO stands for La Tribune de l'Orgue and TI for Bovet's Une traduction intégrale de la préface et des remarques de Francisco Correa de Arauxo (n.p., n.d). See also Bovet 1997a–c and 1998a–d for some corrections to and additional remarks on the French translation.

⁷⁶ Folio 63 has the erroneous number 85 in both of the Madrid exemplars (R. 9279 and R. 14069) and in the Brussels exemplar, with the folio number 195 being unclear in all three of the above-mentioned exemplars.

⁷⁷ Correa does not speak directly of "tempo connotations," but both the textual part proper and the prefaces of the *Facultad orgánica* show clearly his intentions to indicate different tempi by specific use of time signatures.

3.1 A Summary of the Contents of Correa's Prefaces to the *Tientos* of the *Facultad orgánica* (fols. 1–203)

[I] The First Preface (f. 1; KFO I: 1)

Correa points out that in this *tiento* of the first tone "all fours have to be played on the white keys of *befabemi*," meaning that all B's have to be natural. In other words, there is no general indication by any symbol of the use of B-naturals at the beginning of this *tiento*. The author claims to maintain such "doctrine" in all his pieces of music, following in this the masters of polyphony and plainchant. (Correa's remarks here concern expressly those *tientos* which are in the *género diatónico*, the diatonic genus.)

Another issue of the first preface is an explanation of the usage of '2' and '3,' signs which often appear above the staffs of *cifra* in the *Facultad*. Generally speaking, the number two indicates an equal manner of playing while the number three is an indication of the *ayrezillo*. (See the discussion of Correa's *ayrezillo* in *Chapter VI*, 4.2 *Ayrezillo*.)

[II] The Second Preface (f. 4; KFO I: 7)

The second *tiento* (Correa actually writes *tiento* and *discurso*) is in the second mode. "All the fours," that is, B's, have to be played on black keys, except for when there is a *sustenido* (a sharp sign) written for a B. Correa explains that he uses the letter B besides the time signature to indicate the necessity to play B-flats.

[III] The Third Preface (f. 7; KFO I: 13)

According to Correa, this *tiento* and *discurso* in the third tone [in A] is "commixed with the tenth tone [or mode]." For this reason, one has to play all B's as B-naturals. Here Correa makes a reference to the first preface. In addition, Correa asks the reader to note that the diatonic third mode which ends on A finishes "irregularly," its regular ending being on E.

[IV] The Fourth Preface (f. 11v; KFO I: 22)

One has to play "all the fours" on *bemi blanco* in this tiento of the fourth tone [in E]. In other words, all the B's have to be natural. Correa refers in this connection to the preface of the first *tiento*.

[V] The Fifth Preface (f. 14v; KFO I: 28)

One plays this *tiento* in the fifth mode [in F] with B-naturals, following the opinion of those who claim there to be twelve modes. The fifth and sixth modes belong to the *género diatónico* (the diatonic genus), ⁸⁰ in the execution of which all the fours have to be played

⁷⁸ Correa indeed uses a sharp sign (a *sustenido*) to indicate a B-natural within a piece as the equivalent of our natural sign.

⁷⁹ I use the terms 'mode' and 'tone' interchangeably in the chapter on Correa's prefaces.

⁸⁰ Correa's system of géneros is explained in Chapter V, 3 Géneros.

on white keys of *befabemi* [B]. Correa points out that sharps are put on some of the said signs, in which cases – for some particular reason – one could doubt whether they should be *intensos* (raised) or *remissos* (lowered).

[VI] The Sixth Preface (f. 17; KFO I: 33)

One has to play the *tiento* of the sixth tone [in F] with B-naturals, "following the opinion of the twelve tones," as previously indicated. (In other words, Correa refers to the preceding preface.)

[VII] The Seventh Preface (f. 19v; KFO I: 39)

One must use the accidental of F-sharp through this piece, the *tiento* of the seventh mode. The use of F-sharps is indicated by a large natural sign, a "square B," which is written right after the time signature with a number one below the natural sign. The number refers to F, the first of the seven figures used in *cifra*.

The seventh preface of the *Facultad orgánica* is one of the numerous examples of a clash between theory and practice in Correa's use of modes. Correa states that the mode finishes irregularly on A in this case, adding that its normal ending would be on E. He gives a very complex explanation about the mode of the piece and seems to be writing at some points in terms of the system of eight modes instead of the system of twelve modes, which he claims to be using in his book.

Normally, the seventh mode begins on G in the system of twelve modes, while the seventh mode in the system of eight modes begins on A. However, because the seventh mode in the latter system involves the use of a sharp, Correa seems to have transposed it by a fifth, the mode finishing therefore "normally" on E.

[VIII] The Eighth Preface (f. 23; KFO I: 46)

Besides the normal declaration of the mode, *género*, and diapason, Correa asks one to play "all the fours on the white [keys] of *befabemi*." That is, B-natural is used in the course of the *tiento* in the eighth tone.

[IX] The Ninth Preface (f. 27; KFO I: 55)

This *tiento* in the transposed ninth tone is the only one of Correa's *tientos* which has three sharps, and which ends actually in F-sharp. Due to the rare key and its implications in the meantone tuning, Correa – to avoid the A-sharp of a major third in the final chord – ends his piece with an empty fifth, which is also unique in his compositions.

Correa indicates the use of three sharps by three natural signs, below which are placed the correspondent figures of *cifra* (one, five, and two). The natural signs are written right after the time signature.

[X] The Tenth Preface (f. 30; KFO I: 62)

Correa refers to all the preceding prefaces concerning the diatonic genus. One must play B-naturals throughout the piece, a *tiento* in the tenth mode.

[XI] The Eleventh Preface (f. 39v [= f. 33v]; KFO I: 69)

This *tiento* of the eleventh mode is written with one capital B (a *bemol*) in the key signature, signifying the use of B-flat. Correa adds that the exception to this are those (individual) notes in the course of a piece for which sharp signs have been written. (Such notes appear in several cadences, for instance.)

[XII] The Twelfth Preface (f. 42v [= f. 36v]; KFO I: 75)

The preface for the *tiento* in the twelfth tone basically repeats the previous preface.

[XIII] The Thirteenth Preface (f. 39v; KFO I: 83)

The preface of the thirteenth *tiento* of the first mode begins with a remark that the said *tiento* is the first one in a new set of *tientos* of the *registro entero* (full register, as opposed to the divided registers). This new set of *tientos* consists of pieces in the eight "vulgar" (i.e., common) tones, easier than the preceding ones.⁸¹

According to Correa, the first mode (in D) is mixed with the second mode. This is done in order to extend the ambitus of the first mode by one note. One should play B-naturals throughout the piece if not indicated otherwise (with flat signs). In this matter, Correa refers to the "beginning" [of his prefaces] where he makes similar observations.

[XIV] The Fourteenth Preface (f. 42; KFO I: 89)

This second *tiento* of the first tone is "of eight [notes, quavers] in a *compás* [measure]," and it is written in \mathfrak{E} . The author of the *Facultad* writes that in the said *tiento* one has to have *compás ligero*, fast (and/or light) *compás* [tactus] – the *compás* being steady, he adds. Correa has notated the piece with \mathfrak{E} , *tiempo [imperfecto] de por medio*, because of the two fast *compases*, one can make one good slow one, which – according to Correa – is what this *tiempo* signifies, strictly speaking. Correa characterizes this *tiento* as being "easy for beginners." One ought to play "all the fours" as B-naturals.

[XV] The Fifteenth Preface (f. 43v; KFO I: 93)

The *tiento* of the fourth mode belongs to the diatonic genus, which results in the use of B-naturals.

⁸¹ This part appears as a preface in Kastner's edition, the rest of the text having been treated as a footnote (Kastner 1980: 83).

[XVI] The Sixteenth Preface (f. 45v; KFO I: 97)

In the preface to the famous second *tiento* in the fourth mode "a modo de canción" (in the style of a canzona), Correa gives advice on the performance of the different sections which the piece contains.

It is possible that Correa refers to the variety of tempi with the rubric "a modo de canción" (Bovet 1991: No. 3: 15; TI: 74). According to Correa, the \mathbf{C} (of the first section) has to be played slowly and equally. In the [tiempo] perfecto partido with three and two [ϕ 3/2, three whole notes in a measure], one must give the downbeat to the first whole note, rest on the second, and give the upbeat to the third, making the half notes of ayre igual [of equal manner]. (Correa makes a reference here to the preface of the first tiento.) Finally, the proporción menor (ϕ \mathbf{C} 3) has to be played with the ayrezillo, customary in this tiempo, "more or less slowly, according to the number of notes [in a measure]."

Correa's first ternary section has been notated as 3/2 by Kastner, instead of the 3/1 intended by Correa. In addition, the section between the two ternary sections (Correa 1626: 46v, measures 13–21; KFO 1980, Vol. I: 100, measures 90–98) has been erroneously notated. The rhythm in this section should be 3+3+2, and not 3+3+3 as edited by Kastner.

This preface is a demonstration of the twofold usage of the ϕ sign by Correa. It can indicate either *tiempo perfecto partido* or the tempo of a section not being strictly regulated by the proportional theory but chosen instead by the maximum number of notes in a measure ⁸²

[XVII] The Seventeenth Preface (f. 48; KFO I: 103)

The third *tiento* of the fourth tone has "eight [quavers] to the *compás*." One has to play the *compás ligero* (fast, light *compás*) as previously stated in the preface for the second *tiento* of the first tone (f. 42). Correa also emphasizes that he gives the diapason in order to clarify the quality of the *género* rather than to describe the ambitus of the mode.

[XVIII] The Eighteenth Preface (f. 49v; KFO I: 107)

The fourth *tiento* in the fourth mode is for average players because it does not have much *travazón* (effort). Nevertheless, Correa has decided to write his piece in **c** because the *tiento* in question "has some (although only a few) of sixteen[th notes per measure]."

[XIX] The Nineteenth Preface (f. 51v; KFO I: 111)

This work, the fifth *tiento* of the fourth mode, is "easy for beginners." Correa tells his readers that he wanted to include this piece (although it is an early work) in order, first of all, to encourage the new composers to study, by making them see what he did before and what he does now; secondly, for "the old" (*los viejos*) not to swell with pride if they

⁸² For the performance considerations of this *tiento*, see Bovet 1979: No. 3: 3–7, No. 4: 4–9, and 1991: No. 3: 14–15; *TI*: 73–74.

⁸³ Correa explains elsewhere in the *Facultad orgánica* that he uses **c** for pieces with sixteen notes to the *compás*. For instance, see Correa 1626, textual part: 4.

see something worth correcting – considering that the difference which exists between the early and later works is the same between the later works and those yet to be composed, "if God gives me life."

[XX] The Twentieth Preface (f. 53v; KFO I: 116)

Like the previous one, this *tiento* in the fifth mode is addressed to beginners. Correa mentions that the piece is of eight (notes) to the *compás*. One has to play relatively fast (*compás ligero*), as indicated by the *tiempo partido* (�). This preface is one of the several demonstrations that Correa relates the time signature to the performance tempo, which was not typical of his time.

[XXI] The Twenty-First Preface (f. 55; KFO I: 120)

According to Correa, his *tiento* of the sixth tone is easy for average players. The piece is of eight and nine notes to the *compás*. Correa writes that he notates the work with the *tiempo [imperfecto] de pormedio*, because one has to play in a light/fast *compás (compás ligero)* up to the *proporción nonûpla* [a section with nine notes to the *compás*]. The *nonûpla* part has to go as Correa has previously explained in the preface to the second *discurso* of the fourth tone (f. 45v). In other words, one plays the said section "more or less slowly, according to the number of notes [within a measure]."

[XXII] The Twenty-Second Preface (f. 57; KFO I: 124)

This second *tiento* of the sixth mode has sixteen notes to the *compás*; it is easy for average players. Correa remarks that "in this [piece] as well as in many others of these *discursos*, I use some figures which do not exist in *canto de órgano* [i.e., in polyphony]." As examples of these "figures," Correa gives five quarter notes, five eighth notes, and others in the same manner. Correa claims to have seen such figures "used (without exception) in *discursos* of *cifra* of the most eminent masters of organ of our Spain," adding that in this way "we have more figures than the eight and nine common ones."

[XXIII] The Twenty-Third Preface (f. 59v; KFO I: 129)

The multisectional third *tiento* in the sixth mode is unique among Correa's works. In the preface Correa writes that the piece is based on the first part of the *Batalla* by Morales. The *compás* should be treated similarly to the second *tiento* of the fourth tone, "a modo de canción" (see Correa 1626: 45v). However, Correa's third piece of advice on the tempo for the *Tiento XVI* does not seem to be applicable as such in the *tiento* on the first part of the *Batalla* by Morales, the tempo issues of which will be discussed further.

⁸⁴ As Guy Bovet points out in his French translation of the *Facultad orgánica*, to his knowledge there are no other early Spanish pieces with quintoles or measures in five besides those of Correa and one piece by Pablo Bruna (Bovet 1991: No. 3: 17; *TI*: 75).

⁸⁵ For instance, two groups of five notes per measure are "more figures" as compared to eight notes per measure.

The *tiento* in question also has a brief postscript which involves advice on performing the piece. Towards the end of the *tiento* the composer has written the words "*Presa*" and "*Verso*" (from "*Verso 1*." to "*Verso 6*." plus "*Verso final*") below the staffs of *cifra*. In his postscript (f. 85 = f. 63), Correa recommends that one repeat the *Presa* (a kind of refrain) at the end of each one, two, or three of the six *Versos* (verses) – "for extending more or less this thought." In Kastner's edition, the *Presa* and *Verso* indications have been misplaced. *Presa* should be put at the beginning of bar 198 and *Verso* indications at the beginnings of bars 208, 218, 228, 238, 248, 258, and 268.

[Regarding the historical background of Correa's unique *Tiento tercero de sexto tono* "sobre la primera parte de la Batalla de Morales," Cristóbal Morales (ca. 1500–1553) might have been the first Spanish composer of a Batalla Mass. The original copy has, nevertheless, been lost (Sutton 1975: 16). Correa, for one, used some material from Morales's mass as the basis for his *Tiento tercero de sexto tono*. Morales's piece probably parodied the famous chanson *La Guerre* (1528) by the French composer Clément Jan(n) equin (ca. 1485–1558), who wrote his own *Missa la Bataille* (1530) on the same chanson (ibid.: 15). This explains the obvious similarities between Correa's *tiento* and the first part of Janequin's *La Guerre*. Janequin's chanson describes the victory of Francis I at the Battle of Marignan in 1545; thus, the piece was also known as *La Bataille de Marignan* (ibid.: 5), and later as "*Die grosse Schlacht*." The latter epithet differentiates Janequin's piece from the Flemish Hermann Matthias Werrecoren's (d. ca. 1558) vocal battle piece *Die Schlacht vor Pavia* (1545), which later became known as *La Bataglia Taliana* and also as "*Die Kleine Schlacht*" (ibid.: 8–9). Werrecoren's piece was a description of the victory of Duke Sforza against the French over Milan (ibid.: 7).]

[XXIV] The Twenty-Fourth Preface (f. 85v [= 63v]; KFO I: 138)

This "small and easy" *tiento* is in the seventh mode, which is in this case "commixed with the ninth tone," according to Correa. It is a piece of eight notes to the *compás*. Correa emphasizes that he has composed the work for beginners "because there must also be something to eat for the little ones as there is for the big ones." Moreover, Correa goes on to advise one to play in light *compás* [tactus], more or less, in accordance with the capacity of the practicant and the facility or difficulty which the work requires. He remarks that one ought to observe this rule generally throughout his book.

[XXV] The Twenty-Fifth Preface (f. 65; KFO I: 140)

The first half of this preface concerns a "new order of *tientos de medio registro*, celebrated invention and very well-known in the Kingdoms of Castile, although not known in others." There are four different kinds of *tientos* for the divided registers: with one solo voice in the treble, one solo voice in the bass, two solo voices in the treble, or two solo voices in the bass.

⁸⁶ In the original it reads *pensamiento* (literally, a 'thought,' or an 'idea').

The second half of the preface is specific to the *tiento de medio registro de tiple*⁸⁷ of the "seventh, or second tone." The latter remark has to do with the clash of the legitimate ambitus of a mode and the division of the keyboard. ** The *compás* is slow, but not too much so.

[XXVI] The Twenty-Sixth Preface (f. 85 [= 68]; KFO I: 147)

The preface to the second *tiento de medio registro de tiple* of the seventh tone (or second tone) mainly discusses different aspects of the modality of the piece. Correa explains that the said mode finishes irregularly on D. He refers to the previous preface (twenty-five) in this context. The preface also mentions the arithmetic and harmonic divisions, which are explained in *Chapter V*, 2.1 of this dissertation.

[XXVII] The Twenty-Seventh Preface (f. 69v [= 70v]; KFO I: 153)

This preface for another *tiento de medio registro de tiple* in the seventh mode (finishing irregularly on D) concerns principally the same modal issues as the two preceding prefaces. Correa's explanations are somewhat complicated and are only understood in light of the fact that the system of the arithmetic and harmonic divisions in the plainchant is exactly the reverse of that in instrumental music (Bovet 1991c: 11; *TI*: 77). The main point of the author of the *Facultad* is that, in his opinion, one composes *tientos de medio registro* of the first tone "on G," and not "on D."

[XXVIII] The Twenty-Eighth Preface (f. 73; KFO I: 160)

The fourth *tiento de medio registro* of the seventh mode also "finishes irregularly" on D, and thus the modal clarifications of the three previous prefaces apply to this *tiento* as well. The piece is of eight notes to the measure, which means that the *compás* [tactus] is relatively fast. Correa emphasizes again that the *compás* is fast, "as is shown by the [sign of the] *tiempo* [imperfecto] partido [\$\mathbb{C}\$], placed at the beginning [of the piece]." Moreover, in the *tiempo ternario*, called *proporción mayor* (\$\mathbb{C}\$ 3/1), the *compás* has to be played slowly and equally where there is a number two above [a staff of *cifra*]. When there is a number three [written above a staff of *cifra*], one plays with the *ayre* [the manner] attributed to the *proporción menor* (\$\mathbb{C}\$ 3/2), as Correa points out having said in the beginning. Correa has intended this *tiento* "for players who do not have much agility of hands, and for organs which are very heavy to play."

[XXIX] The Twenty-Ninth Preface (f. 75v; KFO I: 166)

Correa refers to the previous prefaces for the modal explanation of the fifth *tiento de medio registro de tiple* in the seventh mode, pointing primarily to the twenty-fifth preface (fol. 65; see also the prefaces on folios 85 = 68, 69v = 70v, and 73). Besides the modal

⁸⁷ Tiple, 'soprano,' means that there is one solo voice in the treble.

⁸⁸ This problem is discussed in the context of Correa's use of modes.

⁸⁹ Rezio (recio in modern orthography) could also be translated as 'difficult' or 'clumsy.'

issues, the main subject of the twenty-ninth preface is the observation that there is not a determined number of figures (i.e., notes) in *quiebros* and *redobles*. In other words, in the case of partially or completely written-out ornaments, they need not be played exactly as written, this concerning especially the number of notes (for instance, the number of repetitions in trills). Ocrrea writes that the masters of the organ have many more figures than the *maestros de capilla*. Correa mentions that in measures 29 and 41 one finds a *quiebro* whose first figures count five *semicorcheas*.

[XXX] The Thirtieth Preface (f. 77v; KFO I: 172)

Correa makes reference again to the previous prefaces of *tientos de medio registro de tiple* for the explanation of the mode of the first *tiento de medio registro de baxón* 91 of the seventh mode.

Correa advises the "players of the first and second courses to leave this *tiento* for those of the third and fourth, because it is very difficult." Correa stresses that the same advice is to be taken into account concerning the other works of his book. When one sees that any work at hand exceeds one's potential, one should refrain from playing it until one has "more sufficiency" and years of study."

[XXXI] The Thirty-First Preface (f. 81v; KFO I: 183)

Although Correa does not refer to any other preface in the preamble to the second *tiento de medio registro de baxon* in the seventh tone, it is useful, nevertheless, to see his explanations about the mode in the twenty-fifth preface (f. 65).

In his thirty-first preface Correa makes the remark that although the piece is not as difficult as the previous one, neither is it so easy that it would be appropriate for anybody. The main issue of this preface is, however, the *punto intenso contra punto remisso*, Correa's favorite dissonance.⁹⁴ He points out that there are examples of such dissonances "in some of my works (particularly in measure 79⁹⁵ of this *discurso*)." Moreover, he has seen the said dissonance used "in many and very serious composers." Lastly, he recommends that young composers leave the use of this dissonance to their later years.

[XXXII] The Thirty-Second Preface (f. 84v; KFO I: 191)

As in several other preambles, Correa refers to previous prefaces for the modal explanation of the piece (see especially the twenty-fifth preface, f. 65). The third *tiento de baxon* is in

⁹⁰ Most likely, the same principle applies to the written-out examples by Correa of at least the *redobles* in the textual part of the *Facultad orgánica*.

⁹¹ Baxón (bajón in modern orthography) means that there is one solo voice in the bass.

⁹² It is not currently known exactly what "courses" Correa meant.

⁹³ Meaning competence, and/or sufficient amount of study.

⁹⁴ A simultaneous appearance of a note with its chromatic alteration.

⁹⁵ In folio 83 in the original edition and on page 187 in Kastner's edition. This particular *punto intenso contra punto remisso* consists of the C in the soprano voice sounding against the C-sharp of the tenor on the main beat of the measure.

the seventh mode. The work is "of eight [notes] to the measure." The *tiempo* [perfecto] partido (ϕ) denotes compás andado, a relatively fast compás.⁹⁶

[XXXIII] The Thirty-Third Preface (f. 86v; KFO I: 197)

Although Correa does not refer expressly to the twenty-fifth preface, it is, nevertheless, relevant to the modal scheme of the fourth *tiento de baxon* of the seventh tone. Another subject of this preface is an emphasis that in the *Facultad orgánica*, the works "of eight [notes] to the measure" are written with the *tiempo [imperfecto] partido* [�], appropriate to the *compás mayor*. (Corra refers to folio 42 in this context.) Correa's rather complicated explanation means that in � one plays faster than in �.

[XXXIV] The Thirty-Fourth Preface (f. 88v; KFO I: 202)

The fifth *tiento de medio registro de baxon* of the first tone has been transposed to G. Like the previous *tiento*, this work is "of eight [notes] to the *compás*," which is to be played somewhat fast (*algo veloz*), as the *tiempo [imperfecto] partido* [�] indicates.

Correa points out that in this *tiento* there is a little-used proportion called *sexquiseptima*, or *septûpla*, of seven notes to the measure (beginning from measure 97⁹⁷). Correa writes that these groups of seven have to be played with equality of tempo, without lingering oneself more on one note than on the other, which is also indicated by the number two written below the seven (in the proportional sign).

[XXXV] The Thirty-Fifth Preface (f. 90v; KFO I: 206)

The sixth *tiento de medio registro de baxon* in the first mode has also been transposed to G, and it is "of eight [notes] to the *compás*." According to Correa, the piece is accommodated to students of the second course, ⁹⁸ because it is easy and an early work of his.

This preface includes one of the few instructions on registration by Correa. For a *tiento de medio registro* with a solo voice in the bass, Correa recommends using a 4' registration in the left hand against the 8' registration of the treble half of the keyboard. He specifies that this is to be done in large organs of fourteen *palmos* or more, and that with such a registration the stops respond better.

[XXXVI] The Thirty-Sixth Preface (f. 92v; KFO II: 1)¹⁰¹

According to Correa, this *tiento de medio registro de tiple* is of the tenth tone or also of the first tone [transposed up], which means that it finishes irregularly on A of the *delasolrre*

⁹⁶ By andado Correa can also mean "ordinary" or "common."

⁹⁷ In actual practice, the septûpla section begins from measure 98 – both in the original and in Kastner's edition.

⁹⁸ See the thirtieth preface (Correa 1626: 77v).

⁹⁹ Correa's advice on registration will be discussed further.

¹⁰⁰ Thirteen *palmos* (or *palmas*) ordinarily equal eight feet. Consequently, large organs "of fourteen *palmos* or more" are of a lower pitch than organs of thirteen *palmas*.

¹⁰¹ The tientos XXXVI-LXIX are found in Vol. II of Kastner's edition.

[D]. Correa warns his readers of the way in which the dotted rhythms have been notated, in particular in measure 80 (f. 94, staff 2, measure 1; KFO II: 4, measure 80). In the case of a dotted eighth note which is followed by a sixteenth note, Correa writes only the dotted eighth note above the staff of *cifra*, leaving out the indication of the sixteenth note. First of all, this solution is based on the sixteenth notes obviously following the dotted eighth notes. Secondly, Correa wants to avoid "overloading this work with figures [i.e., notes]." Finally, the author makes the remark that although the *tiento* is "of sixteen [notes to the *compás*]," it is easy for students of the "second course," and it is an early work of his.

[XXXVII] The Thirty-Seventh Preface (f. 95; KFO II: 6)

The *tiento de medio registro de baxon* in the ninth mode is a work "of eight [notes] to the *compás*." The main consideration of the preface is to explain how rhythm is indicated in *cifra*. The note value (or values) written above the measures of *cifra* refers to the voice which has the biggest number of notes (i.e., the smallest note values) and applies until another note value is denoted.

[XXXVIII] The Thirty-Eighth Preface (f. 97; KFO II: 10)

The preface for the *tiento de medio registro de tiple* of the fourth tone concentrates on describing the mode of the piece. As stated by Correa, this mode has "nineteen legitimate notes" counted from *elami sograve* [E] to *befabemi sobreagudo* [b1], according to which the fourth mode used by the *maestros de capilla* is more like the tenth than the fourth tone. Also in this preface Correa discusses a 4' registration (as he does in the thirty-fifth preface), explaining that if one takes off the 8' bourdon, the legitimate nineteen notes of the ambitus of the said mode are counted from *elami grave* [e] to *befabemi agudissimo* [b2], which "the organs of four octaves" have. The said tone is not suitable for other kinds of organs in *medio registro* because such organs lack the b2.

[XXXIX] The Thirty-Ninth Preface (f. 99v; KFO II: 16)

In the preface to the second *tiento de medio registro de tiple* of the fourth tone, Correa writes that the work is "under the same conditions as the previous one," referring to the modal explanations of *tiento* thirty-eight. Moreover, he makes a reference to measures thirty-nine and fifty-six of the previous *tiento*¹⁰⁵ to give an example of apparent (forbidden) parallel movements in the context of *redobles*. Correa emphasizes that in the *redoble* one

¹⁰² Correa's theoretical terminology and structure of modes will be discussed further in Chapter V.

¹⁰³ In the *Facultad orgánica* the different note values are indicated by notes written above the staffs of *cifra*.

¹⁰⁴ See also the prefaces in folios 77v (KFO I: 172) and 90v (KFO I: 206).

¹⁰⁵ Correa writes that in "39. y 56. compases antes del fin" (39 and 56 measures before the end) there are two redobles in the soprano. If "the end" is interpreted as the last bar, Correa is referring to the second and nineteenth bars in folio 98r, which are measures number fifty-three and seventy in Kastner's edition (1981: II, 13), and not fifty-seven and seventy-nine, as Holland states (1985: 283). (Holland's first measure number refers to a measure where the redoble is in the alto.)

has to pay attention only to the plain notes (*canto llano*, that is, main notes) of the cadenced or ornamented voice, and not to the circumscribing notes of the *redoble*. He concludes the preface by pointing out the apparent parallel movements (in context of *redobles*) in measures twenty-eight and twenty-nine of the thirty-ninth *tiento*.

[XL] The Fortieth Preface (f. 102; KFO II: 21)

The *tiento de medio registro de baxon* in the ninth mode is "of eight [notes] to the $comp\acute{a}s$." Correa warns that the work is somewhat difficult because in the major part of it two voices produce glosas simultaneously. For this reason the $comp\acute{a}s$ should be taken neither as "slowly as that of sixteen [notes to the measure] nor as fast as of eight [notes to the measure], but in the middle." Correa explains that for this reason he notates the piece with the *tiempo perfecto de por medio* $[\phi]$, which has this significance in his works.

[XLI] The Forty-First Preface (f. 104v; KFO II: 28)

The *tiento de medio registro de tiple* is of the twelfth tone "or similarly of the sixth tone, because in the fifth tone there cannot exist a *tiento* with this ending in the *medios registros*," due to the harmonic division attributed to this mode. Although Correa does not himself refer to any other prefaces here, the modal explanation in the thirty-fifth preface (f. 90v) is relevant to the presently discussed preface.

The second subject of the forty-first preface is the use of particular seventh leaps in the measures from fifty-seven to fifty-nine (after the *arsis*¹⁰⁶), to which Correa refers in his preface. According to him, such leaps are practiced among *varones doctissimos* (learned men), "on the occasions, which they know" it would be appropriate – the said measures being an example of such occasions. The particular seventh leaps discussed by Correa are necessary in order to avoid crossing the division point of the two halves of the keyboard with the soprano solo voice.

[XLII] The Forty-Second Preface (f. 107v; KFO II: 35)

The preface of the second *tiento de medio registro de tiple* in the twelfth mode continues the issue of large melodic leaps, mentioning the leaps of a seventh (measure twenty), of a sixth (measures sixty-four and sixty-five), and of a twelfth (measure sixty-eight). All Correa's examples are ascending melodic jumps.

According to the author of the *Facultad orgánica*, all the mentioned leaps and many others "are used and permitted in the organ as they are in the *chirimia* [shawm] and *corneta* [cornet]." Correa mentions two occasions for using these kinds of large melodic leaps. First, they are used in imitation of a passage of *glosa*. Second, these intervals may be used "in long, longer, or very long scales." Correa specifies that the latter use is to be applied if one cannot use consecutive notes. A jump within a (scale) passage is permitted when it is

¹⁰⁶ Arsis is the upbeat, thesis being the downbeat.

¹⁰⁷ The only large, ascending melodic interval in measure twenty is a leap of a ninth and not of a seventh, as Correa writes (see KFO II: 36). The original edition of the *Facultad orgánica* also bears a ninth.

necessary to change the octave; for instance, when "the consecutive" note would cross the division point of the keyboard or would go out of the range of the instrument altogether.

[XLIII] The Forty-Third Preface (f. 110v; KFO II: 42)

This *tiento de medio registro de baxon* of the sixth tone is "of eight [notes] to the measure." According to its author, the work is easy for beginners, and it is an early work. The *compás* is fast "as the *tiempo* [time signature] denotes." Correa points out that he has already before explained this.

The second issue discussed in the forty-third preface is the use of the capital letter *R* to indicate *redobles*, ornaments. Correa gives measures fifteen, fifty-six, and sixty-three as examples of his use of the said ornamentation sign and makes the general observation that it is common to use the first letter of a word to stand for the whole word. In this sense, he compares his use of the R sign to the use of a capital B for a flat sign.

[XLIV] The Forty-Fourth Preface (f. 112; KFO II: 46)

The preface for the *tiento de medio registro de tiple* in the sixth mode concerns the mode, its accidentals, and the problems of its ambitus. The work is in B-flat, but there is only one flat in the "key signature." Because the mode lacks notes in the upper part [of its ambitus when counting from F], and similarly, lacks notes in the lower part [of its ambitus, counting from B-flat], it is known to be "a commixture, an irregularity, or an imperfection." Correa's words mean that if one counts the ambitus from F, one runs out of keys in the treble. If the ambitus is counted from B-flat, for one, the division point of the keyboard poses a problem.

[XLV] The Forty-Fifth Preface (f. 115; KFO II: 52)

The preface of the *tiento de medio registro de tiple* of the seventh tone discusses the parallel movements in the context of *redobles* and *glosa* as does the thirty-ninth preface (f. 99v), to which Correa makes a reference here. He asks his readers to pay attention to the ornamented cadences in measures fourteen, seventy-one, one hundred one, and one hundred nine, "very common in all my *discursos* in which it seems that the laws of the composition are violated." By this, Correa is pointing to certain seemingly forbidden parallel movements, which are nevertheless permitted because "in *redobles* and *cláusulas glosadas* [ornamented cadences] one has to pay attention to the *canto llano* [plain, unornamented melody] of the cadencing voice, etc.," and not to the notes which are part of the ornamentation. According to Correa, this doctrine is much practiced among the best masters of the organ in Spain. Another important issue in the forty-fifth preface is the *diapasón* of a mode no longer being given from the final note but from the note which is the actual first note of the range of the voice.

¹⁰⁸ The tiempo of this work is ¢.

¹⁰⁹ Holland gives the erroneous number seventeen here (1985: 286).

[XLVI] The Forty-Sixth Preface (f. 117v; KFO II: 58)

The preface for another *tiento de medio registro de tiple* in the seventh mode focuses on good composition. Correa explains that it is "a thing used among masters" that when a theme cannot enter before the previous one ends, one may modify some figure of the subsequent [theme, voice]. Such a change occurs normally on the first note, which is made a half note although it should be a whole note. Correa gives the third bar of his forty-sixth *tiento* as an example (f. 117v; KFO II: 58). In the said measure, Correa has changed the first note of the theme from the whole note into a half note in the second theme entrance, in the bass voice. By delaying the second theme by half a measure, the composer avoids a fourth between the bass and tenor voices. Correa notes that such themes are good for *música voluntaria* ("voluntary" music) but not for *música forçosa* ("forced," strict music), and gives competitions as examples of the latter. In such "forced" situations, one should "pay attention to the (correct) figures and solfa, or at least to the intervals."

[XLVII] The Forty-Seventh Preface (f. 119v; KFO II: 63)

Correa's preface for the *tiento de medio registro de tiple* of the eighth tone continues the discussion of theme entrances. In the words of the author of the *Facultad orgánica*: "An excellent way to follow a theme is to make the second voice enter before the first finishes, and the third before the second finishes, especially in *discursos* and *versos* of the *registro entero*," because in *medios registros* one may well use long entrances even in the three voices of the *flautado* (i.e., the accompaniment), as well as in those which one plays in the soprano or in the bass," Correa reasons that the above-mentioned is done thus because pieces for divided registers require great gravity in their entrances – if they are of sixteen or more notes to the *compás*.

[XLVIII] The Forty-Eighth Preface (f. 122v; KFO II: 69)

The *tiento de medio registro de tiple* in the eighth mode is "of eight [notes] to the measure." According to Correa, the piece is considered in analogy with the eighth [tone] of *claves altas* [literally, "high keys"]. Moreover, it has been accommodated to organs which are

¹¹⁰ The *oposiciones* of the original text can refer to competitions for posts of professional musicians, for instance. Holland's translation has not considered the word *oposiciones* in the sense of a competition (Holland 1985: 287; compare with Bovet 1991c: No. 4: 17; *TI*: 82).

¹¹¹ Registro entero points to a registration which is "undivided," that is, both halves of the keyboard bear the same registration.

¹¹² Correa recommends using his specific way of composing theme entrances "especially in discursos and versos," as opposed to the medios registros. Curiously, in the previous preface (f. 117v) Correa presents his recommended way to arrange theme entrances in context to a medio registro piece, although in the forty-seventh preface he expressly advises one to have "long entrances" of themes (that is, finishing one theme before the next comes) in medios registros. In addition, Correa labels his forty-sixth piece a (tiento de) medio registro de tiple but calls it a discurso in the preface to this piece. Thus it is not clear exactly what Correa means by the term discurso here. On one hand, discurso does not exclude the piece being a medio registro. On the other hand, in Correa's discussion about the theme entrances, these terms appear as opposites to each other.

heavy to play and it is for average players. The *compás* of the piece is fast as is indicated by the *tiempo* [imperfecto] partido $[\mathfrak{C}]$.

Correa's notion of the *claves altas* is interesting. There are basically two main possibilities for an interpretation of the term. "High keys" might refer to modes which are transposed one position up. The other possibility is that the term points to some keyboard instrument which perhaps sounded higher than the normal pitch – in which case the effect would end up being similar to the one achieved by transposing modes.

[XLIX] The Forty-Ninth Preface (f. 124v; KFO II: 74)

The main consideration of the preface for the *tiento de medio registro de baxon* of the twelfth tone is that the mode of the piece should be understood as a twelfth tone although the piece "finishes irregularly" on G. This statement – once again – has to do with the division point of the divided keyboard, which prevents the use of certain modes in *tientos de medio registro*. According to Correa, the *compás* is fast.

[L] The Fiftieth Preface (f. 127v; KFO II: 81)

In the preface of the *tiento de medio registro de baxon* in the seventh tone, Correa writes that in his works there are many licenses, all of which are not necessarily very good but are nevertheless possible. There can be "bad notes" in place of good ones on the *arsis* or *thesis* of the measure – in the bass voice, for instance. Correa gives measure twenty-four as an example and explains that one has to pay attention to the plain melody of the cadencing or ornamenting voice, and not to the notes belonging to the ornamentation – as he has stated before (for example, in the preface to the thirty-ninth *tiento* in folio 99v).

[LI] The Fifty-First Preface (f. 129v; KFO II: 86)

The *tiento de medio registro de baxon* in the tenth tone is "of eight [notes]" to the *compás*. The main issue of the fifty-first preface is the *cifra* tablature notation. Correa writes that some players speak very negatively about *cifra*, their main criticism being that there are figures in *cifra* which cannot be sung. Correa gives as examples the groups of five, seven, and nine half notes, quarter notes, or eighth notes, pointing out that – as he has stated before – "we [i.e., the organists] have some more figures than the eight or nine common ones." In addition, he remarks that those who are against *cifra* do not notice that they similarly produce such groups of notes when they play their fantasies – in other words, when they improvise.

Correa goes on with his praise of the *cifra*, observing that this notation shows very clearly "the good and bad in music, which the *canto de órgano* [polyphony] does not [show], and which it [the *canto de órgano*] greatly covers, and is a cloak of the sinners, and in which there are licences that would cause admiration [if notated] in *cifra*."

¹¹³ Correa means that some things which pass unnoticed in *canto de órgano* would be a source of admiration if they could be seen "all at once" when notated in *cifra*.

[LII] The Fifty-Second Preface (f. 132; KFO II: 91)

This is one of the six prefaces in the *Facultad orgánica* which applies in common to a group of pieces to follow. Correa writes that from here "Begin the works of five [voices]," the first one being a *tiento de registro entero*¹¹⁴ of the first tone, followed by some *tientos de medio registro de dos tiples*, ¹¹⁵ and finally others of *medio registro de dos baxones*, ¹¹⁶ all of them in five voices.

Correa presents a special theoretical terminology in his fifty-second preface, explaining that all musical works fall into two categories, which are generic (genérico) and specific (específico). Generic refers to the género of the piece, and specific to the "species," which means the master and disciple tones (tonos maestros, authentic modes, and tonos discípulos, plagal modes). Generic pieces of music involve features of more than one tone while specific pieces are genuinely in one particular tone. (In other words, generic pieces contain a mixture of modes while in specific pieces there is no such mixture.) According to Correa, the generic works are more often "playable" (used in instrumental music), the specific works being mostly "singable" (used in vocal music). To end the preface, Correa states that his tiento de registro entero of the first tone is mixed with the second tone (i.e., the tiento is generic).

[LIII] The Fifty-Third Preface (f. 136v; KFO II: 100)

The preface for the *tiento de medio registro de dos tiples* in the second mode contains two issues. First, Correa declares that in his opinion, and also "[in the opinion] of some *doctos* [learned men]," the pieces with two treble solo voices have to be in five voices instead of four. The main reason for this is that, according to Correa, there must be three voices left if the two solo voices pause. (See also the next preface, f. 139v.)

Correa's second point is that a *medio registro de dos tiples* on D is of the second, and sometimes of the seventh, and never of the first tone – as he already has explained in the prefaces for *tientos de medio registro* of one solo voice in the treble or in the bass.

[LIV] The Fifty-Fourth Preface (f. 139v; KFO II: 106)

Correa's fifty-fourth preface continues the discussion about the *medios registros* with two solo voices. In addition, the preface of the *tiento de medio registro de dos tiples* of the seventh tone includes one of the few pieces of advice on registration by Correa. He recommends that one registrate the treble solos with the *lleno*¹¹⁷ of the organ and the accompanying voices with the *flautado* – due to the distinct character of the solo voices and the other voices. In a case of two solo voices in the bass, Correa's advice is to registrate the bass solos with the *lleno* or with *trompetas*. After giving his instructions on registration, Correa emphasizes again that the *medios registros* with two solo voices must have five voices in total, although "some who know little" have tried to do otherwise, transferring

¹¹⁴ A tiento for "full register," opposed to divided register.

¹¹⁵ Dos tiples meaning two solo voices in the treble.

¹¹⁶ Dos baxones meaning two solo voices in the bass.

¹¹⁷ *Lleno* can be either a compound mixture or a combination of individual stops.

the second soprano to the *flautado* registration serving as contralto (thus adding the number of the accompanying voices to three in a four-voice texture when the solo voices pause). Correa himself does not accept such "lending" of voices between the solos and the accompaniment. Rather, the texture in *medios registros* with two solos should be of five voices throughout a piece.

[LV] The Fifty-Fifth Preface (f. 143; KFO II: 112)

At the beginning of the preface for discurso de medio registro de dos baxones in the second tone, Correa informs the reader that a new and last order of medios registros of two basses in five voices commences. The preface is mainly a repetition of previous prefaces and involves two subjects: issues concerning modes in medios registros and the statement about the number of voices in medios registros with two solo voices.

Correa remarks once again that as in *discursos de medio registro de tiple*, *de baxon*, or *de dos tiples* finishing on D, and similarly in *medios registros de dos baxones*, one has to consider the mode to be the second, not the first. (See preface fifty-three, f. 136v.) Correa's second point is the question already touched upon several times about the number of voices in pieces for divided registers with two solo voices. According to Correa, the texture of such compositions must definitely be of five voices, this applying to pieces with two bass solos as well as to pieces with two treble solos. (See prefaces fifty-three, f. 136v, and fifty-four, f. 139v.)

[LVI] The Fifty-Sixth Preface (f. 146v; KFO II: 120)

As was the case with the previous work, Correa calls his fifty-sixth piece a *discurso de medio registro de dos baxones*. The work is in the fourth mode. The main topic of the preface is how one should divide the voices between the two hands to be able to execute *glosas* well – a matter to which Correa pays a great deal of attention throughout his *Facultad orgánica*.

Correa explains that always when one can in these *tientos* [i.e., in *tientos* with two bass solos], one should free the left hand from playing the tenor voice, leaving it for the right hand in order to form the *glosa* "with more freedom, cleanness, and good touch." According to Correa, this can be practised in the fiftieth to the fifty-fifth measures of the said *discurso*. The same advice concerns the *medios registros* with two soprano solos, in which one can play the second soprano with the thumb of the left hand. (Correa's advice naturally applies to organs which have divided keyboards, and one hand may thus help out the other hand across the division point on the same manual.)

[LVII] The Fifty-Seventh Preface (f. 150; KFO II: 127)

Correa claims the *tiento*, *y discurso de medio registro de dos baxones* to be in the eighth tone, or also in the eleventh tone (finishing irregularly), in respect to *claves altas*. ¹¹⁸ Correa compares the sweetness to the ear caused by the variety of modes to a selection

¹¹⁸ A reference to a transposition of the mode.

of delicacies at a feast. He writes that there is such a case found in the eighty-sixth to the ninety-eighth measures of the work in question, where he claims to have used themes and cadences which combine the first, fourth, ninth, and tenth tones.

[LVIII] The Fifty-Eighth Preface (f. 153v; KFO II: 134)

The preface for the *tiento de medio registro de tiple a 32* [in thirty-two notes] of the second mode includes several important remarks. The major part of the preface is addressed to the next four *tientos* which all have thirty-two notes: first, two *tientos de medio registro de tiple* in the second tone, then a *tiento de medio registro de baxon* in the same tone, and finally, "the memorable among the organists, *canción Susana*."

Correa writes that he notates all these works with a *tiempo* which is commonly called [*tiempo*] *perfecto* [O], to indicate the slowness [*morosidad*] of the *compás*, in regard to much diminution. Correa adds that what this slowness has to be depends on the greater or lesser quickness which each [player] naturally possesses in his hands. (This is not the only time in the *Facultad orgánica* when Correa gives advice on taking into account one's abilities in choosing the tempo.)

The fifty-eighth preface involves a significant performance practice instruction concerning Correa's pieces having a considerable amount of diminution. Namely, he asks the player to keep the same *compás* [tactus/tempo] both in the plain passages and in the passages with *glosas* of eight, twelve, sixteen, twenty-four, and thirty-two. Correa adds that he demands "much equality," touch, and clarity in [playing] these works."

[LIX] The Fifty-Ninth Preface (f. 158; KFO II: 146)

Correa's preface to another *tiento de medio registro de tiple* of the second mode of thirty-two notes [per measure] consists entirely of a rather complicated explanation about the ways of defining the *género* of a piece. According to Correa, there are three such ways: first, by the intervals which each of the voices intones; second, by the notes by which it passes (naturals, or accidentals); and third, by the note on which it finishes. After describing the manners of defining the *género*, Correa goes into some details concerning the said intervals and notes within each *género* and the notes on which different *géneros* end. (See the explanation of Correa's *géneros* in *Chapter V*.)

[LX] The Sixtieth Preface (f. 163; KFO II: 157)

The sixtieth preface of the *tiento de medio registro de baxon* of thirty-two notes [to the *compás*] is in the second mode, and it is "on almost the same theme" as the preceding ones with the soprano solo. This piece is meant to be played on small organs (*realejos*, chamber organs) rather than on large organs, the basses of which cannot respond with necessary rapidity and the action of whose keys is very heavy and deep.

¹¹⁹ Ygualdad [igualdad in modern orthography] of the original text could also be translated as "regularity" in this context.

The other issue of this preface is the *género* of a piece. Correa refers to the previous preface (f. 158) and recommends "the second [way]" (out of three) to define the *género* because this way is very general and it comprises many [situations].

[LXI] The Sixty-First Preface (f. 167; KFO II: 166)

In the preface for the "celebrated" *Canción Susana*: ¹²⁰ *glosada* in thirty-two notes to the *compás*, ¹²¹ Correa warns his readers once again about playing too difficult repertoire. He states that there was a sackbut player Gregorio de Lozoya in the Holy Church of Seville, memorable especially for playing *glosas* with his instrument. Many players, in trying to imitate his ornamentations, revealed the deficiences of their playing, which had remained concealed as long as they had played plain texture. Correa writes that he would not like the same thing to happen to "my organists in these very much ornamented and difficult works," the playing of which could lead them to losing their touch, clarity and other good qualities – if they have them. The author of the *Facultad orgánica* recommends that those who do not have the necessary skills leave playing such pieces to those who are able to do it and "attack" instead the more feasible ones.

[LXII] The Sixty-Second Preface (f. 173v; KFO II: 180)

This is the last of the six prefaces in the *Facultad orgánica* which contains a part addressed to several pieces to follow, namely, four works in *compás ternario* [ϕ 3/2], "of three *semibreves*, six *mínimas*, twelve *semínimas*, and twenty-four *corcheas* to the *compás*." The said four works are all of different types: a *tiento*, a *tiento de medio registro de tiple*, *canción glosada*, and *diferencias* (variations). Correa points out that – except for the *canción* – he has not used the three notes C, D, and E *sograves* (that is, the notes of the lowest register in *cifra*) in these works because they have been composed for some antique organs which lack these notes.

Correa's sixty-second work is a *tiento* in the first mode. The *compás* should be taken rather slowly (*bien a espacio*), putting the whole foot [down] on the downbeat, raising a part of it (that is, the toes or heel) on resting, and finally raising the whole foot another time on the upbeat.

[LXIII] The Sixty-Third Preface (f. 179v; KFO II: 191)

The preface for the *tiento de medio registro de tiple* "of twenty four numbers to the *compás*" in the sixth mode focuses entirely on theoretical issues. First Correa points out again that the first three signs (that is, C, D, and E *sograves*) are not used/played in this work because some antique organs lack these notes.

Next Correa remarks that he has used "passos trocados." This means that while the first theme is descending, the other three come in ascending. The rest of the sixty-third

¹²⁰ The famous tune "Suzanne un jour."

¹²¹ Glosada meaning here ornamented in thirty-two notes, or having glosas of thirty-two notes.

preface discusses cadences and *géneros*. In respect to cadences, Correa refers to the preface for the second *discurso de medio registro de tiple* of thirty-two notes to the *compás* (the *tiento* fifty-nine, f. 158) where he stated that the cadences on *ut* and *fa* are diatonic, those on *re* and *sol* are chromatic, and the cadences on *mi* and *la* are enharmonic. Correa's explanations mean that the leading notes of C and F are B and E, of D and G they are C-sharp and F-sharp, and of E and A the leading notes are D-sharp and G-sharp (the D-sharp lacking in meantone tuning).

In the course of the preface, Correa interestingly makes one reference to his treatise on *punto intenso contra [punto] remisso*. It is not known whether this work was ever written. Thus far the book has not been found.

[LXIV] The Sixty-Fourth Preface (f. 184; KFO II: 201)

Correa's sixty-fourth preface for the *canción glosada* of *compás ternario* in the eighth tone continues the discussion about *géneros*. Before going into that issue, Correa mentions that the said piece has been composed to verse which is a catalectic tetrameter and whose text is "dexaldos mi madre mis ojos llorar, pues fueron a amar" (my mother, let my eyes weep because they have loved). Correa adds that the song begins in the soprano part and continues in the other voices.

Next the author of the *Facultad orgánica* refers to things having been said in the "preceding *discursos*" about the manner in which the *géneros* proceed. Correa's main argument is that it is impossible to give the *género* "in an abstract way" because one has to take into account the intervals, the notes, or the cadences of the other two *géneros*. However, the "ancients" have tried to use *géneros* in the abstract way. According to Correa, such use would cause music "without flavor." In Correa's opinion, the abstract use of *géneros* should be rejected. He remarks that "today they are used in a concrete [way], which is mixing one with the other"

[LXV] The Sixty-Fifth Preface (f. 189v; KFO II: 213)

The preface to the sixteen *glosas* on the tune ¹²² "*Guárdame las vacas*" (keep the cows for me) – or "better said, on the *seculorum* of the first tone of the plainchant" – deals mainly with intervals. First the author makes the already familiar remark that these *glosas* have been composed in respect to antique organs whose first note (that is, the lowest) is *fefaut grave* [F]. The piece is in the *compás ternario*, as are the three preceding works.

Correa mentions three pairs of intervals (the second and the seventh, the fourth and the fifth, the third and the sixth), all of which form an octave. He also connects these intervals to different *géneros*, explaining that the first two pairs (using natural degrees) are diatonic, while the minor third and major sixth are chromatic, and the major third and minor sixth are enharmonic.

¹²² Canto llano in the original text.

This is one of the two instances in the *Facultad orgánica* where there is also a brief postcript written to a piece (the other one is in f. 63). The subject of the postscript is the nature of the interval of the fourth, which Correa claims to be almost the same as the nature of the fifth. To demonstrate his point, Correa has written one staff of *cifra* (twelve measures in total) where he shows that it is the same thing to move the lowest voice an ascending fourth or a descending fifth.

[LXVI] The Sixty-Sixth Preface (f. 196; 124KFO II: 224)

Correa's sixty-sixth preface is brief and consists of some rather general remarks about the *canción* of Tomas Crequil[l]ión called "*Gaybergier*." The piece is in four voices and has *glosas* of sixteenth notes. The rest of the preface deals with the *diapasón* and the *género* of the work.

[LXVII] The Sixty-Seventh Preface (f. 199; KFO II: 230)

The third-to-last preface of the *Facultad orgánica* is for the *Prosa* of the *Santissimo Sacramento* (the Holy Sacrament), "which is sung on the day of the Corpus Christi and on its octave, after the Epistle." The work is intended for organs of thirteen or thirteen and a half *palmos* (palms), which are those that have the note of *fa* of the eighth tone of the *canto de órgano* on *alamire* [A]. ¹²⁵ Also, it can serve the same purpose for the plainchant in organs of fourteen [*palmos*].

The cantus firmus is in the soprano, and where there is a space (meaning probably a blank space within a line of text), the notes are tied, and on the second (tied) part there is no text. (In other words, one should extend the last syllable of a word over the tied notes which follow.) In addition to the preface itself, there are several references in the course of the piece, all of which mean the same thing: one has to sing two verses in a row with the same melody.

[LXVIII] The Sixty-Eighth Preface (f. 202; KFO II: 236)

Correa opens the preface by writing that he will end his treatise "with the following plainchant of the Immaculate Conception of the Virgin MARY, our Lady, under whose protection the present work be brought to light, for the honor and glory of God our Lord, and the same Lady and our advocate, and the other saints of the celestial Court."

¹²³ The postscript for Correa's sixty-fifth work is found in folio 195v, the number of which is illegible in the Brussels exemplar and unclear in both Madrid exemplars, R.9279 and R.14069.

¹²⁴ The folio number is unclear in the Brussels exemplar and in one Madrid exemplar, R.9279. Moreover, in the first of the said exemplars, folio 196 has been misplaced and is thus in the middle of the previous piece, the *Guárdame las vacas*, in between folios 191 and 192.

^{125 &}quot;Palms" were used to measure the lengths of organ pipes. Thirteen *palmos/palmas* equal an 8' pitch. Consequently, the organs of from thirteen and a half to fourteen *palmos* are instruments with a lower pitch. In this particular context, Correa may be referring alternatively to the extension of the bass of the keyboard.

The cantus firmus is in the tenor and the piece is "of ternary number." According to Correa, one should use B-flats (even though they are not indicated at the beginning of the piece).

[LXIX] The Sixty-Ninth Preface (f. 203; KFO II: 238)

The three *glosas* on the cantus firmus of the Immaculate conception complete the *Facultad orgánica*. The author mentions the first *glosada* to be of six [notes] to the *compás*, the second one being of nine, and the third of twelve. The *compás* of these works is the *compás ternario* [\$\psi\$ 3/2]. Moreover, the first *glosa* is in *sexquialtera*, the second is in *sexquinona*, and the third one is again in *sexquialtera*, with the indication of the numbers – the notion for the ternary being the number three, and the one for the binary being the number two. The three indicates that one has to play "with the *ayrezillo* of the *proporción menor* [\$\mathbf{C}\$ 3/2]," the two signifying "the *ayre* of the *proporción mayor* [\$\mathbf{C}\$ 3/2]," the notes being equal. (Correa's *ayrezillo* is discussed in *Chapter VI*, 4.2, *Ayrezillo*.)

The three *glosas* are composed in the form of the *medio registro de tiple*. To end his preface, Correa offers advice on registration, writing that one could give *flautado* to the lower voices (the accompanying voices), and for the soprano (solo) the mixture ¹²⁶ "which would seem best to the organist." This remark is another demonstration of Correa's willingness to leave the application of his recommendations to each performer. Similar observations can be found in the context of choosing fingerings and executing ornaments.

4 The Extant Copies of the Facultad orgánica

Despite the publication of the entire *Facultad orgánica* in the series Monumentos de la música española (vol. VI [1948] and vol. XII [1952]; ed. by Santiago Kastner), the number and the locations of surviving exemplars is a matter of great confusion in the musicological literature. Since Kastner's transcription was published, the number of extant copies of the original edition (1626, Alcalá) has been discussed several times in scholarly writings. A survey of this material reveals inconsistent and often contradictory information (see *Appendix B* for a chronological summary of this literature).

For the purpose of this study, I have tried to verify the existence and location of as many exemplars of the original edition as possible. The results of these inquiries are presented below, in alphabetical order by country, supplemented with some additional information, such as the present condition of the exemplars.

^{126&}quot;La Mixtura" does not necessarily mean a compound stop with that name.

4.1 Belgium: Brussels Exemplar

The Brussels exemplar of the *Facultad orgánica* is in the Bibliothèque Royale Albert 1er and bears the catalogue number Fétis 2004 C RP. There is also a microfilm of the work with the call number LP MIC 2580.

The Royal Library of Brussels acquired the exemplar in 1877 as part of the collection of François-Joseph Fétis. The book has a leather, blind-tooled binding from the 19th century signed *DEMESMAECKER REL. DU ROI*. The prelims have five leaves: after the second leaf, signed § 2, an unsigned leaf has been inserted. It is printed on both recto and verso sides and has a brief introduction, beginning with the words: "*EN ALGVNOS LVGARES DESTE LIBRO SE HALLARAN COMETIDAS*. . . ." The introduction is followed by a list of corrections of one and a half pages, under the heading *ERRATAS* [sic]. ¹²⁷

4.2 France: Paris Exemplar? – Unlocated, or a Cataloguing Error

Although according to *RISM* (1972: 220), ¹²⁸ there is one exemplar of the *Facultad orgánica* at the Bibliothèque G. Thibault, this information appears to be incorrect. French countess Geneviève Thibault – well known of her activities in the field of early music and as director of the Conservatoire de Paris – signified her intention of donating her prominent private collection (consisting principally of music and musical instruments) to the Bibliothèque Nationale before her death in 1975. Before that notice she had, nevertheless, prepared a list of items that she wanted to give to her heirs. G. Thibault's collection presently belongs to the Bibliothèque Nationale of France, and a catalogue of the collection has been published. ¹²⁹ According to this catalogue, the collection of G. Thibault does not include any exemplar of the *Facultad orgánica*, nor any other Spanish or Iberian item.

A minor possibility exists that G. Thibault had left an exemplar of the *Facultad orgánica* to some of her heirs, before the bulk of the collection was donated to the Bibliothèque Nationale. However, so far I have not found any information that would support this supposition.

¹²⁷ The bibliographical information was provided by Elly Cockx-Indestege, Keeper of Old and Rare Books in the Bibliothèque Royale Albert 1er, in a letter to the author dated November 27, 1997. For the catalogue number Fétis 2004, see also Merzbach & Falk (eds.) 1877: *Catalogue de la Bibliothèque de F.J. Fétis acquise par l'état belge*. Bruxelles: Librairie Européenne C. Muquardt.

¹²⁸ Répertoire international des sources musicales. Einzeldrucke vor 1800. Karlheinz Schlager (ed.). Band 2. Kassel: Bärenreiter-Verlag.

^{129 1980:} J. Bran-Ricci, Florence Abondance, Catherine Massip, François Lesure (eds.): *Musiques Anciennes. Instruments et Partitions (XVI^e–XVII^e siècles)*. Bibliothèque Nationale. Musée Instrumental du Conservatoire National Supérieur de Musique. Bibliothèque Nationale.

4.3 Germany: Leipzig Exemplar

I have found a mention of a German exemplar of the *Facultad orgánica* in two sources: *RISM* (1971: 92), and *Francisco Correa de Arauxo, organista sevillano del siglo XVII*, by José Enrique Ayarra Jarne (1986: 117). According to the *RISM* from the year 1971, the German exemplar of the *Facultad orgánica* is in the Leipzig Musikbibliothek. However, the *RISM* from the year 1972 does not mention any German exemplar in its list of the surviving exemplars of the *Facultad (RISM* 1972: 220). Included in the list of those eleven exemplars which Ayarra Jarne claims to have located is one exemplar in Leipzig, Germany (Ayarra Jarne 1986: 117). Ayarra Jarne does not give any detailed information about the location of the exemplar. In his reply to my request for further information considering his sources, Ayarra Jarne wrote that he is not able to give me the sources from which he took the data I was asking him about.

Finally, the reply to my inquiry sent to the Stadtbibliothek Leipzig verified the existence of one German exemplar of the *Facultad orgánica*. This exemplar is located in the Musikbibliothek Leipzig and has the call number I 2^o 99. The Leipzig exemplar presently belongs to the collection "Musikbibliothek Peters," which was acquired by the Musikbibliothek Leipzig in 2004. Until 1927, the Leipzig exemplar belonged to the collection of Wilhelm Heyer in Cologne, after which it became a part of the collection of Musikbibliothek Peters. There is no microfilm of the exemplar.

The sequence of the prelims of the Leipzig exemplar is the following: title page [verso blank], an errata folio, *Tabla de los tientos* [preliminary leaves § 2–3r], a dedicatory poem by Alvares de Alanis [§ 3v], and *Prologo en alabança de la cifra* [§ 4r–v]. It is notable that the rare errata folio of Correa is found only in the Leipzig and Brussels exemplars of all the currently known exemplars of the *Facultad orgánica*.

4.4 Great Britain: Oxford Exemplar

The exemplar of the *Facultad orgánica* mentioned in *RISM* as being located at St. Michael's College Library in Tenbury, Worcestershire (1972: 220), is now at the Bodleian Library in Oxford, where the St. Michael's College Library was moved. The shelfmark is Tenbury Mus. d. 6; the book contains 204 numbered leaves. The exemplar was purchased by Sir

¹³⁰ Répertoire international des sources musicales. Écrits imprimés concernant la musique. François Lesure (ed.). Vol. I. München: G. Henle Verlag.

^{131 1986:} Arte hispalense. Sevilla: Diputación Provincial.

¹³² Letter to the author from José Enrique Ayarra Jarne, organist of the Seville Cathedral, dated December 30, 1998.

¹³³ The bibliographical information concerning the Leipzig exemplar was given by Brigitte Geyer of the Musikbibliothek Leipzig in a letter to the author dated November 13, 2007.

¹³⁴ Letter to the author from Maria Fry, Managing Director of Saint Michael's College, dated November 28, 1997.

Frederick A. Gore Ouseley sometime in the mid-19th century. Sir Ouseley died in 1889, and the large library that he kept at the school which he had founded near the village of Tenbury Wells in Worcestershire was purchased by the Bodleian Library in 1990. The copy has been restored, and pages 62 and 132–140 have been replaced with excellent hand-copied facsimiles of the original pages expertly done on matching paper. ¹³⁵

4.5 Holland: Utrecht Exemplar

This exemplar is in the collections of the library of the Faculty of Arts (Letterenbibliotheek) of Utrecht University. Until 1993 the book was in the collections of the library of the Instituut voor Muziekwetenschap in Utrecht (as is mentioned in *RISM* [1972: 220]). In the summer of 1993 the Instituut's library became part of the Letterenbibliotheek. The exemplar's present catalogue number is LB-MUZ: Bq Correa 1. There is neither a microfilm nor a microfiche of the book. The exemplar is bound in leather, and the volume is stored in a cardboard box. It is improbable that the binding and the box would be from the original 1626 edition. The book is in excellent condition.

4.6 Portugal: The Two Exemplars in the Biblioteca Nacional of Lisbon and the Exemplar in the Biblioteca da Ajuda

There are two exemplars of the *Facultad orgánica* in the Biblioteca Nacional in Lisbon. The work is listed under the name Araújo, Francisco Correia. The exemplars are registered under the call numbers Res. 377 V and Res. 1508 V. There is also a microfilm of Res. 377 with F R 69 as its call number. ¹³⁷

In the collections of the Biblioteca da Ajuda in Lisbon there is one exemplar of the *Facultad orgánica*. The call number is BA 38-XII-27. There is no microfilm of the exemplar. The book is well preserved and contains several pieces of music written by hand in *cifra* after the final printed folios. ¹³⁸ (For more information about the manuscript appendix to the Ajuda exemplar, see *Appendix C*, 9 of this study.)

¹³⁵ The bibliographical information was given by Principal Library Assistant of the Bodleian Library, Mr. Robert J. Bruce through e-mail on August 25, 1998.

¹³⁶ The bibliographical information was received through e-mail from Charlotte Sienema of the Letterenbibliotheek on November 28, 1997.

¹³⁷ This information was given by Dra. Luísa Cardia, who is responsible for the Area of Bibliographical Information of the Biblioteca Nacional of Lisbon, in a letter dated April 28, 1998.

¹³⁸ The bibliographical information was given by Director of the Biblioteca da Ajuda Francisco Cunha Leão through e-mail on September 9, 1998.

4.7 Spain: The Two Exemplars in the Biblioteca Nacional of Madrid and the Exemplar in the Museo Massó de Pontevedra (Bueu)

Two exemplars are found in the Biblioteca Nacional of Madrid with the call numbers R.9279 and R.14069. There are also two microfilms of R.9279, their call numbers being 2367 and 1128.

Both exemplars are available in the section of Incunables y Raros of the Biblioteca Nacional and are well preserved. Of the two copies, R.14069 is more worn than R.9279. R.14069 also contains numerous and interesting marginal and other notations and brief sections of *cifra* written by hand. (For a more detailed description of these exemplars, see *Appendix C* of this dissertation.)¹³⁹

The third exemplar of the *Facultad orgánica* located in Spain belongs to the collection of the Museo Massó de Pontevedra (Bueu). After several unsuccessful attempts to find the contact information of the said museum in different reference sources, I decided to write a letter to the Museo de Pontevedra instead, to inquire how I could get an access to the bibliographical information of the Museo Massó. The director of the Museo de Pontevedra responded that the books which belong to the Museo Massó de Pontevedra had been deposited in the Biblioteca Pública Provincial de Pontevedra while the Museo Massó was under repair.¹⁴⁰

The Biblioteca Pública de Pontevedra informed me then that only the most precious exemplars of the Museo Massó had been stored in the Public Library of Pontevedra. The rest of the books were situated on the premises of the Museo Massó. I was told that while the Museo Massó was closed due to the renovation, the register of the books of the Museum could be consulted through the Administration of the Cultural Heritage of the Ministry of Galicia (Dirección Xeral [General] de Patrimonio Cultural, Xunta de Galicia). Finally, the Director of the Service of Archives and Museums (xefa do Servicio de Arquivos e Museos) from the Ministry of Galicia gave me the requested bibliographical information concerning the exemplar of the *Facultad orgánica*, as well as some general information about the Museo Massó.

The Museo Massó is situated in the locality of Bueu (Pontevedra), and its collection involves objects related to fishing and to the canning industry. In the collection of the Museum, there is also a library about maritime commerce and other themes. The collection was obtained by the Ministry of Galicia in 1993. All the books of the Museo Massó will be placed on the premises of the Museum after its renovation is completed.

One exemplar of the *Facultad orgánica* still belongs to the library of the Colección Massó. Its call number is 000686; it is located in Sala E 09-E. The exemplar is in bad

¹³⁹ I studied both exemplars in the Biblioteca Nacional during the summers 1996, 1997 and 1998.

¹⁴⁰ This information was provided by José Carlos Valle Pérez, Director of the Museo de Pontevedra, in a letter dated September 14, 1998.

¹⁴¹ This information was given by Pilar Fernández of the Biblioteca Pública de Pontevedra through e-mail on September 30, 1998.

condition, and there is no microfilm of the book. The description of the exemplar includes the material of the book (parchment) and the number of folios (26 + 204 hojas).

4.8 United States: New York Exemplar; Stanford Exemplar – A Cataloguing Error?; Washington Exemplar

The only two sources which mention the New York exemplar of the *Facultad orgánica* are the *RISM* from the year 1971 and José Enrique Ayarra Jarne's *Francisco Correa de Arauxo, organista sevillano del siglo XVII.* ¹⁴³ According to *RISM* (1971: 92), there is one American exemplar of the *Facultad orgánica*, which is in New York, in the collections of the Hispanic Society of America. Nevertheless, the *RISM* of 1972 fails to mention any American exemplar (*RISM* 1972: 220). In Ayarra Jarne's list of eleven exemplars, two are said to be housed presently in the United States, namely, in New York and Washington (Ayarra Jarne 1986: 117). No further information about the location of these exemplars is given. Ayarra Jarne's reply to my request for detailed information about his sources ¹⁴⁴ did not help me any further in my attempts to verify the existence of the possible New York exemplar.

Finally, the reply to my bibliographical inquiry sent to the library of the Hispanic Society of America confirmed the existence of one exemplar of *Facultad orgánica* in New York. The exemplar is housed in the collection of Manuscripts and Rare Books of the Hispanic Society of America and bears the call number MT 190 .A2 .C82 1626. There is also one negative copy of the book. The New York exemplar is in good condition, with the usual waterstaining and foxing, and it is bound in old, worn vellum, with the remnants of the ties. The sequence of folios in the beginning of the book is the following: title page [verso blank], *Tabla de los tientos* [preliminary leaves 2–3], a dedicatory poem by Alvarez de Alana [p.l. 3v], and *Prologo en alabança de la cifra* [p.l. 4r–v]. There is no errata leaf. The *Advertencias* begins from folio numbered 1. 145

According to the *National Union Catalog of the Pre-1956 Imprints* (1970: 457), there is one exemplar of the *Facultad orgánica* in the Libraries of Stanford University (citation NC 0715112 in the *NUC*). However, on following up this information, I was told that no Stanford holdings for this item could be located, despite a search of all the online and manual records. It appears that the "CSt" holdings symbol denoting Stanford University Library is incorrect.

¹⁴² The information about the Museo Massó and the bibliographical information was acquired from Director of the Service of Archives and Museums Marina García Pita in a letter to the author dated November 9, 1998.

^{143 1986:} Arte hispalense. Sevilla: Diputación Provincial.

¹⁴⁴ Letter to the author from José Enrique Ayarra Jarne, organist of the Seville Cathedral, dated December 30, 1998.

¹⁴⁵ The bibliographical information was provided by John O'Neill, Curator of the section of Manuscripts and Rare Books of the Hispanic Society of America, through e-mail on September 8, 2007.

¹⁴⁶ Vol. 123. Washington, D.C.: Library of Congress.

In the Stanford University Music Library, there is instead a microfilm of the Library of Congress exemplar. It is part of a 220-reel set from the Library of Congress that was acquired by the Music Library in 1985. The call number for the microfilm is M/F 1923: 8^{147}

There is one exemplar in the possession of the Library of Congress, in the collections of the Music Division of the library. The call number is MT 182.C7 Case. There is also a master negative microfilm for the work, found under the call number MUSIC 5000. Item A-044. According to the LC catalogue description from 1930, the layout is as follows: 4 p. I., 26 numb. I., 204 numb. I. (music). The signatures are: #4, A-N2, A-Z4, Aa-Zz4, Azz-Eee4. Leaves 33–36 are numbered 39–42; there are other errors in numbering.

The Library of Congress copy was purchased in 1929 under the order number 379327 from Maggs Bros. (34 & 35, Conduit Street, New Bond Street, London, W.). The exemplar was listed as entry no. 88 in the Maggs catalogue *Music, Early Books, Manuscripts, Portraits and Autographs* (Catalogue No 512) of 1928. The copy is presently in reasonably good condition, although repairs need to be made on the spine of the binding.¹⁴⁸

4.9 At Least Twelve Exemplars Survive

The survey of the musicological literature concerning the extant copies of the *Facultad orgánica* gave a hypothetical list of fourteen surviving copies as a starting point. I have been able to verify the existence and location of twelve exemplars: three in Spain, three in Portugal, two in the United States, and one each in Belgium, Germany, Great Britain, and the Netherlands. The remaining two hypothetical copies appear to be cataloguing errors (the Paris and Stanford exemplars) and thus non-existent.149

¹⁴⁷ All the bibliographical information presented here was given by the Music Technical Services of the Stanford University Music Library by Keith A. Bisaillon through e-mail on November 28, 1997.

¹⁴⁸ This information was acquired from Reference Librarian of the Music Division of the Library of Congress William C. Parsons through e-mail, dated January 21, 1998.

¹⁴⁹ With a minor possibility, though, that the Paris exemplar mentioned in *RISM* would currently be in possession of some private person, rather than part of the collections of the Bibliothèque Nationale of France.

V SOME THEORETICAL ISSUES AND TERMINOLOGY IN THE FACULTAD ORGÁNICA

1 Cifra

1.1 Three Types of Spanish Keyboard Tablature

Although the scarcity of documents on Spanish keyboard music of the sixteenth century does not allow us to get a complete picture of the history of notation in Spain that time it is clear that several attempts were made soon after 1550 to introduce a notation based solely on figures (Apel 1953: 47).

Juan Bermudo recommends in his *Declaración de instrumentos musicales* (Osuna, 1555) a new keyboard tablature, in which the white and black keys from C to a² are numbered from 1 to 42 (Bermudo 1555: lxxxijv). Bermudo's first octave is a short octave of eight tones (C D E F G A Bb B). The staff used for this notation does not indicate pitch but represents the voices of the composition. Thus the figures that are written on a certain line denote the notes of the corresponding voice part.

Bermudo mentions likewise another notation using figures, in which figures are used only for the white keys while black keys are indicated by sharps and flats (ibid.). A long horizontal line separates the parts for the right and left hand, and above the part of the right hand, metrical signs are given. Only the shortest time value of simultaneous tones is given. If there is a succession of several notes of the same time value, the metrical sign is given only for the first one of these. (Apel 1953: 48–49.) This notation was used, for instance, by Antonio Valente in his *Intavolatura de cimbalo* (Naples, 1576).

In the third system of Spanish keyboard tablature, a still further reduction in the number of figures is reached. As Willi Apel aptly points out, this notation "meets the needs of practical music still better, and merits attention for its simplicity and clarity" (ibid.: 49–50). The clarity is precisely one of the main reasons for Francisco Correa de Arauxo to advocate this notation (Correa 1626: § 4–4v), which he calls *cifra*.

In this third type of Spanish keyboard tablature the white keys of one octave (from f to e¹) are numbered from 1 to 7. The lower and higher octaves are indicated by adding tiny strokes or dots to the plain figures. As in the first keyboard tablature described by

¹ The details of reading *cifra* will be dealt with in the chapters to follow.

Bermudo, in this one each voice is represented by a horizontal line on which the figures of that voice are written. Sharps and flats show the chromatic alterations, and metrical signs are added above the staff as Valente has done in his mentioned book. The accidentals are placed below, above, or after the notes to which they relate. Commas found written on the horizontal lines of this tablature signify tying of the preceding note, and diagonal dashes are signs for rests.

At least three important collections of Spanish keyboard music are notated with the third type of tablature: Venegas de Henestrosa's *Libro de cifra nueva para tecla, harpa, y vihuela* (Alcalá, 1557), Antonio de Cabezón's *Obras de música para tecla, arpa y vihuela* (Madrid, 1578), and Francisco Correa de Arauxo's *Libro de tientos y discursos de música práctica y theórica de órgano intitulado Facultad orgánica* (Alcalá, 1626).

1.2 Correa's Writings About Cifra in the Facultad orgánica

There are three chapters in the *Facultad orgánica* that are entirely devoted to the notation of *cifra: PROLOGO EN ALABANÇA DE LA CIFRA* (A Prologue in praise of the *cifra*, fols. § 4–4v), an extensive chapter *SIGVESE EL ARTE DE PONER POR CIFRA* (Follows the art of playing from *cifra*; fols. 13–24v) and *CAPITVLO DECIMO DE LAS ADVERTENCIAS* para perfectamente poner por cifra (The tenth [sic] chapter of the *Advertencias* for reading *cifra* perfectly, fols. 24v–25v²). It is unclear whether the last chapter is really meant to be "the tenth chapter of the *ADVERTENCIAS*" or rather to belong to the end of the *SIGVESE EL ARTE DE PONER POR CIFRA*. The latter alternative seems to be more feasible (see *Chapter IV*, 2.7.5 of this dissertation).

1.3 Prologue in Praise of Cifra

The first chapter dealing with *cifra* (*PROLOGO EN ALABANÇA DE LA CIFRA*) is focused, literally, on praising this notation. Correa emphasizes how much easier it is to learn and see different elements in music written in *cifra* than in other previously used notations. He also specifies these important musical elements in his prologue.

Correa writes that "La cifra in music was a great humanity and compassion that the masters in it [the music] used with the young ones and [with those] who are capable of little":

La cifra, en la musica fue vna grande humanidad, y misericordia que los maestros en ella vsaro[n] con los pequeños y que poco pueden: . . . (Correa 1626: § 4).

² Folio 25 is unnumbered in at least the two Madrid exemplars (R.9279 and R.14069) and in the Brussels exemplar.

He goes on to explain that the masters saw the need for such people to memorize their lessons and to add to these lessons what was missing, in order to perfect themselves. In addition, the masters saw the great difficulty that existed – for those very competent in music, as well – to notate any work of polyphony for the keyboard. (Ibid.) The *cifra* notation was a remedy provided by the masters to overcome these difficulties. According to Correa, the masters "agreed by divine grace to invent a new manner of notation that producing the same effects (with such perfection and beauty as in the notation of [vocal] polyphony, and without the music losing any of its qualities) would reduce this difficulty and inconvenience to a great ease and sweetness, making the road even and easy that earlier was extremely difficult and bitter":

...; acordaron diuinamente de inventar vn nuevo modo de señales, que causando los mismos efectos (en tanta perfeccion y primor como los de canto de organo, y sin la musica perdiesse vn punto de sus quilates) reduxesse aquella dificultad y desabrimiento, a grande facilidad y dulçura, haziendo camino llano y facil, el que antes era en [sic] extremo dificultoso y agro (ibid.).

Correa writes that the new system of notation is called *cifra* and that in the beginning it was used in some different ways, sometimes with the letters of the alphabet, sometimes with ordinal [Roman] or Castilian numbers, with diverse accidentals and signs. However, that type of *cifra* did not possess the ease and precision that it pretended to have. (Ibid.) According to Correa, the earlier system of *cifra* "was totally abandoned until the ingenuity of our Spaniards invented this [new] type of *cifra* that we have today, and in which this book of practical music is notated, [a system] so easy and at the same time so perfect that there cannot be another one to exceed it":

..., fue totalmente desamparado, hasta tanto q[ue] el ingenio de nuestros Españoles inve[n]to este genero de cifra que oy tenemos, y en que va puntada la musica practica deste libro, tan facil, y juntamente tan perfecto, que no puede auer otro que le exceda (ibid.).

Correa states that the invention of *cifra* has been very practical and useful for the divine worship and service of the Holy Catholic Church. Wherever it has been used, it has produced marvellous effects, making people of tender youth achieve in a short time that which one in other centuries did not achieve even with long years of study:

... que en donde quiera que se a vsado a obrado maravillosos efectos: haziendo que personas tiernas y de poca edad, alcancen en breve tiempo, lo que en otros siglos, aun no se conseguia con largos años de estudio (ibid.).

In Correa's opinion, this is nothing to wonder at because in *cifra* not only the master but also the reasonable student sees how the themes of different voices are introduced, how the voices accompany each other, how the voices imitate some passage of *glosa*, or play

without imitation. Similarly, one can see the voices becoming silent, beginning³ again with a new theme, or with the same theme repeated with a different style of accompaniment, the voices awaiting an occasion to make a cadence. In *cifra* the good student may observe the quality of the cadence, the mode with its proper cadences, the moderation with which the cadences outside the mode are used, the species of intervals which the tenor, alto and soprano use with respect to the bass, the alto and soprano with respect to the tenor, and the intervals that the soprano voice uses with respect to the alto. (Ibid.: § 4v.)

Among still other musical elements to note are the curiosity and the license, the liberty and the dissonance, the accompaniment and the theme of it, the passage of glosa, the ayre, the imitation proper [of the theme] or of other voices, the theme now long and fast, now sinuous and complicated, "the savory morsel, the piece of pastry, the play, and the other thousand tidbits that the eminence of art discovers every day" (ibid.). In addition, according to Correa, one who is already informed also knows the géneros and their intervals, proportions and their numbers, notes the beginning, middle and end of the measures and all the rest that they contain, sees where the downbeat and upbeat are, which voices go together, and in which place and part each one of them is located. Correa writes that all this was achieved by masters only with great difficulty and after many years of study in canto de órgano [i.e., in polyphony] and that there were also those who even in their entire time did not come to comprehend four simultaneous plain voices. On the contrary, with cifra students who have studied a very short time are coming to see and understand not only the plain voices but also ornamented voices. (Ibid.)

Correa ends his Prologue in praise of *cifra* by commenting that despite all the benefits of *cifra*, there is no lack of those who "do not feel good" about *cifra*. Correa considers it a great consolation if those critics would happen to make acquaintance of his book, anyway. At the same time, the author of the *Facultad orgánica* addresses "embarrassment and confusion to the bitter ones, having spilled their venom, if the *cifra* and my book will remain in the perpetual memory of the good intentioned, to whom alone I direct all that it contains, and especially the following *advertencias* [the extensive foreword to follow 6]":

... pero verguença, y confusion para los mordazes, si auiendo derramado su veneno, permaneciere la cifra y mi libro en perpetua memoria de los bien intencionados, a los quales tan solamente encamino todo quanto en el se contiene, y en particular las aduertencias siguientes (ibid.).

³ Folio § 4v begins here.

⁴ Another tentative translation of this place would be "the accompaniment and the intention of it," the original text reading "el acompañamiento, y el intento della."

^{5 ... &}quot;el bocadito gustoso, el melindre, y el juguete, y otros mil sahinetes que la eminencia del arte descubre cada dia" (Correa 1626: § 4v).

⁶ The word *advertencias* can also be understood and translated more generally as "advice," not necessarily a "foreword."

1.4 Follows the Art of Playing from Cifra

Correa's second chapter concerning *cifra* is the long chapter *SIGVESE EL ARTE DE PONER POR CIFRA* (Follows the art of playing⁷ from *cifra*; fols. 13–24v [25v⁸]). This second main chapter of the *Facultad orgánica* consists of ten subchapters. First it deals with reading the figures and signs of the *cifra* tablature and then goes on to fingerings and ornaments. There is also a brief subchapter on the downbeat and upbeat and on *sesquialtera*. Lastly, the *CAPITVLO DECIMO DE LAS ADVERTENCIAS para perfectamente poner por cifra* lists several elements crucial in playing *cifra*. I consider that concise and important chapter to be an independent chapter, belonging loosely to the *SIGVESE EL ARTE DE PONER POR CIFRA*, and will therefore write about it in the following subchapter (1.5). I focus next on Correa's advice on how to read *cifra*. The fingerings, ornaments, rhythmical elements and tempo considerations are discussed elsewhere in this dissertation.

The first three of Correa's ten subchapters are devoted to reading *cifra*. The first subchapter has the heading *Capitulo pri.[mero] de los signos del Organo del genero diatonico, o natural* (The first chapter of the signs of the Organ of the diatonic or natural *género*; fols. 13–13v). Correa explains that the signs (notes) of the organ of the *género diatónico*⁹ number twenty-seven and they consist of five different octave segments which are notes of *sograves*, *graves*, *agudos*, *sobreagudos* and *agudissimos*, from the lowest to the highest. Of Correa's twenty-seven notes of the *género diatónico*, there are three notes in both the lowest and highest "octave" and seven notes in other ones. To distinguish the different octaves, the figures of *sograves* (C–E) have two little strokes (*rasguillos*) added to the figures, the figures of *graves* (F–e) have one stroke added to each figure, *agudos* (f–e¹) are plain figures, *sobreagudos* (f¹–e²) have a little dot added to the figures, and *agudissimos* (f²–a²) have a little comma.

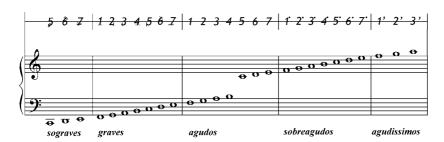
Correa describes the three notes of *sograves* to be the lowest in tone in the organ and indicated in *cifra* with the numbers five, six and seven with two strokes added to the figures. Correa then goes through all the other octaves in a similar manner. He also gives letter names to the figures. In modern terminology, in Correa's octave, the notes from f to e¹ (*agudos*) receive plain figures from one to seven. In lower and higher octaves, additional signs (strokes, dots, commas) are used with figures to mark a certain range. See the following example for Correa's twenty-seven notes of the *género diatónico* in *cifra* and in modern notation:

⁷ As already pointed out, "playing from *cifra*" is not the only possibility for translating this title. Correa's "poner por cifra" could also be taken to mean "notating in *cifra*" (or, "composing in *cifra*").

⁸ There are two possible interpretations of the end of the chapter. The *CAPITVLO DECIMO DE LAS ADVERTENCIAS para perfectamente poner por cifra* in folios 24v and 25 may either be considered to belong to the *SIGVESE EL ARTE DE PONER POR CIFRA* and at the same time to be a more or less independent chapter, or it was possibly intended to complete the other main chapter, the *ADVERTENCIAS* (fols. 1–12v). I regard the former alternative more likely. Folio 25 is unnumbered in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

⁹ Correa's géneros are looked at in more detail in Chapter V, 3 Géneros.

Example 4



Correa's twenty-seven notes of the *género diatonico* in *cifra* and in modern notation

The letter names used by Correa within one octave (f–e) are *fefaut*, *gesolrreut*, *alamire*, *befabemi*, *cesolfaut*, *delasolrre* and *elami*. To be exact, the name of a certain octave range is used together with the letter name to indicate the individual notes of a certain pitch, for example, *a* is "*alamire agudo*."

The other two subchapters of the SIGVESE EL ARTE DE PONER POR CIFRA are about reading cifra having accidentals. The title of the second subchapter is CAPITVLO SEGUNDO DE LOS SIGNOS DEL Organo de el genero Cromatico (The second chapter of the signs of the Organ of the Chromatic género; fols. 13v-14). The author of the Facultad orgánica calls the second género that he introduces a género cromático blando (soft chromatic género), which has two black notes in the octave ranges of graves, agudos, and sobreagudos. Correa declares these notes to be "the black keys of befabemi and elami," which are indicated with a bemol (a flat sign). In other words, in the género cromático blando, E and B have a flat except in the sograves range – where the key for the note E belongs to the short octave and thus sounds C, not E – and in the range of agudissimos (f²-a²). Note that the flat sign in cifra is written after a note to be chromatically altered.

The third subchapter, *CAPITVLO TERCERO DE LOS SIGNOS de el organo, del genero Enarmonico* (The third chapter of the signs of the organ of the Enharmonic *género*; fols. 14–14v) concentrates on Correa's *género en[h]armónico*. Correa remarks first that because the organ does not have the notes of A-flat and D-flat of the *género enarmónico blando* (the soft enharmonic *género*), he will not include them here. Correa writes then that in the *género enarmónico duro* (the hard enharmonic *género*) there is a black note in the ranges of *agudos, sobreagudos*, and *agudissimos*. This note is a *sustenido* of *gesolrreut*, in modern terminology a G-sharp. Note that a sharp sign is written in *cifra* after the note to be chromatically altered. A lengthy and rather complicated explanation about Correa's use of *géneros* completes the third subchapter of the *SIGVESE EL ARTE DE PONER POR CIFRA*.

^{10 &}quot;The black keys of b and e," meaning the notes of B-flat and E-flat.

¹¹ In other words, in the meantone tuning, A-flat and D-flat were not used (in favor of G-sharp and C-sharp).

1.5 The Tenth Chapter of the Advertencias for Playing from Cifra Perfectly

Although the title of the CAPITVLO DECIMO DE LAS ADVERTENCIAS para perfectamente poner por cifra (The tenth chapter of the ADVERTENCIAS for playing from cifra perfectly; fols. 24–25v) seems to refer to the first main chapter of the Facultad orgánica, its contents point at least as much to the SIGVESE ELARTE DE PONER POR CIFRA. The essence of the chapter is to give a list of factors which enable one to learn to play from cifra perfectly.

Before going into his pieces of advice, Correa remarks that there are many persons who think that they are already able to play with perfection from *cifra* if they know the numbers of the *cifra*, which notes are to be played simultaneously, which notes belong to the upbeat and downbeat, that the commas signify holding of the preceding note, and which are sharps (*sustenidos*) and flats (*bemoles*) when playing diatonically. Nevertheless, believing to know the *cifra* perfectly after knowing the things mentioned above is deceiving oneself, according to Correa. He emphasizes that the elements mentioned are of least consideration and easiest, which is proven by the fact that they are the things first taught to students (Correa 1626: 24v). In Correa's words, "that which is first is not what perfects a work, but [rather] that which is last, because the Philosopher says: *Finis rei dat esse rei*, that is, that the end of the thing gives the being to the thing":

... y lo primero no es lo que perficiona la obra, sino lo vltimo, por que como dize el Philosopho: Finis rei dat esse rei, esto es, que el fin de la cosa da el ser a la cosa: (ibid.)

After having cited a philosopher whom he leaves anonymous, Correa goes on to specify which aspects make one a perfect player of *cifra*. Correa's advice is divided into eight brief paragraphs.

First of all, one has to be a skillful singer of polyphony, from which is born the knowledge to give the legitimate spirit (*ayre*) and duration to all the binary, ternary, quinary, senary, septenary *glosas*, etc., as well as to the dots, aspirations, syncopations and such (ibid.). Secondly, one must be on guard with "unviolated observance" not to release a note before another note, or a rest, follows on the same line, which relates to the following advice (ibid.). Thirdly, one has to know how to accommodate the fingers and hands, giving them the necessary ordinary or extraordinary postures already mentioned, in order not to release a previous note before another one follows on the same line (ibid.: 25¹⁴).

¹² Folio 24v begins here.

^{13 &}quot;The necessary ordinary and extraordinary postures" refer to Correa's extensive explanation of fingerings in the chapter SIGVESE ELARTE DE PONER POR CIFRA.

¹⁴ Folio 25 is unnumbered in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

Correa's fourth piece of advice is concerned with not mixing a voice part with another but rather "to know and observe every voice" (ibid.). The fifth paragraph prohibits adding or removing voices, thus avoiding closing an octave, a sixth or a fifth which does not have to be closed but instead to play the open as open and the closed as closed¹⁵; anything else corrupts the music and takes away the beauty and eminence from the works (ibid.). Correa goes on to underline that "this vice and that of losing the *compás* is very common among [female] players who learn [to play] in the convents of nuns" (ibid.).

Sixth, one has to play in tempo (*a compás*) as much as one can, knowing where to give the downbeat and the upbeat, getting used to keeping the beat with the tip of the right foot, keeping the heel on the floor to rest on it (ibid.). Seventh, one must not play two adjacent keys with the same finger in *glosa*. (Here Correa refers to his advice on fingerings in the chapter *SIGVESE EL ARTE DE PONER POR CIFRA*.) In addition, one should not play a black key with the thumb in a fast *glosa*. (Ibid.) Last but not least comes Correa's eighth paragraph, where he asks the player to read and understand the prefaces (*preambulos*) placed at the beginning of each *tiento*, because there is advice concerning playing from *cifra* in some of these prefaces (ibid.: 25r–25v).

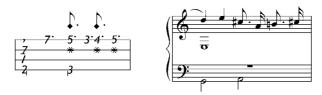
1.6 Correa's Prefaces and Cifra

In addition to the longer chapters which Correa has devoted to the *cifra* notation, there are also a few prefaces that concern *cifra* more or less directly. In the preface for the *Segundo tiento del sexto tono* (f. 57), Correa points out that in the second *tiento* in the sixth mode, as well as in many others "of these *discursos*," he uses some figures that do not exist in *canto de órgano*. As an example, the author gives figures whose duration is five quarter notes, five eighth notes, and others in the same fashion. (Correa 1626: 57.) Correa claims that he has seen such figures "practiced in *discursos* of *cifra* of the most eminent masters of organ of our Spain" (ibid.).

The next two prefaces that deal with *cifra* do not mention the word itself. They are focused, nevertheless, on details about writing different note values in *cifra*. In the first of these prefaces, a preface for a *Tiento de medio registro de tiple de décimo tono* (f. 92v), Correa writes that in some places of "these *discursos*" – and especially in measure 80 of the *tiento de medio registro de tiple* in the tenth mode – he does not notate the sixteenth note in a combination of a dotted eighth note followed by a sixteenth note (ibid.: 92v). This means that he has wanted to reduce the number of the notes indicating note values written above the lines of *cifra*. The duration of the notes themselves is not reduced, only the number of the metrical signs for these notes. Correa justifies his notational solution by maintaining, first of all, that a dotted eighth note must be followed by a sixteenth "of necessity." Secondly, he has not wanted to burden this piece with figures. (Ibid.) See the following example:

¹⁵ Correa discusses "closed and open consonances" and their fingerings in the chapter *SIGVESE EL ARTE DE PONER POR CIFRA*. In Correa's terminology, an interval is 'open' when it consists only of the two extreme voices. A 'closed' interval involves a third, intervening voice.

Example 5



Tiento de medio registro de tiple de décimo tono (Correa 1626: f. 94, m. 80) showing Correa's use of metrical signs in combinations of dotted eighth notes followed by sixteenth notes

The preface to the *Tiento de medio registro de baxón de noveno tono* (f. 95) also deals with notating and reading the note values in *cifra*. This time Correa gives a general rule that the notes written above the staff always imply the voice having the shortest note values and these values are kept the same until another metrical sign above the staff or another time signature follows (ibid.: 95).

Although the preface for the *Tiento de medio registro de baxón de sexto tono* (f. 110v) does not mention the *cifra* literally, it gives information on how to read *cifra*. Here Correa introduces his sign for ornaments, a capital 'R,' writing that "In many places of these *discursos*, and in particularly in this, in measures 15., 56., and 63. I am used to putting a capital R, which means a *redoble*, in the voice where such [ornament] is to be made" (ibid.: 110v).

In the last preface under discussion here, the author of the *Facultad orgánica* again writes directly about *cifra*. In his preface for the *Tiento de medio registro de baxón de dézimo tono* (f. 129v), Correa states first that "Some players say a lot of bad things about the *cifra*" (ibid.: 129v). According to Correa, one of the reasons that they give for criticizing *cifra* is that it has "figures which cannot be sung," that is, figures which have the value of five, seven or nine half notes, quarter notes or eighth notes (ibid.). Correa points out that the same thing happens to the critical ones – without their noticing it – when they are "playing their fantasy" (i.e., are improvising) (ibid.). In Correa's opinion, *cifra* shows very clearly the good and the bad in music, which the notation of *canto de órgano* does not do – it [*canto de órgano*] instead covers those qualities comprehensively and is "a cloak of sinners" (ibid.).

2 Diapasons and Hexachords and the Ambitus of the Modes

In order to understand numerous theoretical explanations in the textual part proper and in the prefaces to the *tientos* of the *Facultad orgánica*, it is indispensable to the reader and/ or the keyboard player to become acquainted with Correa's central theoretical concepts

¹⁶ In contrast to the notation in form of a score or part books, *cifra* enabled one to be able to see all the voices simultaneously.

and terminology. One such term is the *diapasón*, which would equal a 'scale' in modern terminology. Diapasons differ from each other according to the place of a semitone. Thus each mode uses an octave of notes involving a special arrangement of whole steps and semitones. Correa employs the old system of hexachords to describe the diapasons. In this system, note names from *Ut* to *La* are used and a semitone is always between *Mi* and *Fa*. For example, the note names for an octave beginning from D would be *re*, *mi*, *fa*, *sol*, (*la*)/ *re*, *mi*, *fa*, *sol* in Correa's terminology. Correa's *tientos* make use of two hexachords each: a "natural hexachord" (beginning from C in modern terms) plus either a "hard hexachord" (beginning from G in modern terms) or a "soft hexachord" (beginning from F in modern terms). Theoretically, the hard (*duro*) hexachord implies the use of a F-sharp while the soft (*blando*) hexachord implies the use of a B-flat.

2.1 Arithmetic and Harmonic Division of Diapasons

In the *Facultad orgánica* Correa presents a concept of an arithmetic and harmonic division of diapasons, which is one of the theoretical concepts relating to modes. In the case of arithmetic and harmonic division, Correa employs old terminology but in practice applies these divisions differently, compared with their traditional usage in the plainchant.

In the harmonic division of a diapason, there is a fifth (diapente) in the lower part and a fourth (diathesaron) in the upper part of the diapason. In the arithmetic division, for one, a fourth is found in the lower part and a fifth in the upper part of the diapason. The modes are divided into two categories, depending upon whether the fifth is in the lower or in the upper part of the diapason. These categories are (authentic) "master tones" (tonos maestros) and (plagal) "disciple tones" (tonos discípulos). Correa attributes the arithmetic division to master tones and the harmonic division to the disciple tones. He is well aware that "the ancients," on the contrary, termed the master tones harmonic and the disciple tones arithmetic and that his own employment of these divisions is opposite to the one traditionally used in the plainchant. The reader of the Facultad orgánica is easily led astray if he does not notice that in the table of modes presented by Correa in the QVARTO PVNTO (Fourth Point, fols. 2v-3v¹⁷) of the ADVERTENCIAS, the terminology about the diapasons is applied in a different manner compared with (some parts of) the NOVENO PVNTO (Ninth Point, fols. 5-5v) of the ADVERTENCIAS, in the preface to the Tiento de medio registro de tiple de séptimo tono (f. 65), and in the tientos themselves – as will shortly be discussed. This difference in the use of terminology derives mainly from the fact that in the Fourth Point, Correa is dealing with a system of modes belonging to the plainchant, in which also the numbering of modes is different from the one that Correa actually uses in his music.

In the older system that Correa describes in the Fourth Point, the master (authentic) tones are harmonic (a fifth in the lower part of the diapason, e.g., D-A-D) and the disciple

¹⁷ Folio 3 is unnumbered in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

(plagal) tones arithmetic (a fourth in the lower part of the diapason, e.g., A-D-A) (Correa 1626: 2v–3v). In the Fourth Point, Correa gives a table of modes involving six master tones and six disciple tones with their diapasons. As already mentioned, these modes belong to the system used in plainchant, as Correa himself makes clear to his readers in the following passage:

Siguense doze diapasons diferentes, segun la diferente posicion de diapentes y diatesarones, la qual pertenece a los tonos de canto llano en el qual, los maestros tienen los diape[n] tes hazia baxo, y los diathesarones hazia riba: y los discipulos al reues en todo y por todo (ibid.).

(Follow twelve different diapasons, according to the different position of fifths and fourths, that belong to the modes of the plainchant in which the masters [master tones] have the fifths on the bottom, and the fourths on the top: and the disciples [disciple tones] contrariwise in all and for all.)

While the divisions of diapasons presented in the Fourth Point of the *ADVERTENCIAS* concentrate on the system used in plainchant, in the *NOVENO PVNTO* (Ninth Point) the system that one uses in polyphony is also taken up. Correa's Ninth Point begins with a reference to the Fourth Point and a remark that the diapason of each mode is made up of two consonances, the *diapente* (a fifth) and the *diathesaron* (a fourth). Then the author writes once again about the two ways in which "the ancients" divided the diapason. The first way is to place the fifth in the lower part and the fourth in the upper part. This division was attributed to the *modos maestros* (authentic modes) of plainchant. (In other words, the master tones were harmonic in this system.) The other way was to place the fourth in the lower part and the fifth in the upper part of the diapason. This division was attributed to the *modos* (or *tonos*) *discípulos* (plagal modes) of plainchant. (That is, the disciple tones were arithmetic in this system.) (Ibid.: 5. (19) See the following example for the divisions used in plainchant:

Example 6



master tones in plainchant, harmonic

disciple tones in plainchant, arithmetic

¹⁸ I use Correa's original spelling here (Correa 1626: 5).

¹⁹ Folio number 5 is unclear in at least the Brussels exemplar and the two Madrid exemplars of the *Facultad orgánica*.

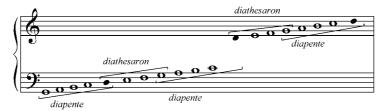
Next Correa goes on to describe the system used in polyphony and that he himself employs in his music, pointing out that in *canto de órgano* (polyphonic music) the fourths are "in the outside part," a fifteenth apart, and the fifths "in the interior part," in octaves with each other. This division of the diapason is attributed to the master tones and is composed of eighteen notes. In the other division for the polyphonic music, the fifths are found in the outer part, in fifteenths with each other, and the fourths in the inner part, in octaves with each other. This division of the diapason is attributed to the disciple tones and its ambitus is nineteen notes. According to Correa, the division with a fourth in the lower and a fifth in the upper part of the diapason is called arithmetic while the division with a fifth in the lower and a fourth in the upper part is harmonic. (Ibid.) Correa attributes the division with a fourth in the lower part to master tones. Thus the master tones become arithmetic and the disciple tones harmonic in Correa's terminology. In the system used in plainchant and described by Correa in both the Fourth and Ninth Point of the *ADVERTENCIAS*, the use of terminology is exactly reversed (the master tones being harmonic and the disciple tones arithmetic).

The terminological difference between the systems used in plainchant and in organ music (or polyphony, generally speaking) derives from the fact that in the older system the master tones were harmonic because they had a fifth below and a fourth above (e.g., D–A–D). Due to Correa's adding to the described ambitus a fourth below and an octave above (A–D–A–D–A–D), the master tones become arithmetic because a fourth is now in the lower part of the diapason. Similarly, Correa adds a fifth below and an octave above to the ambitus of the disciple tones of the plainchant, which makes the disciple tones harmonic. Correa's often rather complicated theoretical explanations relating to modes become impossible to understand if one is not aware of the two opposite systems of the division of diapasons described in the *Facultad orgánica*. See the following example for the divisions and their ambiti applied by Correa to his *tientos* where the final note has been written as a black note:

Example 7



Correa's first tone as a demonstration of the structure of the master tones in *canto de órgano* (polyphony), arithmetic (total 18 notes)



Correa's second tone as a demonstration of the structure of the disciple tones in *canto de órgano* (polyphony), harmonic (total 19 notes)

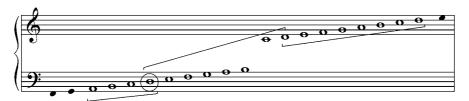
Also in the preface to the *Tiento de medio registro de tiple de séptimo tono* Correa touches the issue of the arithmetic and harmonic divisions of the diapason (ibid.: 65). It is noteworthy that the major part of Correa's explanations and discussions of modes apply to the bass voice and not to the tenor voice – as one would normally expect (Bovet 1991c: No. 4: 11; *TI*: 77; Holland 1985: 47).

2.2 The Ambitus of the Modes

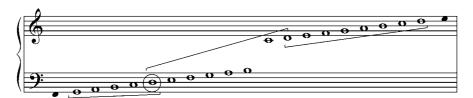
In the OCTAVO PVNTO (Eighth Point) of the ADVERTENCIAS, Correa gives eighteen notes as the legitimate ambitus for the (arithmetic) master tones. According to Correa, the eighteen notes are composed of the fourth below the final note of the mode, an octave (diapasón) running from the final note, and another octave added "above" the first octave (in the first mode: A–D–A–D) (Correa 1626: 5²⁰). These components together make up "the legitimate ambitus of each master tone, to which one can add one licentious note above and two below, which are twenty-one in all" (ibid.). For the disciple tones, the legitimate ambitus is nineteen notes, formed by adding "another harmonic diapason to the first one, and a fifth" (ibid.) (in the second mode: G-D-G-D). (By "harmonic diapason," Correa means here an octave with a fifth in the lower part of it.) In addition, one "licentious" note above and another one below may be added to the legitimate ambitus of the disciple tones. Thus, the "licentious" notes being taken into account, the ambitus for both the master tones and disciple tones is twenty-one notes, while the legitimate ambitus without these extra notes is eighteen notes for the master tones and nineteen notes for the disciple tones. See the following example where the final note of the mode has been circled and the "licentious" notes written as black notes:

²⁰ The folio number 5 is unclear in at least the Brussels exemplar and the two Madrid exemplars of the *Facultad orgánica*.

Example 8



The components of the ambitus of the first (arithmetic) master tone. Total 21 notes.



The components of the ambitus of the second (harmonic) disciple tone. Total 21 notes.

Even the ambitus of twenty-one notes can be violated on some specific occasions, according to the author of the *Facultad orgánica*. Correa writes that "in *glosa* one does not guard this rule" and thus in *glosa* one is entitled to broaden the ambitus of a mode both below and above the given limits (ibid.). Similarly, neither at the ends of pieces nor in the cadences does one need to stick to the rules of the ambiti of modes. At the end of a piece, as well as in a cadence, "the low voice can, on these occasions, go down an octave, for embellishment and plenitude of the end and cadence, and the organ enjoys most of this license, among the many others that it enjoys, and also all the [other] instruments enjoy" (ibid.):

... la voz inferior puede, en estas ocasiones, ponerse en octaua abaxo, para adorno y plenitud de el fenecimiento y clausula, y desta licencia mas goza el organo, entre las otras muchas que goza, y gozan tambien todos los instrumentos (ibid.).

3 Géneros

In nearly every preface to his *tientos*, Correa indicates a *género* of the piece. The function of the indication of *género* is to show whether there are accidentals used in "a key" and if there are, how many. Correa's *género diatónico* (diatonic *género*) has no accidentals, while the *género semic[h]romático* (semichromatic *género*) has one accidental, the *género c[h]romático* (chromatic *género*) has two accidentals, and the *género en[h]armónico*

(enharmonic *género*) has three accidentals. Semichromatic, chromatic and enharmonic *géneros* are each divided into two further categories, according to the kind of accidentals used. If a *género* involves one or several sharps, it is *duro* (hard). If a *género* involves one flat or more it is called *blando* (soft). Correa's soft enharmonic *género* (with three flats) does not exist as such in meantone tuning because in practice there is no A-flat in that system.²¹ Although Correa's *géneros* resemble key signatures, they are not meant to refer to particular tonal centers.

In notation Correa indicates the accidentals to be used in certain *género* immediately after the time signature, written on the left side of the actual staff for *cifra*. To denote a sharp, Correa uses a sign similar to our natural sign while a capital *B*, "a round B" (*be redonda*), is his sign for a flat. Correa adds a number of *cifra* under his sharp sign(s) to show which note(s) is/are to be altered (see f. 19v and f. 27 of the *Facultad orgánica* as examples).

Correa characterizes the *géneros* as "a new language and manner to speak" (Correa 1626: 1) in the introductory chapter to his foreword, *ADVERTENCIAS*. In actual practice, the real novelty is Correa's personal way of using the ancient theory and terminology of genera as a part of his modal theory. Correa was well aware of the use of *géneros* by his contemporaries as is shown, for instance, by his reference to Maestro Francisco de Salinas in connection to explanations of the *género en[h]armónico* in the chapter *SIGVESE EL ARTE DE PONER POR CIFRA*. Here Correa writes that although he in many things follows Maestro Francisco de Salinas, in the particular question of *géneros* his opinion differs from Salinas's. Namely, Salinas attributes the use of the "third sharp," G-sharp, to the *género cromático* while Correa himself is certain of that accidental's belonging instead to the *género en[h]armónico*. (Ibid.: 14.) To mention some other contemporaries of Correa in regard to the issue of *géneros*, Cerone²² takes a cautious attitude towards *géneros* and does not consider them as inevitable for knowing how to compose music (Jambou 1968: 19) while Mersenne, on the contrary, was a great defender of the theory and practice of the old system of three genera (ibid.: 17).

The theory and terminology of genera seem to have originated in ancient Greece and were, after many kinds of transformations, adapted to the music theory of the Renaissance. The original idea of genera having being used to alter the modes was retained in the Renaissance, too. This meant that the notes of the different modes could be altered by changing the size of intervals between notes through the use of genera. As to Correa's particular use of *géneros*, he gives a threefold statement of the significance of them in the *SEGUNDO PVNTO* of the *ADVERTENCIAS*. First of all, the *géneros* indicate the accidentals to be used in the course of a piece of music (Correa 1626: 2). By this Correa means the accidentals that belong to a certain mode. (On the contrary, to show those notes that were outside the mode, it was often necessary to add some individual accidentals.)

²¹ An exception would be the split upper keys, which would enable one to choose between the G-sharp and A-flat.

²² Pedro Cerone de Bergamo, who deals with géneros in his El Melopeo y el Maestro (Naples, 1613).

Secondly, the *géneros* are useful for becoming aware of "the intermixing²³ of the *géneros* in the use of raised and lowered tones and the dissonances which result from this comparison and intermixing" (ibid.). Correa is pointing here to the awareness of the accidentals outside the mode and to dissonances such as those we would today call simultaneous cross-relations, which inevitably needed accidentals other than those belonging to the prevailing mode of a piece. Thirdly, Correa terms important the knowledge of "the proceeding of the *géneros* by their intervals" (ibid.). According to Correa, this knowledge is essential for being able to "arrange curious *tientos* and *discursos*, taking advantage of these intervals on good occasions" (ibid.). This skill is needed when one becomes a master and will be able to play good fantasy [in other words, when one improvises] (ibid.). "Taking advantage of intervals [of different *géneros*]" refers most probably to the mastery of modes – including the skill of using notes which are outside the mode – when improvising or composing. (It is well to note that 'improvising' in Correa's time meant a well-structured and thoroughly worked-out process of "*composing* in one's mind," respecting both theoretical rules and laws of good composing.)

After the statement of the importance of the *géneros*, Correa explains in his Second Point how one can determine the *géneros*. In the proceeding of each *género*, one should pay attention to its [legitimate] intervals, to its [proper] notes and to its [proper] cadences (ibid.: 2–2v). In this connection, Correa refers to folio 158 of the *Facultad orgánica* and also to the "promised book of versets."²⁴ In the preface for *otro* [another] *tiento de medio registro de tiple de segundo tono* [LIX], Correa repeats the three ways to determine the mode to be of a particular *género*. This is done by observing the intervals which each voice intones, by the notes that one plays (naturals or accidentals) and finally, by the note on which the mode finishes. To end the preface, the author specifies once more his different species of *géneros*. (Ibid.: 158.)

As has already become clear, the *géneros* form part of Correa's modal theory. As I see it, one of Correa's main goals in introducing *géneros* is a very practical one. By indicating a *género* in the beginning of a piece, one can reduce greatly the number of accidentals to be notated in the course of a piece. The *QVINTO Y SEXTO PVNTO* (The Fifth and Sixth Point) of the *ADVERTENCIAS* is focused on the matters concerning accidentals. The Fifth and Sixth Point begins with Correa's remark that "When I began to open [my] eyes to music there was not in this Town [Seville] even a trace of organ music with accidentals."

Quando comence a abrir los ojos en la musica no auía en esta Ciudad rastro de musica de organo, accidental: . . . (ibid.: $3v^{26}$).

²³ Correa uses the word *commistión* here. A more modern spelling is *conmistión*.

²⁴ Correa's "promised book of versets," *Libro de versos*, was perhaps never written or, alternatively, has not yet come to light.

²⁵ By "accidental organ music," Correa naturally means pieces which involve sharps or flats.

²⁶ Folio 3 is unnumbered in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

After a few years, he saw the first such music written in cifra – some versos in the eighth mode on delasolrre²⁷ by Peraza – and a little later some others by Diego del Castillo, prebendary organist of the Seville Cathedral, and later of the Royal Chapel. According to Correa, all these pieces of music had sharps on all "the ones" [i.e., on all signs for F in cifra, the number one indicating F in this notation]. Instead of writing all the sharps individually, Correa recommends using one "square B" (be quadrada capital |) to represent all the F-sharps. (Ibid.) In form, Correa's "square B" resembles our natural sign.²⁸ Therefore, Correa uses one "natural" to indicate that there is one sharp in use in the course of a piece. Similarly, Correa advises using two "square Bs" to denote two sharps (F-sharp and C-sharp) and three to denote three sharps (F-sharp, C-sharp and G-sharp). In addition, Correa suggests that one place below the "square B" the figure or figures of the notes to be altered. For instance, in the case of three sharps, Correa writes three "square Bs" to the left side of the first staff of *cifra* and places a number below each of the square signs, in this case the figures of 1, 5, and 2 to show that all the notes of F, C, and G are to be altered by using a sharp (see ibid.: 27). In the same fashion, Correa recommends the use of one capital B, "a round B," to indicate that there is one B-flat in use within a piece (see ibid.: 55 and 57, for example), two capital Bs to indicate two B-flats, and three to indicate three B-flats. Both the "square Bs" and "round Bs" are placed immediately after the time signature in the Facultad orgánica.

Regarding pieces without accidentals, Correa argues that the best procedure is not to write any accidental signs for "natural and diatonic works" (ibid.: 3v). By this Correa means that there is no need for any general accidental sign. Rather, the few alterations that there possibly are in such pieces can be written individually, as it is in actual practice for "diatonic" pieces in the *Facultad orgánica*. In regard to leaving the "natural and diatonic works" without any general indication of accidentals, Correa claims to follow "many great players of the Old Castile" as well as the *maestros de capilla* and of plainchant. In the case of accidental music, Correa follows Nicolas Barroducense, "serious and ancient author" who puts "a square" for the signs of F and C, which have to be sharped. Correa even makes a specific reference to Barroducense's *Enchiridion de música* and, once more, a reference to his "promised *libro de versos*." (Ibid.: 3v–4.)

The *género* of a piece is determined in almost every preface that Correa wrote for his *tientos*. The only exceptions are the prefaces for the last two pieces of the *Facultad orgánica*. These pieces are a setting of a cantus firmus of the *Inmaculada concepción de la Virgen Maria* and the three *glosas* on it. The preface for the cantus firmus setting is found in folio 202 and the preface for the three *glosas* in folio 203.

Out of Correa's sixty-nine pieces of the *Facultad orgánica*, a *género* is thus defined for sixty-seven pieces. By far the most-used *género* is the diatonic one which does not

²⁷ The eighth mode on D. Hence the eighth tone should actually be on G.

²⁸ Nevertheless, in the course of his *tientos*, Correa uses an asterisk-like sign to indicate both sharp and natural signs. See measures 40 and 45 of Correa's *Tiento de sexto tono* for an example (Correa 1626: 55v).

involve any accidentals indicated at the beginning of a piece. Fifty-two pieces are in the diatonic *género* (*género diatónico*). Next comes the soft semichromatic *género* (*género semicromático blando*), which is given for thirteen *tientos*. There is a sign *B* written at the beginning of these pieces to indicate one flat (B-flat). Lastly, there is one *tiento* in the hard semichromatic *género* (*género semicromático duro*) with the indication of one sharp (ibid.: 19v), and another one in the hard enharmonic *género* (*género enharmónico duro*), with the indication of three sharps (ibid.: 27) at the beginning of the piece.

As in many other theoretical matters presented in the *Facultad orgánica* and in his use of modes in general, Correa takes great liberties in his music with the theory of the different species of *géneros*. Correa's theoretical notions about *géneros* can also be seen to have been directed mainly to the practicing musicians, as has been pointed out by Louis Jambou, too (1968: 17). Correa was going to discuss the matters of *géneros* more widely in his *Libro de versos* which has, regrettably, not come to light. The contents of the *Libro de versos* would probably have been focused deeply on even more thorough theoretical discussions directed mainly to the scholarly world of music rather than the more concise theoretical ponderings of the *Facultad orgánica*, which were clearly written (also) with the keyboard players in mind. Nevertheless, with the *Facultad orgánica* alone, Correa has definitely proven to be one of the erudite men of his time, both as a composer and a theoretician – not to speak of his well-known skills as a performer.

4 Modes

4.1 The Modes Used in Instrumental Music of the 16th and 17th Centuries – Historical Background

Before the development of major-minor tonality, it will be remembered that music was based on a series of modes, in Spanish, *tonos*, derived from the medieval modes of Gregorian chant. The church modes were originally eight in number, and they formed groups of four authentic and four plagal modes. Both groups shared the same final but the plagal modes started a fourth lower than the authentic ones. The church modes differed from each other in the order of tones and semitones.

In the *Dodekachordon* (1547) of the Swiss theorist Henricus Glareanus, four further modes were described. These modes were also arranged in pairs of authentic and plagal modes, the additional pairs being the Aeolian mode with its plagal counterpart and the Ionian mode with its plagal form. In Glareanus's church mode system, the Dorian mode was numbered as the first mode, its plagal counterpart second and so forth until the last, twelfth, Hypoionian mode was reached. Since the introduction of the twelve-mode system, a musician had two systems of tone designation at his disposal: the traditional eight-mode system and the twelve-mode system of Glareanus (Meier 1992: 31).

Different classifications of church modes existed at various times. One example was Charles Guillet's collection of keyboard pieces, 24 Fantaisies à quatre parties disposées suivant les douze modes (1610), where both the names and numbers of modes were switched around compared with Glareanus's system (Ferguson 1979: 105).

Furthermore, Gioseffo Zarlino (1517–90), who in his *Institutioni harmoniche* (1558) fully approved of Glareanus's church mode system, decided to renumber the modes in the revised edition of his book in 1573. According to Zarlino's new ideas, the two modes based on *C* (the authentic and the plagal) became the first and second modes, the ones based on *D* became the third and fourth and so on, until the series was concluded by the eleventh and twelfth modes with an *A* as their final. (Powers 1980: 411.)

Both the eight-mode system and the system of twelve church modes were used in the late 16th and early 17th centuries, these systems being "two genuinely competing theories, one rational and unified, the other traditional and diverse" (ibid.: 413). In Germany Glareanus's modal theory was initially the main source for further developments. This earlier twelve-mode system was also preferred in Italy while in France, on the contrary, Zarlino's revised system was generally accepted. (Ibid.: 412–413.)

When the modes began to be applied to instrumental music, they went through various modifications and began to be called *tonos*. The *tonos* were commonly either eight or twelve in number. The division of modes into authentic and plagal pairs was no longer as strict and the second, sixth and eleventh tones now had a key signature of one flat (Ferguson 1979: 108). Certain accidentals characteristic to each mode were also permitted. Moreover, the tones could be transposed a fourth or fifth upwards or a fifth or fourth downwards. All in all, the tendency towards major-minor tonality began gradually to be apparent, especially from the beginning of the 17th century on. (Ibid.)

Although Glareanus's modal theory dominated, it is clear that the rivalling modal theories – especially with their different names and numbers given to particular modes – were already creating confusion before the onset of the 17th century. Further complications resulted from the fact that some composers of the same era clung to a system of eight church modes; meanwhile, others used a system of twelve. In addition, modes could also appear in transposed forms and the accidentals characteristic of each mode could vary to a certain extent. All these facts should naturally be taken into account when trying to determine and understand the modal system used in any particular piece of instrumental music, especially those dating from around the turn of the 17th century.

4.2 Francisco Correa de Arauxo And Modes – Introduction

Like Glareanus, Correa de Arauxo used a system of twelve modes in his compositions. Correa, too, added four modes to the eight church modes without changing the numbering of the earlier modes. The way in which he explains the modal system in the *Facultad orgánica* differs from the conventional teaching of the plainchant modes. For this reason,

it is slightly confusing that in the *QVARTO PVNTO* of the *ADVERTENCIAS* Correa also offers a traditional explanation of the modes.

Correa writes about modes and issues closely related to them in several *puntos* of the *ADVERTENCIAS* and in the preambles to his tientos. In the introductory passage of the *ADVERTENCIAS*, Correa first mentions some of these topics briefly and deals with them in greater detail in various *puntos* that follow. Correa writes about the twelve-mode system in general, about the importance of defining the *género* of a piece and the use of accidentals. Correa takes up special modal terminology and makes a curious statement that in the first mode it is impossible to compose a *tiento de medio registro* with a soprano solo voice. This argument has to do with the theoretically proper ambiti of modes and the divided registers pertaining to the historical Spanish organs, as we shall shortly see.

Correa's music and writings about modes and modal theories reveal once again the tension between his loyalty to the tradition, on one hand, and his striving for a new means of musical expression on the other. Although Correa defends modality, he often gets into serious trouble with the actual use of modes because his music no longer fits into the very theoretical framework that he himself defends. In many *tientos* Correa resorts to adding accidentals (which theoretically do not belong to a mode) in the course of a piece, and even modifying the theories in which he has just taken pride.

4.3 Correa's Twelve-mode System

Both Glareanus and Correa created their modal systems by adding four modes to the eight church modes, without changing the earlier numbering. In this way, the first and second modes were built on D, the third and fourth on E, the fifth and sixth on F, and the seventh and eighth on G. The new modes, the ninth and tenth, were built on A, and the eleventh and twelfth, on C. Correa explains that in the opinion of "the moderns," music has six notes (meaning the six notes of the hexachord: ut, re, mi, fa, sol, la), and therefore there is no reason why one should not also build modes on ut and la.

Although Correa did not renumber the earlier modes, one particular passage in the *TERCERO PVNTO* of the *ADVERTENCIAS* reveals that he might have considered doing so. In this *punto* Correa describes first the eight-mode system and then gives reasons for forming a more modern twelve-mode system. In this connection, he also mentions that the last two modes²⁹ on *ut* should actually be the first and second, because *ut* is "the basis and fundament and the first voice [meaning a note or a syllable] of music":

... y al vt, el vndecimo y duodecimo: deviendo en buena razó[n] ser estos dos vltimos, los primeros dos tonos por ser el vt, el basis y fundamento, y primera voz de la musica (Correa 1626: 2v).³⁰

²⁹ The last two modes in Correa's numbering system are the eleventh and twelfth modes.

³⁰ Please note that in the Facultad orgánica there are three sets of page numbers: the first for the few

4.4 Modal Notions of Correa's Prefaces

Next I am going to discuss further the different elements of Correa's modal theory, some of which (diapasons, arithmetic and harmonic divisions, the ambitus of the modes, and *géneros*) have already been introduced in previous chapters. Before going to the essence of Correa's twelve modes itself, it is useful to examine certain theoretical indications contained in almost every one of Correa's prefaces to his *tientos*. All these indications are components of Correa's modal theory.

First of all, Correa presents a description of the particular mode (or tone) that the piece is in. After this he usually gives the names of two individual notes, for example, "Tiento of the first tone, re and sol" (see, for instance, Correa's first tiento, f. 1). Although the meaning of these notes is not absolutely clear, I agree with Guy Bovet that the two notes refer most likely to the function of the final note in the two hexachords used in a piece (Bovet 1991a: No. 2: 7; TI: 68). In theory, the hexachords are three in number, and in each piece of music, a combination of two of these is used. The natural hexachord begins from C, the hard hexachord begins from G, and the soft hexachord begins from F. The hard hexachord implies the use of F-sharp, and the soft hexachord the use of B-flat. In reading Correa's prefaces, one should note that he employs the six note names used in the hexachordal system (i.e., ut, re, mi, fa, sol, la). Thus, in the modal indications of his prefaces, Correa uses the six note names used for the hexachords and "the rest" is expressed by a transposition of the hexachord.

After giving the mode and the two notes which most probably refer to the function of the final note in the two hexachords used, Correa names the note on which the piece finishes. He uses two alternative prepositions (por and en) to express this. In the case of the first tiento, Correa states the piece to be "of the first tone, re and sol, por delasolrre" "por delasolrre" meaning "through D" in modern terms. The last indication belonging to the modal issues that Correa provides in nearly every preface is that of the species of a género. In addition, many times Correa also gives the diapason (a 'scale' used) with the note names used in hexachords.

It is important to note that Correa deliberately changes his system of giving the diapason (in sense of a 'scale') in his prefaces from folio 115 – actually, from folios 112 and 115, according to Correa himself (Correa 1626: $4v-5^{32}$). Before folio 115 the diapason is given from the final note of a mode. After folio 115 the diapason is given from the first note of the range of the voice.

Already in the introduction to the *ADVERTENCIAS*, Correa mentions that in the prefaces for *tientos* the diapason "is counted in some [*tientos*] from the final note [*punto*

folios preceding the ADVERTENCIAS, the second for the ADVERTENCIAS itself, and the third for the musical part of the Facultad.

³¹ Delasolrre is an old note name for the final note D.

³² These folio numbers refer to the set of folio numbers for the *ADVERTENCIAS*, the number of folio 5 being unclear in at least the Brussels exemplar and the two Madrid exemplars of the *Facultad orgánica*.

final] and in others from the "middle point" [punto mediante]³³ (ibid.: 1). In the OCTAVO PVNTO Correa gives grounds for using the more simple system of always giving the diapason from the final note in the first half of his book. In his opinion, with the simplified system it is easier for the students to see the *género* of a piece (ibid.: 4v). Correa makes it known that following the simpler system of describing the diapasons through the first half of the Facultad orgánica should be enough for achieving the end of making the géneros obvious to the students. Correa then shifts to the use of "the most perfect order" [of giving the diapasons] in the second half of his book, in order to serve other ends besides teaching the géneros, such as the knowledge of the arithmetic and harmonic divisions and the ambiti of the modes (ibid.). The "most perfect order" involves attributing the arithmetic division of diapasons to master (authentic) modes and the harmonic division of diapasons to disciple (plagal) modes and giving the legitimate ambitus of each mode from folio 112 and folio 115 until the end of the Facultad orgánica (ibid.: 4v-5³⁴). In actual practice, the Tiento de medio registro de tiple de sexto tono (fols. 112–114v) is in an irregularly treated plagal mode; the preface of the Tiento de medio registro de tiple de sé[p]timo tono (fols. 115-117) is the first instance of Correa's having clearly taken into use his "most perfect order" of describing the diapasons, mentioning the diapason of the piece to be arithmetic (for the master tone in question) and beginning to count it from the "middle point" [punto mediante] (ibid.: 115).

To complete the modal notions of the preface for Correa's first *tiento* in the first tone, it is in *género diatónico* (diatonic, or natural *género*) and its diapason is given from the final note D as "re, mi, fa, sol, re, mi, fa, sol." In the diatonic *género*, there is no general indication of accidentals (although Correa resorts to writing individual accidental signs in the course of the piece). The diapason given in hexachordal note names (re, mi, fa, sol, re, mi, fa, sol) is a scale of d, e, f, g, a, b, c, d in modern terminology. Concerning the two individual notes given after the tone designation, namely, "re and sol," the function of the final note D is 're' in the diatonic (natural) hexachord beginning from C and 'sol' in the hard hexachord beginning from G. The use of the soft hexachord is excluded in this case by the absence of the indication to use a B-flat. To make this nomenclature clear, see the following table (Bovet 1991a: No. 2: 9; TI: 69³⁵) about the hexachords where the note names of the modern usage are shown in a vertical column on the left and the note names used in the system of the hexachords are written in solmization syllables:

³³ This means that the diapason is counted from the first note of the actual legitimate ambitus of a mode and, consequently, the final note is found "in the middle" of the diapason.

³⁴ The number of folio 5 is unclear in at least the Brussels exemplar and the two Madrid exemplars of the *Facultad orgánica*.

³⁵ I have added the epithets of the different kinds of hexachords to the table cited from Bovet (1991a: No. 2: 9; *TI*: 69). Bovet, for one, has apparently adapted Juan Bermudo's table of hexachords, presented at the beginning of the *Libro segundo* (Second Book) of his *Declaración de instrumentos musicales* (Osuna, 1555).

Table 1

a						la			
g						sol			
f						fa			
e					la	mi			
d				la	sol	re			
c				sol	fa	ut			
b				fa	mi	1			
A			la	mi	re	natura	.1		
G			sol	re	ut	hexac	hord		
F			fa	ut	<u> </u>				
Е		la	mi	↑	hard				
D	(la)	sol	re	soft	hexac	hord			
C	(sol)	fa	ut	(bland	do)				
В	(fa)	mi	<u> </u>	hexac	hord				
A	(mi)	re	natura	natural					
G	(re)	ut	(natur	(natural)					
(FF)	(ut)	<u></u>	hexac	hexachord					
		hard							
	soft	(duro))						
	(bland	o) hexac	hord						
	hexacl	nord							
N T 4	1 (11)	•) 64							

Natural (diatonic), soft, and hard hexachords

In theory, the hard (*duro*) hexachord implies the use of the accidental of F-sharp while the soft (*blando*) hexachord implies the use of a B-flat.

4.5 Master Modes and Disciple Modes

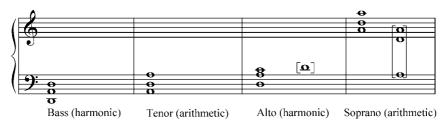
Correa uses a twelve-mode system in which the modes with odd numbers are "master tones" (*tonos maestros*, i.e., authentic modes) and the modes with even numbers are "disciple tones" (*tonos discípulos*, i.e., plagal modes). The first and second modes are built on D, the third and fourth on E, the fifth and sixth on F, the seventh and eighth on G, the ninth and tenth on A, and the eleventh and twelfth on C. Note, once again, that the table of modes presented by Correa in the Fourth Point of the *ADVERTENCIAS* (Correa 1626: $2v-3v^{36}$) concerns the plainchant and has no relation to the actual numbering of Correa's modes.

³⁶ Folio 3 is unnumbered in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

4.6 The Impossibility of Composing Tientos de Medio Registro de Tiple in the First Mode

In the NOVENO PVNTO (The Ninth Point) of the ADVERTENCIAS, Correa takes up a special issue concerning the limitations of the use of the first mode. He states that it is impossible to have a tiento de medio registro de tiple in the first tone on D (Correa 1626: 5v³⁷). The dilemma described by Correa derives from the fact that within the confines of the first mode the highest note (d¹) of the alto becomes "impossible" because it would run into the range of the solo voice. (In the old Spanish organs, the stops were divided normally between the c¹- and the c¹-sharp.) In the case of the soprano voice, its legitimate range could not be employed as such, either, because the three lowest voices (a-c¹) would run into the range of the accompanying voices. Thus the soprano voice has to be transposed up one octave, its new range being from a¹ to a² (instead of from a to a¹). Correa describes the above situation by using his terminology of the divisions of diapasons, writing that "in the diatonic tientos de medio registro de tiple ending on D, the three low[er] voices have by necessity the arrangement of a disciple tone" (ibid.) – although the first mode is normally considered by Correa as a master tone having an arithmetic diapason. That is to say, in the case of diatonic tientos de medio registro on D, the bass voice has a harmonic diapason, the tenor voice an arithmetic diapason, the alto voice a harmonic diapason, and the soprano voice again an arithmetic diapason. As a whole, the mentioned arrangement of diapasons belongs to the disciple (plagal) modes in Correa's terminology. See the following example of the ranges and divisions of diapasons of different voices in the tientos de medio registro in the first mode where the brackets show which notes would theoretically belong to the legitimate range of the alto and soprano voices in the first mode:

Example 9



The ranges and divisions of diapasons of different voices in the *tientos de medio* registro in the first mode

As already pointed out, in the first mode in the alto, it is not possible to use the d¹ in the *tientos de medio registro de tiple* because it belongs to the range of the solo voice. The soprano voice, for one, has to be transposed up by one octave, in order to avoid the notes

³⁷ The number of folio 5 is unclear in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

from a to c¹ of the soprano range getting mixed with the accompanying voices.

After the theoretical discussion of the problem of the impossibility of composing *tientos* de medio registro de tiple in the first mode, Correa states that these pieces "necessarily" have to be either in the second mode or in the "irregular" seventh mode (ibid.). In practice, this means that Correa runs into transpositions and the use of accidentals in replacing the first mode by the second and seventh modes for his "diatonic" tientos de medio registro de tiple. Although Correa considers the use of the second mode more appropriate than the irregular seventh mode to solve his problem, he chooses, nevertheless, the seventh mode more often to replace the first mode for the diatonic tientos de medio registro de tiple. This partly explains the considerable number of pieces in the seventh mode in the Facultad orgánica.

Several of Correa's prefaces relate to the problem of composing tientos de medio registro in certain modes. (See the prefaces for tiento XXV [f. 65], tiento XXVI [f. 68³⁸], tiento XXVII [f. 70v³⁹], tiento XXIX [f. 75v], tiento XXX [f. 77v], tiento XXXI [f. 81v], tiento XXXII [f. 84v], tiento XXXIII [f. 86v], tiento XLI [f. 104v], and tiento XLIX [f. 124v].) Out of the ten tientos mentioned, eight are in the seventh mode to avoid the solo voice and the accompanying voices overlapping within the confines of the mode. In three prefaces to these *tientos* in the seventh mode, Correa states the piece to be of the seventh mode or of the second mode (f. 65, f. 77v, f. 84v), and in another preface to a tiento in the seventh mode (f. 68) Correa mentions the said mode to "finish irregularly." The last two out of the above-mentioned ten tientos are in the twelfth mode, the preface to tiento XLI (f. 104v) reporting the piece to be of the twelfth or as well of the sixth mode, and the preface to tiento XLIX (f. 124v) stating that the mode finishes irregularly. The similar problem of range that one encounters in trying to compose tientos de medio registro in the first mode also arises in the use of the fifth mode for the *medio registro* pieces (ibid.: 104v). That problem is overcome, according to Correa's recommendation, by using the twelfth or sixth mode instead (ibid.).

In the prefaces to *tientos* XXVII (f. 70v) and XXXII (f. 84v), the dilemma of the impossibility of composing *tientos de medio registro de tiple* in the first mode is clearly worded. In the first of these prefaces, Correa brings out his concern and view that one can only with great difficulty compose a *medio registro* of the first tone on D if one sticks to the laws of composing (Correa 1626: 70v). For this reason, the author of the *Facultad orgánica* holds the opinion that the *medio registro* of the first tone should be composed on *gesolrreut* (G) and not on *delasolrre* (D), especially in *tientos* where there is no demand which obliges one to do otherwise (ibid.). In the other preface, Correa determines the *tiento* to be of the seventh mode, or, as well, of the second mode, because in the first mode there is no such termination [i.e., the final note (D) of the first mode cannot be used for

³⁸ Folio 68 has erroneously been numbered 85 in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

³⁹ Folio 70 has erroneously been numbered 69 in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

the purposes of composing a *medio registro*] (ibid.: 84v). Consequently, in this preface as well, Correa advises one to compose pieces of *medio registro* in the seventh mode on G, or on D if they are to be in the second mode (ibid.), instead of trying to compose such pieces in the first mode.

4.7 Correa's Use of Modes

Correa uses all of the twelve modes in the *Facultad orgánica*. He defines the mode for sixty-five out of his sixty-nine works. For four pieces the mode is either not given at all or is indirectly given. The pieces without the complete modal designation are the *canción* "Susana" (LXI), the cantus firmus setting "*Prosa del Santissimo Sacramento*" (LXVII), another cantus firmus setting of the hymn *Todo el mundo* for the *Inmaculada concepción* (LXVIII) and three *glosas* on the same cantus firmus (LXIX).

Out of the sixty-five works for which the mode is given, by far the most frequently used is the seventh mode, which is indicated for sixteen pieces. The next most common is the fourth mode, which is given to nine works. The first mode is designated for eight pieces, the sixth mode for seven pieces, the second mode for six pieces, the eighth mode for five pieces, and the twelfth mode for four pieces. The ninth and tenth mode are given to three works each while the fifth mode is indicated for two pieces. Lastly, the most rarely used third and eleventh modes are employed for only one work each. As already mentioned, the great number of *tientos* in the seventh mode is partly explained by Correa's recommendation to compose *tientos* de medio registro de tiple in the seventh or second mode rather than in the first mode, to avoid problems of ambitus in relation to the ranges of the solo voice and the accompanying voices in such pieces. Moreover, four prefaces of Correa's works in the seventh mode (f. 65, f. 85 [68], f. 77v, and f. 84v) give the second mode as an alternative mode and three prefaces (f. 85 [68], f. 69v [70v], and f. 73) include a mention of the seventh mode "finishing irregularly."

In Correa's time, there was a tendency towards a stylistic change, one feature of which was a gradual breaking of the modal system in favor of the major/minor tonality. Comparing him to J.S. Bach, Guy Bovet aptly describes Correa as being simultaneously archaic and a renovator who often takes a position in defense of modality (Bovet 1991a: No. 2: 5; TI: 66). However, in practice many of Correa's tientos reflect the difficulty – not to say the impossibility – of combining the use of true modality with musical language already embracing many elements of the Baroque. In the Facultad orgánica, one witnesses the problems of fitting new musical ideas within the modal framework as constant compromises, modifications, and exceptions to modal theories by its author, although the old terminology has been retained in principle. Many a tiento of Correa reveals striking movement between central "tonal" areas, use of modulation and frequent adding of chromatic alterations to indicate notes outside the mode. However, Correa takes great pains to carefully explain most of the liberties he takes as exceptions or deliberate modifications to the modal theory

presented in the *Facultad orgánica*. Examples of such exceptions are the notions of a work being either of one or another mode (usually of the seventh or of the second mode), the mode finishing irregularly, or a work involving mixing of modes. To indicate a mixture of modes, Correa uses the expression of "mixed" (*mixto*) or "commixed" (*conmixto*) modes. Probably the difference between the mixed and commixed modes is that in the case of mixed modes there is a combination of modes normally using the same final, while in the case of the commixed modes there is a mixture of modes with different finals (Holland 1985: 51).

One instance of commixed modes is the *Tiento y discurso de tercero tono*, Correa's only *tiento* in the third mode (fols. 7–11). In the preface to this piece, Correa designates it to be in the third mode on A, commixed with the tenth mode, and belonging to the diatonic genus, for which one has to use a B-natural in the course of a piece. Correa emphasizes that the third diatonic mode finishing on A finishes irregularly because its normal ending is on E. (Correa 1626: 7). Indeed, the piece involves features of the tenth mode although it has been indicated to be in the third mode. There are no B-flats; the work makes use of the *género diatónico* and it is on A. Several individually added F- and G-sharps, as well as some C-sharps are employed.

A striking example of the controversial elements of the modal theory and practice is found in Correa's only *tiento* which has three sharps "in the clef," namely, the *Tiento de noveno tono* (*Tiento* of the ninth tone [IX], fols. 27–29v). The piece ends with an F-sharp chord, though without a third. The piece involves harmonies that resemble A major and F-sharp major/minor. The most likely reason for the empty fifth at the end of the *tiento* – in other words, the avoidance of the major third – is the meantone tuning, common in the organs of Correa's time.

There are many examples resembling movement from one "tonal center" to another in the works of Correa. In some cases, it is hard to tell when the impression of tonal centers stems more from the mixing of two modes within a piece than from a real urge to modulate, in modern terms. Nevertheless, there are instances where the author of the *Facultad orgánica* clearly embraces traits of tonality. One example is the *Tiento tercero de sexto tono* (The third *tiento* of the sixth mode, fols. 59v–85 [63]⁴⁰ [XXIII]), also taken up by Holland in his dissertation on the *Facultad orgánica*, to give a demonstration of *tientos* that are "more progressive in their use of modulation" (Holland 1985: 53–54). In this *tiento*, "on the first part of the Batalla by Morales," a definite movement between the "tonal areas" of F-major and C-major is found. In theory, Correa tries to use the sixth mode with B-naturals in the *Facultad orgánica*, but adds B-flats to many sections of his works in this mode. Hence Correa's use of B-flats here, which in many instances gives the flavor of F-major.

Another symptom of the gradual disintegration of modality as such is the necessity to add chromatic alterations of pitches against the rules of pure modality. For instance, according to the modal theory of Glareanus and the earlier system of Zarlino, the fifth mode on F should not involve the use of B-flats (Meier 1992: 183). Although Correa does

⁴⁰ Folio 63 has erroneously been numbered 85 in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

not indicate the use of B-flat in the fifth tone "in the clef," he often ends up adding some B-flats individually in these pieces anyway. See the *Tiento de quinto tono* (*Tiento* of the fifth tone (fols. 14v–16v [V]) as an example. In the preface to this *tiento*, Correa designates the piece to be in the *género diatónico*, with B-naturals, specifying later that there are, nevertheless, accidentals written on some notes where one could doubt "for some particular reason" whether they are to be *intensos* [raised] or *remissos* [lowered] (Correa 1626: 14v). Similarly, Correa is compelled to employ B-flats in the sixth mode, which – theoretically speaking, in accordance with the modal theory of Glareanus and of early Zarlino – should not involve the use of B-flats. As an example, see the *Tiento de sexto tono* (*Tiento* of the sixth tone (fols. 17–19 [VI]) in whose preface (f. 17) the author indicates the piece to be in the *género diatónico* with B-naturals but in practice several B-flats are added.

Many of Correa's *tientos* witness a struggle between new musical ideas and resources and the older theoretical framework. However, besides the works already involving tonal features, there are also many *tientos* which work mostly within the modal confines. Because our knowledge about the chronology of Correa's individual works is restricted to the few mentions in the prefaces for the pieces by the author himself, it it hard to evaluate reliably whether the tonal elements increased systematically with time in Correa's works. Such a process is not impossible, though, since those *tientos* that Correa particularly mentions to be "from his beginnings" are usually rather moderate in respect to "tonal" developments. Although Correa's music cannot be said to be tonal in the real sense of the word, it certainly has its tonal-like moments, features of nascent tonality, side by side with the application of modal practices. To the reader interested in Correa's actual use of modes and their nature in the *Facultad orgánica*, I recommend the excellent résumé on the subject by Guy Bovet in his French translation of the *Facultad orgánica* (Bovet 1991a: No. 2: 6–7; *TI*: 67–68).

5 Falsas

5.1 Correa's Categories of Falsas

Out of the seventeen *puntos* ("points") of Correa's *ADVERTENCIAS*, three are entirely devoted to the issue of dissonances. In the *PVNTO DVODECIMO* (Twelfth Point, fols. $6v^{41}-8$), Correa distinguishes general types of dissonances and opens his extensive discussion about the nature of the interval of the fourth, which is the main subject of the *PVNTO QVINZE* (Fifteenth Point, fols. 8v-11v). In the *PVNTO DIEZ Y SIETE* (Seventeenth Point, fols. 11v-12v), for one, Correa focuses on his favorite dissonance, the *punto intenso contra punto remisso*.

In the PVNTO DVODECIMO Correa differentiates between two main types of dissonances, the *falsa de número* (number *falsa*) and the *falsa de género* (genus *falsa*). *Falsa*

⁴¹ Folio 6 has erroneously been numbered as 5 in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

de número is a dissonance that is formed between two contiguous pitches (Correa 1626: 5v [6v]). Correa describes the second type of dissonance, the *falsa de género*, as being formed between two voices belonging to different *género* or "property" (ibid.). In other words, the two notes of the *falsa de género* each represent a different *género* and, consequently, bear a non-altered and a chromatically altered form of the same pitch simultaneously. For instance, simultaneously sounding F and F-sharp or B and B-flat would be called *falsa de género* in Correa's terminology while two adjacent pitches (of different note names), such as simultaneously sounding C against D, would be called *falsa de número*. In addition, the inversions of intervals formed by any adjacent notes as well as the compounds of number *falsas* belong to the category of *falsa de número*. For example, sevenths and ninths – in addition to seconds – are number *falsas*. According to Correa, the two types of dissonances described are dissonant "by their nature and essence" and "bitter to the ear" and thus they deserve the name *falsa* (ibid.: 7v). Correa emphasizes that one cannot end a work with these *falsas*, neither "covered" nor as such (ibid.), "covered" meaning that a *falsa* appears together with some other pitches which are not a part of the *falsa* itself.

Next Correa shifts to his argument about the nature of the interval of the fourth, which in Correa's opinion is "neither a *falsa* nor a dissonance" (ibid.: 7). A little later, the author of the *Facultad orgánica* adds that besides the *falsas de número* and *falsas de género* "there is a consonance, which is held and practised as a *falsa* on certain occasions, and this is the fourth" (ibid.: 7v). However, in Correa's view the fourth is not a *falsa* but rather a consonance by its nature (ibid.). Furthermore, the fourth can be seen to be used as "a partially perfect consonance like the fifth" and other time as "an imperfect [consonance]" (ibid.: 7v–8).

To complete the *PVNTO DVODECIMO*, Correa names once more the different types of *falsas: falsas de número*, *falsas de género*, and "putative" or "similitudinary" *falsas*, the last meaning the interval of the fourth (ibid.: 8). From these three species of *falsas* "is born such a great number of cases and different concurrences and there is so much to say and to do that one could write a lot of books":

De estas tres diferencias de falsas, de numero, de genero, y putativa, o similitudinaria, (que es la quarta) nace tan gran suma de casos y diferentes concurrencias, y ay tanto que dezir, y hazer, que se pueden escreuir muchos libros (ibid.).

Correa then asks one to always pay attention to the varying contexts in which the same dissonance may appear (ibid.). In other words, one should observe not only a particular dissonance but also the other voices of the texture.

⁴² Correa uses the word falsas here.

5.2 The Nature of the Fourth

The nature of the interval of the fourth continued to be an object of extensive discussion among theoreticians in Correa's time. One reflection of that debate is Correa's long argumentation about the essence of the fourth in his *Facultad orgánica*. The issue of the nature and properties of the fourth is dealt with in the longest subchapter of the *ADVERTENCIAS*, the *PVNTO QUINZE* (Fifteenth Point, fols. 8v–11v). In addition, there are briefer notions about the fourth, for instance in the *PVNTO DVODECIMO* (Twelfth Point, fols. 6v⁴³–8) and in connection to the *tientos* LIV (fols. 139v–142v) and LXV (fols. 189v–195v).

Correa begins his argumentation about the nature of the fourth in the *PVNTO QUINZE* with the statement again that there is so much to say about this interval – which he calls a *Diathesaron*⁴⁴ – that of it alone one could write a lot of books (Correa 1626: 8v). He goes on to promise that in all the books that he himself could bring to light, God allowing, he would offer "different novelties and curious speculations" of the fourth (ibid.).

Correa writes that the *Diathesaron* was held in great esteem by "the ancients" as well as by all the theoreticians, both ancient and modern (ibid.). According to Correa, there is a good reason for such respect because the fourth is "the *totum continens* of music" due to its containing all the notes of music, which are *ut*, *re*, *mi*, *fa*, *sol*, and *la* (ibid.: 8v–9). By this remark Correa means that the fourth potentially contains all the notes of music because in the modal system it was possible to determine all the notes of the scale by knowing the first tetrachord (Bovet 1987b: No. 3: 9, footnote 250; *TI*: 34, footnote 250). Moreover, in Correa's opinion, in the fourth concur all the "reasons" that music contains, which are three in number: reason of the partially perfect consonance, reason of the imperfect consonance, and reason of *falsa* (Correa 1626: 9). In other words, the fourth as an interval has features of partially perfect consonance, of imperfect consonance, and also of *falsa*, a dissonance.

"The reason of the partially perfect consonance" derives from the fact that the fourth produces a fifth – that is, a fifth is an inversion of the fourth and vice versa – and the fourth and the fifth together form the octave, which is a perfect consonance (ibid.). Thus, the two components of the perfect consonance, the octave, are partially perfect in this respect. Correa reinforces his argument by stating that "the perfect produces perfect, the imperfect imperfect and the *falsa* produces *falsa*"; because the fifth is partially perfect, the fourth necessarily is of the same nature (ibid.). "A good tree cannot produce bad fruit," stresses Correa (ibid.). In the context of proving that the fourth is a partially perfect consonance, Correa refers to the old tuning of vihuelas, to the use of the fourth by the Venetians and the Greeks of Naples⁴⁶ – referred to by Salinas and Bergamasco, and to some practical examples

⁴³ Folio number 6 has erroneously been numbered as folio 5 in at least the Brussels exemplar and in the two Madrid exemplars of the *Facultad orgánica*.

⁴⁴ Correa also uses the spelling *Diatessaron* in the *Facultad orgánica*.

⁴⁵ In Correa's words, "especulativos antiguos y modernos" (Correa 1626: 8v).

⁴⁶ An ethnic Greek minority living in Naples.

found by Correa, one being involved in his collection of trios,⁴⁷ namely, a trio by Josquin des Prez⁴⁸ (ibid.: 9–9v). To end the argumentation (at this point) about the fourth being a partially perfect consonance, Correa cites a particular measure of his *Tiento y discurso de segundo tono* (ibid.: fols. 4–6v) where there is an example of the use of two fourths in the two lower voices, a perfect fourth on the downbeat followed by an augmented one on the upbeat (see KFO 1980, I: 11, m. 120).

After having stated that the fourth is a partially perfect consonance, Correa discusses "the reason of the imperfect consonance," in other words, the elements which show that the fourth can also be viewed as "an imperfect consonance." Correa's approach to this issue is a very practical one. He refers to examples that he has found in music of the *practicos* (practical musicians), which prove that they considered the fourth to be an imperfect consonance (Correa 1626: 9v). Correa emphasizes that the practical musicians "confess" this not in words but rather by their works. Correa refers to the use of "many fourths one after another, covered with a third below, giving one [fourth] on the downbeat and other [fourth] on the upbeat" (ibid.: 10). Correa clearly describes here the chords used in the parallel movement found in *fauxbourdon* as a demonstration of the fourth treated as an imperfect consonance.

Next Correa touches the issue of the fourth considered as a dissonance by pointing out that "the natural reason of falsa, founded in good arithmetic, is given by the practicos" who use the fourth in the endings of pieces in the upper part (ibid.). ⁴⁹ However, further in the same sentence, Correa claims that such a use of the fourth is one of the strong reasons also given by all those who consider the fourth a consonance because "in the endings there cannot be a falsa hidden in them"; therefore it follows "by an infallible consequence" that the fourth is not a falsa. Correa then speculates that because there are no other species of intervals in music (besides the perfect, imperfect and dissonant ones) and if the fourth belongs to none of these, it is consequently either an "other fourth species" [of interval] different from those that are being taught, or it is "not a species of music," or else what is being taught is without basis (ibid.: 10v). Correa's conclusion is that the practical musicians treat the fourth as "a monster in music" due to its being considered a consonance in the upper part, sometimes a dissonance in the lower part, sometimes perfect in the endings, and sometimes imperfect, giving two, three, four or more consecutive hidden fourths (ibid.). In Correa's opinion, the interval of the fourth results in being "a monstrous consonance" and "the totum continens of music" (ibid.). Correa also refers to the theoretician Francisco Montanos in the course of his argumentation (ibid.). In addition, Correa presents as one more proof of the fourth being a consonance the ways in which the diapason [the octave] is composed (ibid.: 10v-11). As already discussed earlier in this chapter, the diapason is formed of the fifth (diapent[h]e) and the fourth (diat[h]esaron), "partially perfect" consonances,

⁴⁷ Here Correa means three-part contrapuntal works by composers other than himself. Apparently, Correa had a collection of such works in his possession.

⁴⁸ In Correa's spelling "Iosquin de pres."

⁴⁹ Guy Bovet gives a chord of c-e-g-c as an example of such a use in his French translation of the *Facultad orgánica* (Bovet 1987b: No. 3: 13, footnote 271; *TI*: 36, footnote 271).

which together compose the octave, which is a perfect consonance. The fifth and the fourth termed as partially perfect consonances in this context derives from their both being a part of the perfect consonance, the octave.

Towards the end of the extensive *PVNTO QUINZE*, Correa refers once more to the example that he gave earlier (ibid.: 8v) about the use of two consecutive fourths in his music. The first perfect fourth on the downbeat is followed by an augmented fourth on the upbeat. These fourths are found in the two lowest voices. Correa warns that this "license" used by him is put in his book on purpose "to see but not to imitate" (ibid.: 11). Correa advises young composers and the authors of *romances* to leave this and the other licenses that he will further present until they have been well-instructed and are capable of evaluating them (ibid.).

Correa alludes to the opinion of great musicians who hold the fourth as a falsa and does not want to see them as being totally wrong (ibid.). However, Correa emphasizes that the fourth is a falsa only by resemblance and this is so because "in the effects it is similar to the effects of the seventh" (ibid.). In other words, Correa is pointing here to a cadential use of the seventh which resembles a certain cadential use of the fourth as well. In such a case, a seventh appears in the upper voice which is tied from the previous measure, the upper voice of the seventh resolving downwards to a sixth, the lower voice of the seventh staying in place. After this, the two voices resolve to an octave, the upper voice proceeding upwards, and the lower voice downwards. Analogously, the fourth in the upper voice tied from the preceding measure resolves downwards to a third while the lower voice stays in place. To complete the cadence, both voices resolve to a fifth by a contrary motion. Correa sees the fourth and seventh having "certain sympathy" in a similar manner to the fifth and the octave. Both the fifth and the octave are perfect, the fifth "improperly" and the octave "properly." Similarly, both the fourth and the seventh may in this respect be regarded as falsas, the fourth improperly and the seventh properly. (Ibid.) Nevertheless, the dissonant characteristics of the fourth are only by resemblance, the true essence and nature of it being a consonance, "as I have said and [how] those who comprehend it best [say]," concludes Correa (ibid.: 11v) in his many-sided argumentation in PVNTO QUINZE about the fourth, "the monstrous consonance."

5.3 Punto intenso contra punto remisso

The last of the seventeen *puntos* of Correa's *ADVERTENCIAS* (*PVNTO DIEZ Y SIETE*, fols. 11v–12v) is devoted to a description of a dissonance held important by the author of the *Facultad orgánica*. Correa calls this dissonance *punto intenso contra punto remisso*. It is, basically, a dissonance that we would call a simultaneous cross-relation today, in other words, a dissonance composed of a natural and a chromatically altered version of the same pitch, which are not necessarily in the same octave range. *Punto intenso contra punto remisso* means literally "an intense point against a remiss point." The term is possibly Correa's own

Already in his introduction to the *ADVERTENCIAS*, the author had declared that there is "a new *falsa* of *punto intenso contra punto remisso*" to be found in the *Facultad orgánica* (Correa 1626: 1v). In the same place Correa gives three examples of the use of this *falsa* in his music. The first reference is made to the *Tiento de duodécimo tono* (folio 37 and measure 28), the second work referred to is the *Segundo tiento de sé[p]timo tono de baxón* (folio 80 [sic], measure 79) and the third reference is to the *Tiento de octavo tono* (folio 23 [sic], measure 153). In addition to the *PVNTO DIEZ Y SIETE* and the introduction to the *ADVERTENCIAS*, there is a brief discussion of the *punto intenso contra punto remisso* in the preface to the *Segundo tiento de medio registro de baxón de séptimo tono* (ibid.: 81v), one of the three *tientos* just mentioned referred to by Correa in his introduction of the *ADVERTENCIAS*.

At the beginning of the PVNTO DIEZ Y SIETE, Correa points out that he began to write "this article only to satisfy some masters of the faculty" for whom it was a very new thing to see in his works the punto intenso contra punto remisso in minor and chromatic semitones, in diminished octaves, and in augmented octaves (ibid.: 11v). (In Correa's terminology, the diminished octave is semidiapasón and the augmented octave is plus diapasón or octava mayor.) Correa then assures his readers that there is so much in defense of the punto intenso contra remisso that he wrote a treatise which on its own could be printed and pass for a book – "and not a small one" (ibid.: 11v-12). 53 Due to the abundance of "fundamentals and testimonies," Correa meaning mainly examples of the use of the said dissonance found in works of other composers, it would be a waste of paper to try to incorporate all that there is to say in the present book, in Correa's opinion (ibid.: 12). "God being served, it [all the information that Correa has to present about the punto intenso contra punto remisso] will come to light on another occasion (ibid.). However, "for the consolation" of the masters mentioned at the beginning of the PVNTO DIEZ Y SIETE, Correa has decided to focus in the Facultad orgánica on some practical examples of the use of the punto intenso contra punto remisso, leaving the actual theoretical considerations to his treatise on this dissonance (ibid.).

Correa goes on to give examples of the employment of the *punto intenso contra punto remisso* in several works of other composers. His first example comes from *maestro* Francisco de Montanos. Correa cites Montanos's "treatise of genera, in chromatic demonstration," folio 22, where there is a diminished octave [$semidiapas\acute{o}n$] of the b in the tenor against the b^1 -flat in the soprano on the downbeat, in the sixth measure of Montanos's demonstration.

⁵⁰ Correa gives an erroneous folio number. Measure 79 of the *Segundo tiento de sé[p]timo tono de baxón* is found in folio 83 (*Tiento XXXI*, Vol. I, p. 187, m. 79 in Kastner's edition of the *Facultad orgánica*).

⁵¹ There is also an erroneous folio number here. The *punto intenso contra punto remisso* that Correa is referring to is indeed in measure 153, but this measure is found in folio 25v instead of folio 23. (See *Tiento* VIII, Vol. I, p. 52, m. 153 in Kastner's edition.)

⁵² This is the full title of the composition. In the introduction to the *ADVERTENCIAS*, Correa gives the name of the same work in a shorter form: *Segundo tiento de sé*[p]timo tono de baxón (Correa 1626: 1v).

⁵³ Correa's reference to a treatise that he claims to have already written is interesting. Neither this nor his "promised book of *Versos*" has come to light thus far.

(Ibid.) Correa argues that this example "binds the hands and closes the mouth of those who feel bad about his [use of the *punto intenso contra punto remisso*]," emphasizing that in the example cited from Montanos, the note b has been expressly indicated with a sharp sign to be natural against the b¹-flat (ibid.). Thus, the *punto intenso contra punto remisso* found in Montanos's works cannot be interpreted as a mistake, as the opponents of this *falsa* might claim.

The second of Correa's examples comes from the Franco-Flemish composer Nicolas Gombert, whom Correa holds to be "an excellent musician" and who in Correa's opinion used "most and best these *falsas*," in the *canción* in five voices which begins with the words "Ay me qui voldra," in measure 84, in the value of a quarter note in the soprano and the tenor, after the upbeat of the measure (ibid.). As a third example, Correa mentions that the same *canción* is also found "glossed" (intabulated, having *glosas*) by Hernando [de] Cabezón in the compendium of his father's works, where in the first measure of folio 142 Hernando de Cabezón has expressly used a sharp sign "against its *semioctava remissa* ["lowered *semioctava*", i.e., a diminished octave]" (ibid.). This means that Hernando de Cabezón has taken care to show that a note which would normally be expected and interpreted to have a flat is, in this case, natural and thus forms a *punto intenso contra punto remisso* against the same note with a flat.

A fourth work that Correa refers to as a demonstration of the use of the *punto intenso contra punto remisso* is also by Gombert. This work is the motet "O gloriosa Dei genitrix" in four voices, on the upbeat of which in measure 31⁵⁴ (in the soprano and tenor) and further in measure 35 (in the soprano and bass) there is an augmented octave [octava mayor] (ibid.). In the same context Correa mentions, as his fifth example, Gombert's use of the punto intenso contra punto remisso in the form of a minor second [semitono menor y cromático] in the final cadence of the motet of the tenth tone, or the fourth tone, which ends irregularly on alamire [A], between the soprano and alto where the text is "Adversum me &c." (ibid.).

Correa's sixth and last reference to the works of other composers in the *PVNTO DIEZ Y SIETE* is another example of the *punto intenso contra punto remisso* in the form of a minor second. This example is by "Iosquin de Prest, ancient and serious author" in his trio with the text "*Pleni sunt*" in measure 76, in the value of a quarter note after the upbeat (ibid.). Correa points out that Josquin has placed a sign in his music to expressly indicate the said dissonances (ibid.). Correa gives in *cifra* notation a (rather disappointing) example of eight measures from Josquin's trio (ibid.: 12v), presented here in modern notation:

⁵⁴ The number of this measure is not perfectly clear in the facsimile by Minkoff on the Brussels exemplar of the *Facultad orgánica*, where it is easily read as 51, as has been interpreted by Bovet (1987b: No. 3: 19; *TI*: 40). Consequently, Bovet gives Correa's second reference to measure numbers in the Gombert example as "35 measures further" instead of measure 35. In light of the two Madrid exemplars that I have studied, the first measure number given by Correa in this Gombert example is 31. This is the interpretation of Jambou (1968: Deuxième partie, 52) and Holland (1985: 207) as well, both of them giving the second reference to measure numbers by Correa as 35. Schrader (1987: 57) erroneously gives the same number (thirty-five) to both of Correa's references.

Correa's example of the use of the *punto intenso contra punto remisso* in the form of a minor second by Josquin (Correa 1626: 12v)

Correa closes his discussion of the *punto intenso contra punto remisso* by commenting that because he has proved his intention with such qualified witnesses as Josquin, Gombert, Montanos, and Hernando de Cabezón, this is enough to end his treatise (ibid.).

Besides the introduction to the *ADVERTENCIAS* and the *PVNTO DIEZ Y SIETE*, the preface to the *Segundo tiento de medio registro de baxón de séptimo tono* focuses on the *punto intenso contra punto remisso*. In that preface, Correa makes it known that in some of his works there is a *punto intenso contra punto remisso* but that is done with "consideration and reason" (ibid.: 81v). Correa writes to have seen such a thing in the works of many and very serious composers and remarks that, although in many works there is not a sharp sign used, "nothing is against reason demanding it [a sharp sign] and force obliging there to be one [a sharp sign]." With his comment, Correa defends notation which expressly indicates the existence of the *punto intenso contra punto remisso*. Because in Correa's time the differentiated use of the sharp and natural signs had not yet been fully established, the "sharp sign" (in modern terms) often served as an indicator that the other component of the *punto intenso contra punto remisso* really was natural, sounding against its chromatically altered counterpart. At the end of his preface, Correa gives one of his several warnings in the *Facultad orgánica* that the still-inexperienced composers should leave the use of this license [meaning *punto intenso contra punto remisso*] to their advanced years (ibid.).

As we have seen, the *punto intenso contra punto remisso* was not "a new *falsa*" as a phenomenon, although Correa characterizes it as such in his introduction to the *Advertencias* (ibid.: 1v). Correa's very own writings prove that he had carefully studied and become fascinated by the use of this dissonance by such theoreticians and composers as Montanos, Gombert, Hernando de Cabezón and Josquin des Prez, giving exact citations of their works to his readers. It is also well to remember that Correa is often writing in a clearly ironic fashion, which is seen, for example, in his reference to "certain masters in the faculty" for whose satisfaction alone Correa had begun to write his *PVNTO DIEZ Y SIETE* about the *punto intenso contra punto remisso* (ibid.: 11v). Correa's declaring the said dissonance to be "a new *falsa*" may be understood as his deliberate and carefully chosen polemic expression, directed to some of his contemporaries. In practice, the *punto intenso contra punto remisso*

⁵⁵ By the "force" that obliges the employment of a sharp sign, Correa probably means circumstances such as voice leading that might create certain dissonances.

is an old device, taken anew into use by Correa. In this respect, it can be viewed as "a new *falsa*." Some scholars have seen Correa's remarks about a new *falsa* on one hand and his citations of other composers' use of this *falsa* on the other hand as a mere contradicting of himself (e.g., Holland 1985: 59). However, I see Correa's words as involving a deeper meaning here, reflecting a relation to and position among his contemporaries.

To end this chapter on the *punto intenso contra punto remisso*, let us look at the three examples of Correa's use of this dissonance referred to by the composer himself in the introduction to the *Advertencias*:

Example 11



Tiento de duodécimo tono (Correa 1626: 36–37, meas. 27–29)

Example 12



Segundo tiento de medio registro de baxón de séptimo tono (Correa 1626: 83, meas. 78–80)

Example 13



Tiento de octavo tono (Correa 1626: 25v, meas. 150-154)

Three examples of Correa's use of the *punto intenso contra punto remisso* in the *Facultad orgánica*

VI INSTRUCTIONS ON PERFORMANCE PRACTICE IN THE FACULTAD ORGÁNICA

1 Glosas and Adornos

1.1 Introduction

In Correa's time, two different ways of embellishing keyboard music existed side by side: diminutions (in Spanish *glosas*) and different ornaments (*adornos*). It was customary that *glosas* were improvised by a performer, although they could also be notated by the composer in varying amounts of detail. Besides employing *glosas*, one could embellish music by adding specific ornaments, which were occasionally indicated by particular symbols. However, those symbols were not used by the Spanish keyboard music composers of the sixteenth century (Preciado 1970b: 99). According to Preciado, Francisco Correa de Arauxo was the first Spanish organist to indicate places for ornaments by means of symbols (ibid.: 100). By the end of the sixteenth century, there was a clear tendency towards more precise notation. Composers began to incorporate *glosas* into their scores, and it became increasingly common to indicate desired ornaments with special symbols. Correa was among the composers who used these new practices.

In regard to the embellishment of early Spanish keyboard music, numerous questions confront the modern performer. What kinds of ornaments or *glosas* could and should be made? Where should they be placed? How abundantly should the performer ornament music? If a composer has written out either *glosas* or ornaments or even both, how literally should the notation be taken? The vastly incoherent nomenclature of the *adornos* poses many problems of its own.

1.2 Glosas (Diminutions)

Glosas is the Spanish term for diminutions, which have been defined, for instance, as "melodic paraphrases on notes of long duration" (van Ree Bernard 1989: 38). Kastner describes a diminution to be "the transformation, of a note of long value into shorter values, thus bringing the musical pattern back to its point of departure . . ." (Kastner 1987: 35). Van

Ree Bernard explains the basic difference between the shorter ornaments (*quiebros* and *redobles*) and *glosas* of the sixteenth century to be that "the melodic paraphrase can move beyond the limitation of upper and lower auxiliary" while the trill-like ornaments involve either a main note plus an upper (or lower) auxiliary, or a main note plus both an upper and lower auxiliary (van Ree Bernard 1989: 38). Van Ree Bernard's classification of the sixteenth-century *glosados* (i.e., pieces involving *glosas* written by the composer himself) into three main types is also useful. According to her, such melodic ornamentation can be found in 'long context,' 'short context,' or 'medium context.' In the first category, one individual voice of a polyphonic composition is continuously embellished. In the second category, *glosas* alternate in two or more voices of a polyphonic composition, and in the third category one finds practices described in both the first and the second categories. (Ibid.: 51.)

The primary function of *glosas* was to create movement in a static passage or to fill in sonorous holes (Kastner 1987: 35). Moreover, the *glosa* was important in improvising and composing new *recercadas*, either on specific bass patterns or on works taken from the vocal repertoire (ibid.: 34–35). Cadences were typically embellished with *glosas*. To this can be added the long improvisatory *glosa* serving as a coda in an instrumental polyphonic composition (van Ree Bernard 1989: 52). In regard to the "sonorous holes," their possible existence naturally depends greatly on the type of keyboard instrument. For example, in playing the clavichord, the long notes fade quickly, while when they are played on the organ, the problem does not arise.

Although embellishing music with *glosas* was especially a sixteenth-century practice, even then there were contrary opinions about their usage. The most famous of them are probably the conceptions of Juan Bermudo and Tomás de Santa María. Bermudo writes in his *Declaración de instrumentos* (1555):

El tañedor sobre todas las cosas tenga vn auiso: y es, que al poner la Musica no heche glosas, sino dela manera que esta puntado: se ha de poner. Si la Musica de la ley vieja por su pesadumbre auia menester glosas: la de estos tiempos no tiene necessidad. (Bermudo 1555: lxxxiv^V.)¹

(The player, above all, has to keep in mind a piece of advice; and it is that when playing Music he should not add *glosas*, but play it the way that it is written. If the Music of the old law needed *glosas* for its heaviness, that of today does not have the need.)

Bermudo asks what else is the adding of *glosas* to a work but a pretending to correct the work (ibid.). He goes on to state, "A player who adds *glosas* is correcting or, better said, confusing all the voices" (ibid.). Bermudo writes that he has understood that some

¹ Libro quarto, Cap. xliij.

^{2 &}quot;Music of the old law" could also be translated as "Music of earlier times," or "Music of the early style," to mention two alternatives.

add *glosas* because they do not like the harmony and texture that the music of his time involves. In this way, these people reveal their great ignorance, according to Bermudo. (Ibid.) In Bermudo's opinion, the music of his time has so much diminution that it is both "text and music" (ibid.: lxxxv). He emphasizes that if a player has the sufficient capacity to add *glosas*, he should, nevertheless, not apply them to the works of others (ibid.). Another Spanish composer, Miguel de Fuenllana, also writes about the abuses deriving from the addition of *glosas*³ (Kastner 1987: 34).

Tomás de Santa María takes a much more positive attitude to adding *glosas* than does Bermudo. In his *El Arte de tañer Fantasía* (1565), *Fray* Tomás gives advice on the art of making *glosas*, which should be played, according to him, only in three different note values: whole notes, half notes and quarter notes, although least on the quarter notes (Tomás 1565: 58). He explains that in order to add *glosas* well to a piece, one should pay attention to two things. First, all the voices should have the same amount of *glosas*. Second, when the voices imitate, the *glosas*, too, should be imitated – if there is nothing to impede it, as often happens. (Ibid.) After his written advice, the author gives numerous notated examples of *glosas* on different melodic intervals, both ascending and descending (ibid.: 58v–59v).

Extensive *glosa* tables can also be found in Diego Ortiz's *Tratado de glosas sobre* clausulas y otros generos de puntos en la musica de violones (1553, Roma),⁴ which is a tutor for viol players. Kastner points out that, although *Fray* Tomás, Ortiz, and others teach *glosas* in their treatises, "this science refers primarily to the transformation of vocal works into instrumental works" (Kastner 1987: 34), which was by far one of the principal functions of improvising and composing *glosas*.

Although it is worthwhile studying *glosa* tables and the literary instructions of composers and theorists of the sixteenth century on how to play good *glosas*, I consider the compositions which involve *glosas* most important to study. It is easy to agree with Kastner that "a comparison, of both plain and a diminished version of the same work, is our best master" (ibid.: 36–37). Excellent examples can be found in Antonio Cabezón's *Obras de música*: the *Fabordones y glosados*, composed in eight different modes, for instance. Each of these pieces is composed of a theme plus three variations, in which different voices are ornamented with *glosas*. It is worth noting that although Antonio de Cabezón added *glosas* to vocal works, such as parts of masses, hymns, motets, madrigals, *chansons*, and *romances*, he did not add *glosas* to instrumental works by other composers (ibid.: 34). Besides the works of Cabezón, Kastner recommends studying *tientos* of Bermudo, Palero, Soto, Lacerna, Carreira (ibid.: 35), the works of Gabrieli, Rodio, Valente (ibid.: 37), and also a *tiento* (*ricercare*) by the Italian Giulio Segni da Modena (1498–1561) provided with *glosas* by the Portuguese organist and composer Antonio de Macedo (ibid.: 35), and

³ The work in question is Fuenllana's *Libro de Música para Vihuela, intitulado Orphenica lyra* (1554, Seville).

⁴ There is a commented facsimile edition by Max Schneider (ed.) 1936: *Tratado de glosas sobre las clausulas y otros generos de puntos en la musica de violones*. Kassel: Bärenreiter Ausgabe 684.

⁵ The original version of this work by Segni is number XI in the Musica Nova (1540, Venice) (re-edition

the *Ricercari* III and IV by the Dutch Jacques Buus, which were also known in Spain and Portugal in his time (ibid.: 36).⁶

An example of the rules of thumb concerning the art of *glosas*, expressed by theorists and composers in writing, can be found in Diego de Ortiz's three manners of executing *glosas*. In the first and "most perfect" manner, the *glosa* ends with the same note as the note to be embellished. In the second manner, the *glosa* does not end with the same note as the note that was embellished. In the "third, rejectable manner," the *glosa* deviates too much from the composition. (Ortiz 1553: 3v.) Ortiz also advises one to write down anew that voice part which one wants to embellish, first selecting the *glosas* from his book and then incorporating them at the chosen points (ibid.: 4). (It was a common practice of keyboardists to transfer the voice parts of a vocal work from their original score into the form of a keyboard score or tablature, in which process the desired *glosas* could be added.)

One way to look at the *glosa* tables or music embellished with *glosas* is to analyse the frequency of the melodic intervals used. Van Ree Bernard has carried out one such analysis, comparing material taken from Ortiz's *Tratado de glosas*, *Fray* Tomás's *El Arte de tañer Fantasía*, and Cabezón's *Obras de música* (van Ree Bernard 1989: 43–44). Descending and ascending minor and major seconds were the most frequent intervals found in van Ree Bernard's examination. Next came the interval of a third. Ascending and descending perfect fourths, fifths and octaves were also used by all three composers. Sixths and sevenths were hardly used, and leaps greater than the octave were extremely rare. Some unisons were found, too. (Ibid.: 44–45.) When it comes to the individual characteristics of the compared authors – as far as this kind of analysis can reflect them – Ortiz employs mainly seconds and uses many descending thirds. Dotted notes are rather usual in his *glosas* and occasionally one finds long notes in the middle of ornamented sections. Rhythmically, Cabezón seems to be more even than Ortiz, yet he varies the rhythm with triplets and at times with groups of five notes. (Ibid.: 45.)

In search of some general guidelines for the art of executing *glosas*, several approaches can be resorted to initially. First of all, one should always consider whether it is necessary to add any *glosas* at all to a certain composition. For example, pieces called *Diferencias* (variations) and *Glosados* do not need *glosas* because such pieces already contain them. The character of an individual composition must also be taken into consideration. One should not ruin with one's *glosas* the contrast intended by the composer between the different sections of his work. Some passages are just meant to be plain and tranquil. As has already been pointed out, the art of playing *glosas* flourished principally during the sixteenth century in keyboard music. Later, the formerly improvised diminutions were commonly notated by

¹⁹⁶⁴ by H. Colin Slim, Chicago and London). A primitive keyboard version of the same *ricercare* is involved in the *Libro de Cifra Nueva* of Luys Venegas de Henestrosa (re-edition by H. Anglés in *La Música en la Corte de Carlos V*, number XLVI, *Tiento* XX, p. 59). The version embellished by Macedo is in the *Antología de Organistas do Século XVI*, *Portugaliae Musica*, vol. XIX, p. 123). (Kastner 1987: 35–36).

⁶ These works are found in Buus's *Intabolatura d'Organo* (1549, Venice), re-edited by Kastner in 1957. Hilversum: Harmonia-Uitgave (ibid.: 36).

the composer himself. Such is the case of the works of Correa and Cabanilles, for instance. Additionally, the chosen keyboard instrument has its effect on the need to add *glosas* and on their abundance. The easily fading clavichord sound, for example, often presents more reasons for adding *glosas* than does the organ sound.

It is good to observe the rules of counterpoint when adding *glosas*. Some license can be taken, however. For example, Ortiz allows the parallel fifths and octaves in fast tempi (van Ree Bernard 1989: 39). Generally, the result will be better if one does not add *glosas* simultaneously in two voices. If one finds it helpful, one can see which melodic intervals have been used most in the *glosa* tables and the repertoire of the sixteenth century. However, this does not yet teach the performer the elegant melodic curves typical of the time. In other words, nothing exceeds in importance the study of the early repertoire involving *glosas*.

As I see it, exaggeration rather than frugality in adding diminutions is the tendency of the performers of today. Kastner expresses strongly his disapproval of such a practice, calling pieces overloaded with *glosas* by modern performers "hashes – for they deserve no other name," which "circulate in this world of God with the label 'results of modern musicological investigation!' " (Kastner 1987: 35). Kastner emphasizes that the keyboard players used *glosas* during the sixteenth century "with the highest discretion, applying them only sporadically in their *tientos* or *fantasias*" (ibid.). Putting it still differently, "the addition of *glosas* does not signify a deformation, or over-loading, of a work which, in its original form, lacks little or nothing" (ibid.: 36). I do not consider Kastner's stern warning unwarranted.

1.3 Correa and Glosas

Correa gives neither literary advice on forming *glosas* nor *glosa* tables in his *Facultad orgánica*. One may wonder why he has not offered any instructions for improvising diminutions. I think that the main reason for this lies in the fact that Correa himself had already composed the *glosas* of his works, as was increasingly common practice among the composers towards the seventeenth century. Another tentative explanation would be that the certain pride and strong views about the laws of the "good composition," which Correa's writings reflect, made him adopt the Bermudo-like outlook that performers' adding *glosas* to ready-made compositions was a futile practice and an attempt to "correct" (Bermudo 1555: lxxxiv^V) what the composer already had accomplished.

Yet the issue of *glosas* is not totally absent from the *Facultad orgánica*. There are several notions of *glosas* both in the textual part and in the prefaces of the musical part of the book. Principally, these places concern technical details, such as how the *glosas* of a composition affect the fingerings. Sometimes the amount and forms of *glosas* and the technical difficulty of a piece are related. There are also some observations about *glosas*

⁷ Libro quarto, Cap. xliij.

by Correa which focus on details of composition. Comments related to playing technique concentrate on the textual part of the *Facultad orgánica*, while remarks on the relation of *glosas* and technical difficulty and the points on compositional technique are mostly found in the prefaces of the musical part.

Among the technical points about *glosas* are such subjects as advice on how to divide voice parts between the right and the left hand when a work involves *glosas* (Correa 1626: 17–18), what kind of exceptions one has to make on the fingerings of intervals when one voice (and finger) is tied and the same hand is playing *glosas* (ibid.: 19), how the *glosas* affect the fingerings of chords (ibid.: 22) and scales (ibid.: 22, 23v–24), and when one should use the special third system of fingering in respect to *glosas* (ibid.: 19v). In addition, one should not play two consecutive keys with the same finger nor play black keys with the thumb in rapidly moving *glosas* (ibid.: 25).

Occasionally, the technical level of a piece is related to the number or type of *glosas* involved. For example, in the preface for the fortieth *tiento* (ibid.: 102), Correa claims that the piece is "somewhat difficult" (*algo dificultoso*) because in the major part of it there are two voices simultaneously forming *glosas*. Similarly, in the preface for the *canción Susana* (ibid.: 167), Correa writes that he would not like the same thing to happen to his organists "in these very glossed and very difficult works" as happened to those sackbut players who revealed their defects in trying to imitate the virtuosic *glosas* of one Gregorio de Lozoya.

The rest of Correa's comments on *glosas* deal with details of composition. Many times Correa is just content with mentioning how many notes per *compás* his *glosado* has (e.g., ibid.: 167, 196), how many *glosas* (meaning here variations with diminutions) he has composed based on a certain tune (ibid.: 189v) or *canto llano* (ibid.: 203), or what the time signature is for a piece containing *glosas* (ibid.: 153v, 184).

Some other places are more informative from the compositional point of view. The author of the *Facultad* points out particular leaps of melodic intervals of his texture, such as leaps of a sixth (ibid.: 107v), of a seventh (ibid.: 104v, 107v), and of a twelfth (ibid.: 107v), explaining what kinds of occasions warrant such leaps (ibid.). Correa also emphasizes that both in *redobles* and cadences including *glosas* (*cláusulas glosadas*) one should pay attention to the unadorned main voice instead of the ornamented voices (ibid.: 115, 127v) when evaluating the correctness of the counterpoint. In the same context, Correa indicates some special "licenses" to be found in *glosa* (ibid.: 127v). Lastly, in the preface common to all four works in thirty-seconds, Correa gives crucial advice on performance practice. First he remarks that he uses the *tiempo perfecto* [O] for these compositions, in order to make understood the slowness of the *compás* [tactus], due to a lot of diminution. Then he goes on to emphasize that the *compás* has to be the same in plain passages as in passages of *glosas* of eight, twelve, sixteen, twenty-four, or thirty-two notes. (Ibid.: 153v.)

Both Correa's writings about *glosas* and his compositions with incorporated *glosas* seem to suggest that his works do not need *glosas* improvised by the performer. Nevertheless,

⁸ This folio is unnumbered in the Brussels exemplar and in one of the two Madrid exemplars, R.9279.

⁹ This is the only one of Correa's remarks on glosa with the term 'diminución' instead of 'glosa.'

this is once again a matter of individual choice by each performer. What I am convinced of, however, is that the possible adding of *glosas* to Correa's works should be kept within prudent limits – in order not to end up with the horror scenario that Kastner describes (1987: 35; see the end of 1.2 "Glosas" [Diminutions], in Chapter VI of this dissertation), regarding the balance of plain and more vivid sections carefully constructed by the composer.

1.4 Adornos (Ornaments)

1.4.1 Spanish Sources Relevant to Ornamental Practices in General

Besides glosas, another means to embellish early Spanish keyboard music was the employment of various adornos, ornaments. For the study of the art of improvising diminutions or of adding ornaments, both the extant theoretical treatises and the compositions that involve written-out embellishment prove extremely helpful. To reconstruct a complete picture of the art of embellishing as it existed in the keyboard music of the Spanish Renaissance and Baroque is beyond our reach as modern musicians. However, in light of the sources available, at least the general lines of the forms and uses of embellishment can be established. It goes without saying that in studying any piece of music, it is valuable to consult the primary sources. In the case of early Spanish music, this is particularly important: not only are the surviving sources scarce, but also there seems to be an astonishingly uniform and continuous line of tradition, all the way from Tomás de Santa María in 1565 to Pablo Nassarre, in 1723-24. There are four important Spanish treatises dealing partly with keyboard ornamentation prior to Correa: Juan Bermudo's Declaración de instrumentos musicales (Osuna, 1555), Luis Venegas de Henestrosa's Libro de cifra nueva para tecla, harpa, y vihuela (Alcalá, 1557), Fray Tomás's Arte de tañer fantasía (Valladolid, 1565), and Hernando de Cabezon's preface to the collection of his father's works in Obras de música para tecla, arpa y vihuela (Madrid, 1578). Following Correa's Facultad orgánica, which appeared in 1626 (Alcalá), Pablo Nassarre's monumental Escuela de música (Zaragoza, 1723-24) is the last major contribution to the tradition of the Spanish keyboard school. Because of Nassarre's conservatism and the fact that Escuela was the consummation of a work that could have been started as early as 1681, the work is not a typical example of an eighteenth-century document (Howell 1976: 83). For these reasons, I also consider Escuela a relevant source for the study of Correa's embellishments.

1.4.2 Correa's Writings About Ornamentation

Francisco Correa de Arauxo devoted one chapter of the *Facultad orgánica* specifically to ornaments. This chapter, *Capítulo quinto* (Correa 1626: 15v–16v), belongs to the second of the main chapters of the theoretical part of the *Facultad*, *El Arte de poner por cifra*. In addition, Correa makes some remarks in passing about ornaments in some of the prefaces to his *tientos*. In the *Capítulo quinto*, the author describes the forms and names of his

ornaments and also gives advice for their use, including the appropriate fingerings. Correa distinguishes four different ornaments in his writings: *quiebro senzillo*, *quiebro reiterado*, *redoble senzillo*, and *redoble reiterado*.

1.4.3 The Quiebro senzillo

The first two of the four ornaments that Correa describes in the *Capítulo quinto* of the *Facultad orgánica* are called *quiebros*. The author distinguishes between two kinds of *quiebros*, the *quiebro senzillo* and the *quiebro reiterado*. According to Correa, the simple *quiebro*, the *quiebro senzillo*, consists of two rapid movements (descending and ascending) and includes two notes (*signos*). Correa explains further that the ornament is executed with two fingers. (Correa 1626: 15v.)

By describing an ornament that includes two *signos*, Correa naturally means that there are two different pitches involved. That these pitches are contiguous is made clear by Correa's five examples of the *quiebro senzillo*, given in solmization syllables: 1) *re*, *ut*, *re*, 2) *mi*, *re*, *mi*, 3) *fa*, *mi*, *fa*, 4) *sol*, *fa*, *sol* and 5) *la*, *sol*, *la* (ibid.). All Correa's explanations thus amount to describing an ornament that is basically similar to our mordent:

Example 14



Correa's quiebro senzillo

- a) consisting of a whole step, and
- b) consisting of a half step

From Correa's solmization syllables, it is easy to deduce that the *quiebro senzillo* may consist of either a whole step or a half step. Correa writes that the ornament is played with the third and second fingers of the right hand, finishing with the third (ibid.) and with the second and third fingers of the left hand, finishing with the second (ibid.: 16). By carefully explaining which finger completes the ornament, Correa seems to make certain that his description of the "two movements" of the ornament is understood correctly.

Nowhere in the *Facultad* does Correa mention a variant of *quiebro senzillo* with an upper neighbor (an inverted mordent). This fact attracts attention, because in the earlier Spanish treatises there is no such emphasis on the *quiebro senzillo* with a lower neighbor. Tomás de Santa María presents both upper- and lower-note versions in his *Arte de tañer Fantasía*, calling these ornaments *quiebros de semínimas* (Tomás 1565: 47–47v). As for Hernando de Cabezón, he mentions only a *quiebro* with the upper note, giving a fingering for both hands. Although no notated examples of *quiebros* are provided by him, the form of the ornament can be deduced from the fingering. According to H. de Cabezón, such

¹⁰ In modern Spanish the name of the ornament would be spelled quiebro sencillo.

¹¹ Correa himself does not give any notated example nor an explanation of the rhythm in which the *quiebro senzillo* is to be performed.

quiebros are played with the third and fourth or with the second and third fingers of the right hand and with the third and second or the second and first fingers of the left hand (H. de Cabezón 1578: 6).¹²

Although it can be speculated that Correa just happened to leave out the description of the mordent with an upper note, this possibility seems improbable. After a meticulous explanation of the lower note *quiebro senzillo*, it seems highly unlikely that the author had either forgotten or just did not bother to include the description of the inverted version of the ornament – had he considered it important.

Correa writes that one can and "even should" use the *quiebro senzillo* in every beginning of a *verso* or a little work, "more properly said, and in the course of playing them (Correa 1626: 16). In the course of a work, *quiebros senzillos* are played on all the whole notes and half notes when the hand is not occupied by *glosa* and when playing in a fast tempo (*compás ligero*) or in the *compás mayor* [\$\mathbf{c}\$] (ibid.). In a slow tempo (*compás de espacio*), one can play *quiebros senzillos* in every other quarter note (ibid.: 16v). Correa mentions that he has also seen, although seldom, *quiebros senzillos* executed on eighth notes (in a very slow *compás* and followed by sixteenth notes), but never on sixteenth notes:

En corcheas (en compas muy despacio, y siguiendose semicorcheas) lo e visto hazer, aunque raras vezes, en semicorcheas nunca (ibid.).

Correa's implications of certain note values and *compases* related to certain types of ornaments can be taken as a guideline to a good performance. The author of the *Facultad* wants to give his opinion of which ornaments would best suit pieces of different speeds and genres.

Beyond mentioning *verso*, Correa does not define exactly what he means by "a little work" at the beginning of which a *quiebro senzillo* should be played. *Verso* was a genre of music which had its origin in an interlude which alternated in between the verses or versets of the choral psalmody (Preciado 1973: 58). There were organ *versos* to alternate with the verses of psalms, the *Magnificat*, the *Kyrie*, and even with the *Gloria Patri* (ibid.: 59). In brief, organ *versos* were short musical works, alternatim versets, based on the plainsong. The alternatim practice was employed in psalms, hymns, canticles, and in many parts of the mass. (Hoag 1980: 36–37.) In addition, another organ music genre, the *himno*, was used in services for alternating between singing and organ playing in the same manner as *verso* (Preciado 1973: 59). If Correa's category of little works is understood to include only such short pieces as *versos* and *himnos*, it could actually mean – strictly interpreted – that the *quiebro senzillo* should not be played in any of the *tientos* of the *Facultad orgánica* (ibid.). Nevertheless, besides the *Capítulo quinto* which contains most of Correa's writings about the ornaments and their use, an additional remark on the application of *quiebros* is

¹² This folio is 6r in the section *DECLARACION DE la cifra que en este libro se vsa* of the prelims in an exemplar of the original edition in the British Library. The call number of the exemplar is K.8.e.10.

¹³ The *obra pequeña* of the original text could also be translated "a short work" (or piece), although it literally means "a little work."

found in the previous chapter, *Capítulo quarto* (fols. 14v–15v). There Correa gives playing instructions for beginnings of works where a piece opens with an entry of only one voice, the other voices joining in later. For instance, if it is the soprano voice that enters alone, then one should play a *quiebro* or a *redoble* with the third finger of the right hand at the beginning of a piece (Correa 1626: 15). Before giving his actual advice on performance, Correa writes that his directions concern the beginning of a work that is a *tiento*, a motet, or a *verso* (ibid.). Hence, in light of this remark, *quiebros* can be applied to the *tientos* as well – not only to smaller works.

In the *Capítulo quinto*, Correa also mentions that *quiebros*, both *senzillos* and *reiterados* [doblados], can occur in any voice and on any pitch:

... y todos estos, assi el [quiebro]senzillo como el [quiebro] doblado, se pueden hazer en todas las vozes, y signos: en el vt, re, mi, fa, sol, y la ... (ibid.: 16v).

In other words, one may play *quiebros* on any note of a given hexachord and in any voice part of a piece. The above-cited sentence continues with an additional remark on the application of *quiebros*. As already mentioned, the *quiebro senzillo* does not need to involve a half step (contrary to Correa's *redoble*, as we shall see). Namely, when in some instances it is impossible to play a *redoble* (in a case where a semitone could not be included), Correa recommends using a *quiebro* instead:

... y assi quando no se pudiere hazer el redoble, por ser entre tonos, se haga este [el quiebro] en su lugar (ibid.).

It is hard to know how literally one should take Correa's advice to play *quiebros senzillos* on every whole note and half note whenever one's hand is not occupied with playing *glosa*. At the end of the *Capítulo quinto*, the author comes back to the issue of the abundance of ornaments. Correa writes that if the music is completely (or for the most part) plain, it has to be ornamented with *estos accidentes*; thus, one can play one of them in all the whole notes and half notes. Immediately after this recommendation, Correa adds that it would nevertheless be good to leave some notes plain every once in a while (i.e., without the ornaments):

... y parecera bien dexar algunos puntos llanos, dequa[n]do enqua[n]do sinellos (ibid.).

1.4.4 The Quiebro reiterado

After the explanation of the *quiebro senzillo*, Correa describes another kind of *quiebro*, which he calls *quiebro reiterado* (ibid.: 15v) or *quiebro doblado* (ibid.: 16v). This ornament

¹⁴ Literally translated, "these accidentals." From the context, it is clear that Correa is referring here to the ornaments, *quiebros* and *redobles*, which he has explained earlier in the same chapter.

includes three *signos* (pitches) and is executed with three fingers, beginning one pitch higher in relation to the *quiebro senzillo* (ibid.: 15v). In other words, adding one note to the beginning of a *quiebro senzillo* (i.e., one note above the principal note) makes it a *quiebro reiterado*. Dionisio Preciado argues that the denomination of the *quiebro reiterado* derives from this adding of one note to the beginning of [a simpler] *quiebro*, rather than from the succession of notes in it (Preciado 1971a: 3; Preciado 1973: 69).

Correa gives four examples of the reiterated *quiebro* in solmization syllables: 1) *mi*, *re*, *ut*, *re*; 2) *fa*, *mi*, *re*, *mi*; 3) *sol*, *fa*, *mi*, *fa*; and 4) *la*, *sol*, *fa*, *sol* (Correa 1626: 15v). From Correa's examples and explanations, it can be concluded that the three pitches involved are contiguous and that the *quiebro reiterado* can be played in any voice part or on any pitch of a hexachord (ibid.: 16v). Furthermore, in light of Correa's solmization syllables, the *quiebro reiterado* does not definitely have to involve a semitone (hence Correa's first example of *mi*, *re*, *ut*, *re*). In addition, if there is a semitone in the ornament, it can be either in the upper or the lower part of the ornament. Tomás de Santa María, for one, is much stricter about the placement of the semitone. In describing an ornament similar to Correa's *quiebro reiterado*, *Fray* Tomás writes that the ornament – which Tomás calls *quiebro de mínimas* – contains a tone and a semitone and that the semitone necessarily has to be in the lower part of the ornament (Tomás 1565: 47v).

Correa does not define the rhythmic execution of the ornament but gives a fingering for both hands. In the right hand, the *quiebro reiterado* is begun by the fourth finger and continued like the *quiebro senzillo* (i.e., with the third, second and finished with the third finger) (Correa 1626: 15v). In the left hand, the reiterated *quiebro* is played with the first, second and third fingers and finished with the second (ibid.: 16). Deriving from Correa's written explanations, the form and the fingerings for the *quiebro reiterado* are as follows:¹⁵



Two examples of Correa's *quiebro reiterado* with left- and right-hand fingerings

Correa advises using the *quiebro doblado*, or *reiterado*, at the beginning of a *discurso* or a long serious work (*obra larga grave*). Still in the same sentence, Correa asks that the *quiebro reiterado* be played in "things" of *compás grave*, like those of sixteen figures to the *compás*. (Ibid.: 16v.) By the latter, Correa is referring at least to *compasillo*, **C**, that can have sixteen sixteenth notes in a bar and that represents a relatively slow *compás* [tactus] in Correa's system of *compases* and time signatures. Dionisio Preciado remarks that all

¹⁵ As has already been pointed out, Correa himself does not give any note values in his explanations concerning the *quiebro reiterado*.

the beginnings of works written in *compases* \mathbf{e} , ϕ and \mathbf{o} should have a *quiebro reiterado* because they are all grave *compases* according to Correa's thinking (Preciado 1973: 78).

Besides being played at the beginnings of long and serious works and those written in *compás grave*, *quiebros reiterados* can be played on whole notes (and sometimes minims) that are not occupied by *glosa* (Correa 1626: 16v). In addition, reiterated *quiebros* can occur in all voice parts and on all pitches (ibid.) like the simple *quiebros*, *quiebros senzillos*. The already-discussed recommendation of ornamenting the whole and half notes of the totally (or mostly) plain music can also be taken to imply both types of *quiebro*. However, it should be kept in mind that Correa advises leaving some notes unadorned (ibid.). It is also good to remember that the *quiebro reiterado*, unlike the simple *quiebro*, should not be played on note values shorter than half notes.

1.4.5 The Redoble senzillo and the Redoble reiterado

After describing the *quiebro senzillo* and the *quiebro reiterado*, Correa distinguishes two other ornaments, which he names the *redoble senzillo* and the *redoble reiterado*. Both of these ornaments are kinds of trills. According to Correa, the *redoble* consists of an alternation of two contiguous pitches with a *quiebro senzillo* at the end (Correa 1626: 15v). With the mention of the *quiebro senzillo*, the author explains the form of the "suffix" following the main part of the ornament.

Correa discerns two types of *redobles*, as was also the case with his *quiebros*. On folio 15v and 16r of the *Facultad orgánica*, the author gives an example of both of the *redoble* types, notated in *cifra*. In Correa's illustrations, the pitches of notes are thus expressed with the numbers of the tablature. There is neither an implication of the rhythmic execution nor of the on- or off-beat nature of these ornaments. However, Correa's *tientos* in the musical part of the *Facultad orgánica* provide more information, which will be dealt with further on in this chapter. As in Correa's own illustrations, note values are deliberately left unspecified in the following example transcribed from the tablature. The dashes and little vertical lines seen in the examples are borrowed from Correa's original notation. The dashes signify rests and the vertical lines bar lines.

Example 16



Redoble senzillo



Redoble reiterado

Correa's example of the *redoble senzillo* and *redoble reiterado* (originally notated in *cifra*)

Correa provides fingerings for both types of *redobles*. He advises the *redoble senzillo* to be played with the second, third and fourth fingers of the right hand (ibid.) and with the third, second and first fingers of the left (ibid.: 16). The right-hand fingering for the other *redoble*, the *redoble reiterado*, is identical to the fingering of the *redoble senzillo*, except that one begins to play the reiterated *redoble* with the thumb (ibid.). The left hand plays the *redoble reiterado* beginning with the fourth finger (ibid.). Correa's fingerings for *redobles* are given in the following: ¹⁶

Example 17



Redoble senzillo



Redoble reiterado

Correa's fingerings for the redoble senzillo and redoble reiterado

Although it already becomes clear from the given fingerings, Correa emphasizes that *redobles senzillos* and *redobles reiterados* "have the same solfa" in the left and in the right hand (ibid.).

Correa recommends that a *redoble* should never be used between two whole steps like *ut*, *re*; *re*, *mi*; *fa*, *sol* and *sol*, *la*. *Redobles* are used between semitones *mi*, *fa*, and on *sustenidos* (notes with a sharp sign):

... y nunca vseys de redoble (de mi consejo) entre dos tonos, como son: vt, re; y re, mi; y fa, sol; y sol, la; sino en semitono, mi, fa, o sustenido ... (ibid.).

Correa mentions that only certain singers and instrumentalists employ the *redoble* on a whole step but stresses in the same sentence that "there is no *redoble* between two whole steps" (ibid.). It is clear that Correa's reference to the practice of singers and instrumentalists functions as a warning example here. Correa also touches the problem of the nomenclature of the ornaments by pointing out that the said ornament is called *trinado* or *trino* "by others" and *quiebro* by singers. (Ibid.)

On the aforementioned folio of the *Facultad*, Correa recommends using *redobles* on all the leading tones of unornamented cadences which last for one *compás* [one bar] or more and on every mi which resolves upwards to fa like a cadence (ibid.).¹⁷ It is significant

¹⁶ The right-hand fingering is given above the notes and the left-hand fingering below them.

¹⁷ Mi and fa refer to a half-step relation between two notes within a hexachord.

that Correa appears to be the first Spanish theorist who has related the word cadence to the issue of using *redobles* (Preciado 1973: 102).

Concerning the use of *redobles*, Correa also takes into consideration performances with different keyboard instruments. He advises using a *redoble* at every beginning of a large work (*obra larga*) played on the clavichord when the voice that enters forms the lower part of a half step. (In Correa's terminology, when a piece begins with *mi*.) On the organ, Correa recommends playing a *quiebro* instead of a *redoble* when a piece begins with only one voice. (Correa 1626:16.)

Correa shows the exact places for *redobles* in his *tientos* many times by using the capital *R* as a symbol. One may ask whether Correa was the first Spanish organist-composer to indicate ornaments with special signs (Preciado 1973: 30). Using ornamental signs was at least one of the inventions that Correa attributes to himself (ibid.). Correa writes that it is a habit of his (sometimes) to show these *redobles* "by putting an *R* above [a note] that means a *Redoble*, in order to avoid writing them [*redobles*] in *cifra* [in full]":

Estos redobles los acostumbro (a vezes) señalar poniendo vna R: encima, que quiere dezir Redoble, por euitar de puntarlos por cifra (Correa 1626: 16).

Correa makes a similar observation in the preamble to *tiento XLIII*, adding that an *R* shows in which voice a *redoble* is to be executed. In the same preamble, the author also presents grounds for using an *R* as an abbreviation for a *redoble*, stating that using the first letter of a word to signify the whole word is a much-used practice. This practice is also employed in music. Correa gives as examples the signs of the *B redonda* (the "round B"), which stands for *bemol* (B-flat), and the *B quadrada* (the "square B"¹⁸), which stands for *be quadrado*, or *bedural*. (Ibid.: 110v.)

1.4.6 Remarks on Correa's Ornamentation Signs and Written-out Ornaments

Francisco Correa de Arauxo is considered to be the first Spanish keyboard composer to indicate ornaments with particular signs (Parkins 1980: 9). From the writings of some scholars, one easily gets the impression that Correa also used ornamentation signs for his *quiebros*, not only for *redobles*. For instance, André Lash in his article "Beyond the preface: some thoughts on the application of ornaments in the organ *tientos* of Francisco Correa de Arauxo" mentions that "only in mm. 29 and 41 of Tiento XXIX do we have the 'Q' indication coupled with a notated realization" (Lash 1994: 109). It is not explicit whether the 'Q' indication is meant to signify a particular ornamentation sign here. If that is the case, it is well to note that "Q indications" are found only in Kastner's transcription of the *Facultad orgánica* and not in the original edition. A remark similar to Lash's is made by Robert Parkins in the article "Cabezón to Cabanilles: ornamentation in Spanish

¹⁸ That is, a sign in the form of our natural sign, which was used to indicate a sharp in a key signature, while the "round B" was an indication of a flat in a key.

¹⁹ André Lash is making reference in his article to the 1974 reprint of the first transcription of the *Facultad orgánica* by Kastner.

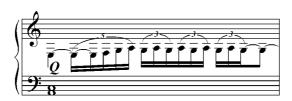
keyboard music," where the author writes that "Although Correa does not mention a sign for the *quiebros* in his text, two examples of a 'Q' are found in Tiento 29, mm. 29 and 41, indicating the performance of an 'irregular' *quiebro*" (Parkins 1980: 15). Also in this case the reader can be led to think that the "two examples of a 'Q'" mean symbols of ornamentation.

It is true that Correa does not mention any symbol for a *quiebro* in his text. The "indications (or examples) of 'Q' " that both Lash and Parkins mention cannot be found in the form of ornamentation signs in the original edition of the *Facultad*. However, Correa makes "indications" to the two mentioned instances of *quiebros* in the preamble to *Tiento* XXIX where he points out that in *quiebros* and *redobles* there is no determined number of notes and so there is a *quiebro* whose first notes (*figuras*) have five sixteenth notes:²⁰

Aduierto que en quiebros y redobles no ay numero determinado de figuras, y assi se hallara en el compas 29. y 41. de este tiento vn quiebro, cuyas primeras figuras valen cinco semicorcheas... (Correa 1626: 75v).

In his transcription of the *Facultad*, Kastner has put a 'Q' sign at the beginning of both bars mentioned by Correa and given them the following realizations:

Example 18



Kastner 1980-81: Vol. I, 167, m. 29



Kastner 1980-81: Vol. I, 168, meas. 41-42

The two 'Q' signs added by Kastner and his realizations of Correa's quiebros in Quinto tiento de medio registro de tiple de séptimo tono (XXIX)

²⁰ Actually, "are of the value of five sixteenth notes." The verb in the original is valer.

Kastner's realizations do not correspond exactly to what Correa wrote in his tablature. According to the tablature, in measure 29 there is a quarter note (e) followed by three sixteenth notes (f, g, a) and finally a half note (g) in the alto, the ornamenting voice (Correa 1626: 76). In other words, the original notation implies that the *quiebro* would stop on the second half of the measure, resulting in what appears to be an inverted version of the *quiebro reiterado*:

Example 19



Correa's realization of quiebro in measure 29 in Quinto tiento de medio registro de tiple de séptimo tono (XXIX)

In measure 41 Kastner has likewise added notes to the second half of the measure, creating an inverted mordent. In Correa's tablature, there is a quarter note (g) written in place of Kastner's inverted mordent (ibid.: 76). The form of the *quiebro* in measure 41 corresponds to the kind of *quiebro reiterado* that Correa describes in his chapter devoted to ornamentation, the *quiebro* in measure 29 being "inverted." Because Correa himself also calls the written-out ornament of measure 29 a *quiebro*, it can be concluded that the *quiebro reiterado* could in Correa's opinion probably be used in an inverted form, as well. Correa's notation of the two *quiebros* is the following, transcribed literally from the tablature:

Example 20





Correa 1626: 76, m. 29

Correa 1626: 76, meas. 41–42

Correa's realization of *quiebros* in measure 29 and in measure 41 in *Quinto tiento de medio registro de séptimo tono* (XXIX)

Barbara Brewster Hoag has pointed out in her dissertation "The Performance Practice of Iberian Keyboard Music of the Seventeenth Century" (1980, New York Univ.) that the tablature used by Correa is entirely capable of indicating a *semicorchea* tied to a semiminim but it cannot show irrational subdivisions (Hoag 1980: 312). Hoag concludes that the

particular choice of notation seems to mean irrational subdivisions, and she gives notated examples where "the fifth *semicorchea*" that she has added editorially has the odd value (ibid.):²¹

Example 21



The "fifth semicorchea," suggested to have an odd value, added editorially (in brackets) by Hoag

As we have seen, Kastner has in his transcription interpreted Correa's notation of *quiebros* as quintuplets, the first two notes of which are tied.

Although Correa did not indicate any *quiebros* with ornamentation signs, the situation with *redobles* is an entirely different matter. There are over two hundred 'R' signs in the sixty-nine compositions of the *Facultad orgánica*. Some scholars have reported the total number of the *redoble* signs to be 215 (e.g., Preciado 1973: 88). I have come up with still five more. The number of the signs varies greatly from piece to piece. There are *tientos* without any *redoble* signs (e.g., *tientos* I–II and VII) and five *tientos* with as many as ten *redoble* signs (*tientos* XXVII–XXVIII, XXXVIII and LVIII–LIX). There is even one instance of a *tiento* with thirteen ornamentation signs, namely, *Tiento* LIII for double soprano solo, *Tiento de medio registro de dos tiples de segundo tono*. The general trend in the *Facultad orgánica*, whose compositions have been ordered by their level of difficulty, is that in the simpler and shorter pieces there are fewer ornamentation signs than in the more complex, longer pieces.

Kastner has produced the majority of Correa's 'R' signs in his transcription, often giving his own realizations of the ornaments. It is not always indicated clearly whether the realizations are partly or completely by Kastner or whether they correspond exactly to the original edition. Another difficulty is that in the original, the ornamentation signs have often been printed above the staff and sometimes, though more rarely, on the staff of *cifra*. When the 'R' sign is above the staff, it does not always mean that it is the highest voice to be decorated. These cases require the performer to have a close look at the texture before applying any ornamentation.

The great majority of the ornamentation signs indicate a *redoble* to be played on a half note. In studying the original edition, I have found nearly 170 such cases. Most of the other indications refer to whole notes with some rare cases pointing to shorter note values. Close to 130 'R' signs are in the soprano voice. Next come the tenor and alto, the tenor

²¹ The cited example is Ex. 16 in Hoag's dissertation.

having more signs than the alto. There are also several instances, although less than for the alto and tenor, of 'R' signs given to the bass as well.²²

Redobles indicated by ornamentation signs in the Facultad parallel Correa's written explanations about the use of redobles in cadences and cadence-like semitonal relations. Most of Correa's 'R' signs imply a redoble that involves both a whole tone and a semitone, i.e., one whose repercussions are a semitone apart. However, there are a few exceptions. For instance, in Tiento LIII for double soprano solo, there appears an 'R' sign in the second half of the measure 26 in the tenor voice, preceded by a written-out, four-note prefix of the redoble reiterado. From the preparation of the ornament, it can already be seen that there are two whole steps involved and thus the repercussions are to be played between the main note (d) and its upper auxiliary (e):²³

Example 22



Redoble reiterado whose repercussions are a whole tone apart, in Correa's Tiento de medio registro de dos tiples de segundo tono (Correa 1626: 137, m. 7)

In the second half of measure 76 of the next *tiento* (LIV) there is a similar case. This time the ornamentation sign is in the soprano, and it is preceded by a figure of six sixteenth notes, forming a "double" prefix for a *redoble senzillo*:²⁴

Example 23



Redoble senzillo whose repercussions are a whole tone apart, in Correa's Tiento de medio registro de dos tiples de séptimo tono (Correa 1626: 141, m. 11)

²² It is difficult to give exact figures for the distribution of *redoble* signs between different note values and voice parts because all the cases are not unambiguous. Sometimes the sign is not placed exactly on the note that it is probably meant to refer to. Sometimes it is also impossible to define with certainty where a *redoble* ends and free figuration begins. There are also some cases where one must make a choice between two voices when applying a *redoble* indicated by a sign.

²³ Kastner's edition 1980–81, Vol. II: 101, m. 26; Correa 1626: 137, m. 7.

²⁴ Kastner's edition 1980-81, Vol. II: 109, m. 76; Correa 1626: 141, m. 11.

The above examples show that sometimes Correa seems to approve of the use of a *redoble* involving two whole steps. Although Correa prohibits the use of *redobles* between two whole steps when writing "y nunca useys de redoble (de mi consejo) entre dos tonos" (Correa 1626: 16), one could argue that his addition "de mi consejo" (of my advice) points to a recommendation or to advice rather than to an absolute rule. Dionisio Preciado, too, considers this a possibility (Preciado 1973: 97). In other words, it is a highly recommended practice to favor *redobles* that involve a whole step and a half step, but *redobles* of two whole steps are not totally out of the question, either.

As can be seen from the examples above, the prefixes of *redobles* can also appear in forms other than those described in the theoretical part of the *Facultad orgánica*. On several occasions, Correa has written out "double" prefixes for both *redoble* types. For example, in measure 48 of *Tiento* XLVII, the *Tiento de medio registro de tiple de octavo tono*, there is a written-out "double" prefix for a *redoble reiterado*: ²⁵

Example 24



A "double" prefix of a redoble reiterado, written out by Correa in his Tiento de medio registro de tiple de octavo tono (Correa 1626: 120v, meas. 3–4)

In addition, sometimes an 'R' sign is also preceded by a group of four notes that could be interpreted as a mirror image of a prefix to a *redoble reiterado*. Such variants are found, for instance, in *tientos* XXXVI and XXXIX. The following example is taken from measure 29 of *Tiento* XXXIX. Besides showing a downward form of a four-note prefix, measure 29 is another demonstration of a *redoble* involving two whole notes:²⁶

Example 25



A "mirror-image prefix" of a *redoble reiterado*, written out by Correa in his *Tiento segundo de medio registro de tiple de quarto tono* (Correa 1626: 100, meas. 7–8)

²⁵ Kastner's edition 1980-81, Vol. II: 65, measures 48-49; Correa 1626: 120v, m. 3.

²⁶ Kastner's edition 1980–81, Vol. II: 17, measures 29–30; Correa 1626: 100, measures 7–8.

1.4.7 On Interpretation of Correa's Ornaments

In light of Correa's written explanations and his music, there are several factors that should be paid attention to in adding ornaments or executing the ones that have been written out by the composer. In the description of both his *quiebros* and *redobles*, Correa refers to the rapidity of the ornaments with the Latin words "facta velociter" that follow the explanation of the form of these ornaments. Indeed, in early Spanish keyboard music, there is a big difference in character between the two ways of making decorations, namely improvising glosas (diminutions) and adding individual adornos (ornaments). In the case of glosas, the emphasis is on their melodic content, and in slow tempos the effect often even comes close to being meditative. The different species of ornaments are "inexpressive" in comparison with glosas. The effect of adding adornos could be described as flavoring a piece with rapidly coming and going formulae, the function of which can be to mark entries of themes, for instance. Another element that offers grounds for playing adornos rapidly derives from the fact that before Correa's time practically everywhere, and in his time still (and exclusively) in Spain, the ornaments usually had a consonance on the beat. Consequently, the *redobles* of Correa have a very different character from the trills of later baroque that expressively emphasize dissonances. Moreover, following Correa's advice, the genre of the piece, the type of a keyboard instrument, the *compás* [tactus], note values and appropriate fingerings should also be observed in decorating a piece with ornaments.

Tomás de Santa María also mentions rapid execution of ornaments in describing his very special *quiebro* to be performed on *semínimas*, quarter notes. The ornament is mordent-like, and in playing it the finger that first strikes the key must not be lifted from it. Meanwhile, the finger playing the second note has to be removed from the key, sliding off it as if one were scratching. At the same time the finger that struck the first note has to press down its key a little.²⁷ (Tomás 1565: 49.) Tomás writes that the second note of the said *quiebros* has to be struck so rapidly that one almost strikes the two notes at the same time, so that it appears that one was striking a second (ibid.). According to *Fray* Tomás, there are two variants of this ornament: one for ascending and another for descending (ibid.). In other words, the lower auxiliary is used when the musical texture ascends and the upper auxiliary is used when the music descends.

The question of how abundantly one should or could ornament when performing the *tientos* of Correa is bound to be left in the end to every individual performer of these works. Studying the texts and music of the *Facultad orgánica* gives a twofold impression of the issue. On one hand, Correa's written explanations still seem to reflect the Renaissance attitude and point to a surprisingly abundant addition of ornaments. On the other hand, the partly or completely written-out ornaments and the about 220 'R' signs showing places for *redobles* in the musical part of the *Facultad* make one wonder whether it is really appropriate to add a lot of ornaments in addition to those notated or indicated by the

²⁷ It is possible that Tomás is describing here a technique which applies particularly to the clavichord. Consequently, *Fray* Tomás's "special *quiebro*" is perhaps not applicable to the organ works of Correa. Notwithstanding, both authors emphasize rapidity in the execution of ornaments in keyboard music.

composer himself. Nevertheless, the numerous and highly creative written-out ornaments of Correa can certainly be taken both as pedagogical examples and as a source of inspiration for the performer of his *tientos*.

Important questions in the interpretation of Correa's ornaments are also the rhythmical execution and the on- or off-beat nature of the ornaments. Concerning the simple *quiebro*, *quiebro senzillo*, there are neither notated examples nor written advice by Correa related to the above issues. The most likely solution is to treat the *quiebro senzillo* as a mordent, its first note played on the beat. In my opinion, it also works very well in practice to begin the ornament just a little before the beat and play it so rapidly that is is hard to tell whether the *quiebro* actually was begun before the beat or not.

Regarding the *quiebro reiterado*, *Tiento* XXIX of Correa and the preamble to it give us a hint of the rhythmic placement of the notes of this ornament. In the preamble to the *tiento*, Correa mentions that there is a *quiebro* in measures 29 and 41 (Correa 1626: 76). In both cases, Correa has written out the ornaments. Only in measure 41 is there an instance of the kind of *quiebro reiterado* that Correa describes in the theoretical part of the *Facultad*. The ornament of measure 29 appears to be an inverted version of the *quiebro reiterado*, the first notes of it going upwards. It is notable, however, that in both of the reiterated *quiebros* written out by Correa, the first three notes come before the beat (see the **Example 20** of the section about Correa's written-out ornaments).

In the same preamble to *Tiento* XXIX, Correa makes a very important remark concerning the rhythmic execution of both *quiebros* and *redobles*, stating that in *quiebros* and in *redobles* there is no determined number of notes:

Aduierto que en quiebros y redobles no ay numero determinado de figuras . . . (ibid.: 75v).

This comment implies a certain flexibility in performance, referring to the fact that one may in many cases freely add more notes to those ornaments that have been written out in the *Facultad*. Similarly, the number of notes in the four "standard" versions of ornaments that Correa describes in the *Capítulo quinto* (ibid.: 15v–16v) is likely to be exemplary rather than fixed – especially in the case of *redobles*.

In interpreting Correa's *redobles*, a good starting point is a close look at the general outline of the *redoble senzillo* and *redoble reiterado* as given by Correa in his two notated examples. Both Correa's *redoble* types can be seen to involve three parts: 1) a prefix (or a preparation); 2) repercussions of two adjacent notes (i.e., the main body of the ornament); and, 3) an ending. In the standard versions of the two types of *redobles* presented in Correa's examples, the prefix of the *redoble senzillo* consists of three notes and the one of the *redoble reiterado* of four notes:

Example 26



Redoble senzillo



Redoble reiterado

The structure of Correa's redoble senzillo and redoble reiterado

In light of the *redobles* written out by Correa in the musical part of the *Facultad orgánica*, the prefixes in the two basic variants described above fall before the beat. (As has been pointed out earlier, there are also several examples of preparations of *redobles* in the *Facultad* that are much more flourished.)

In the two basic *redobles*, the prefix is followed by a repercussion of two adjacent notes, namely, the principal note and its upper auxiliary. The consonant main note falls on the beat. After the repercussions comes a mordent-like ending of three notes. Correa himself describes this ending by writing that a *redoble* is a repercussion of two "propinquous" notes with a *quiebro senzillo* in the end:

Redoble es . . . vna repercusion de dos signos propinquos co[n] quiebro senzillo a la postre . . . (ibid.: 15v).

However, Dionisio Preciado introduces a differing view concerning the structure of Correa's *redobles* in his detailed study of Correa's ornaments, *Los quiebros y redobles en Francisco Correa de Araujo* (1973, Madrid: Editorial Alpuerto). According to Preciado, the structure of the prefixes of Correa's *redobles* could also be given an alternative interpretation. In Preciado's opinion, the number of notes in the prefix of the *redoble senzillo* can consist either of three or four notes, depending on the accentuation. If the central repercussions are ascending, the prefix results in three notes; if the repercussions are descending, the prefix consists of four notes. (Preciado 1973: 85.) In **Example 27** Preciado's four-note interpretation is cited (ibid.: 84):²⁸

Example 27

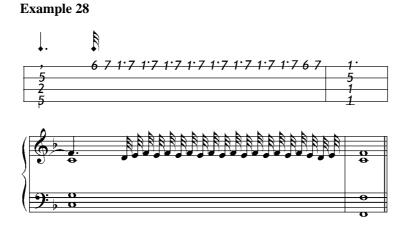


Preciado's suggestion for an alternative interpretation of the structure of *redoble senzillo* (Preciado 1973: 84)

²⁸ The cited example is the third part of Preciado's Ej. 27, namely, Ej. 27, c).

As is obvious from the above example, another consequence of the four-note interpretation is that the ending of the *redoble* changes its form as well, becoming a *quiebro reiterado* instead of a *quiebro senzillo*. Nevertheless, Correa himself does not mention such a possibility.

As a demonstration of his point, Preciado gives the *redoble* in the penultimate measure of the *Segundo tiento del sexto tono* (Correa 1626: fols. 57–59) where Correa has written out the ornament in full but has not indicated it with the 'R' sign. The mentioned ornament is presented in the following, first as written in the tablature of Correa (1626: 59) and then as a transcription to modern notation, unbeamed for the sake of demonstration:²⁹



An example of Correa's *redoble senzillo*, written out in full by the composer, in the *Segundo tiento de sexto tono* (Correa 1626: 59, meas. 3–4)

As the above example shows, the decision in favor of either the three- or the four-note prefix in this case is an interpretative solution, depending on how the accentuation within the ornament is taken to be. In light of Correa's written-out ornaments and assuming that the ornament in question really is an instance of the basic *redoble senzillo*, I consider the best solution to be to have the main note e¹ fall on the beat (the main note thus being consonant) and to consider the repercussions to be ascending. Consequently, the prefix would consist of three notes and there would be a three-note ending, a *quiebro senzillo*, in Correa's terminology. On the contrary, in Preciado's version, where f¹ is considered the main note and the repercussions are to be played with the lower auxiliary, the interval of the fourth falls on the beat and it is difficult to perceive the resolution of the fourth:³⁰

²⁹ The layout of the example is by the author of this dissertation. Preciado's version is cited below in **Example 29**.

³⁰ The cited example is Ej. 30 in Preciado's *Quiebros y Redobles en Francisco Correa de Araujo* (1973: 87). Kastner uses similar beaming in his edition of the *Facultad orgánica* (1980–81, Vol. I: 128, measures 122–123).



Preciado's interpretation of Correa's written-out example of *redoble senzillo* in the *Segundo tiento de sexto tono* (Preciado 1973: 87)

Parallel to his alternative interpretation of Correa's *redoble senzillo*, Preciado presents a version of *redoble reiterado* in which the four-note prefix of this ornament changes into a five-note prefix, the three-note ending described by Correa results in four notes, the repercussions of the main part of the ornament thus descending (Preciado 1973: 92).

I cannot agree with Preciado's interpretation of Correa's *redoble senzillo* as having a four-note preparation (nor *redoble reiterado* as having a five-note preparation). First of all, viewing the prefix of *redoble senzillo* as consisting of four notes has the consequence of making the repercussions of the main part of the ornament descend, thus turning the main note of the ornament, which falls on the beat, dissonant in most instances. Nothing in Correa's own description of the form and use of his ornaments nor the partly or fully writtenout ornaments in his compositions offers grounds for deliberately creating a dissonance on the beat in playing *redobles*, thus creating baroque-like trills out of Correa's *redobles*.

Second, Correa emphasizes carefully in his explanations of *quiebros* and *redobles* that both his *redoble* types have a *quiebro senzillo* at the end, which implies a three-note ending for *redobles*. Correa's remark is in contrast to Preciado's alternative interpretation, which changes the ending of both *redoble senzillo* and *redoble reiterado* to four rather than three notes. Third, in Correa's compositions there are numerous examples of both types of *redobles*, their preparations written out by the composer, which clearly demonstrate that the prefixes of *redobles* (three-note prefix in *redoble senzillo*, and four-note prefix in *redoble reiterado*) are to be played before the beat, and, consequently, in the main part of the ornament, the consonant note falls on the beat, the repercussions of two adjacent notes of a *redoble* ascending.

1.4.8 About the Function and Abundance of Ornaments in Early Spanish Keyboard Music

There are several important aspects to the interpretational questions concerning embellishing early Spanish keyboard music. Among these are questions of the forms, function and speed of ornaments, their on- or off-beat nature, the placing of ornaments in relation to harmonic structure, the abundance of ornaments added in performance and the degree of the performer's freedom.

It is self-evident that ornaments were added to music to decorate it and give more life to it. However, there was also another significant function associated with ornaments, namely,

their role as technical exercise. This is well demonstrated in the *Libro quarto* of Bermudo's *Declaración de instrumentos musicales* (1555, Osuna), where Bermudo emphasizes the importance of daily practice of *redobles*³¹ for those who are learning how to play:

... deuen tener los que aprienden a tañer particular licion, y exercicio cotidiano de los redobles (Bermudo 1555: lx^V).

(... those who are learning to play must have a particular lesson, and daily exercise of the *redobles*.)

Bermudo goes on to stress the importance of being able to trill (*redoblar*) equally well with all the fingers (ibid.: lxi). Naturally the kind of instructions that Bermudo gives can be seen as twofold. Regular practice of the ornaments (separately) could perfect their execution in the performance of a composition. At the same time, diligent practicing of ornaments also served as a tool for greater technical abilities in general. Thinking about the restricted dimensions of keyboards of historic organs and the limited practice hours in unheated churches, it is clear that organists could not develop adequate technical skills by any means comparable, for instance, to our scale studies or keyboard etudes of today. Therefore, there had to be other methods of achieving those facilities which could fulfill the technical demands and challenges posed by the keyboard repertory of the time.

Many primary sources consider the ability to properly execute ornaments urgent. In the same sentence where Bermudo expresses his preference for ornamenting the highest voice of a composition, he writes that well-played *redobles* embellish the music greatly:

Los redobles bien hechos en el tiple (por ser boz más alta) hermosean mucho la Música (ibid.: 60).

(The well-executed *redobles* in the soprano [being the highest voice] beautify the Music greatly.)

Similarly, Pablo Nassarre writes in the second volume of the *Escuela de Música* (1723, Zaragoza) that it is important that one know how to trill so that what is played would thus be more charming³² (Nassarre 1723: 469).

Sometimes there seems to be a tendency among modern performers to exaggerate the addition of ornaments to early Spanish keyboard music. It is noteworthy that the recommendation of the primary sources to make a lot of ornaments may also refer to the development of technical skills.

Besides the aspect of ornaments as a device of training, clearly differing opinions concerning the abundance of embellishment also existed. One trend stressed scarcity in

³¹ The word *redoble* can be interpreted here as a trill or an ornament.

³² The word *deleytable* (*deleitable* in modern orthography) used by Nassarre could also be translated as sweet, lovely or graceful.

ornamentation, another was directed towards the other extreme. Macario Santiago Kastner gives *Fray* Tomás as an example of the orientation towards over-ornamentation and calls the differences of opinion between the mentioned trends tellingly as "the antagonism between the Dionysian and the Apollonian" (Kastner 1987: 38).

In addition to the main trends, every single composer had his own personal style and individual preferences. National tastes, as well as the preferences during different periods of time (compare with the trends and styles in architecture or clothing, for instance), must also be taken into consideration as influencing ornamentation. On the whole, embellishing music was a flexible and highly varied art which contained a vast richness of conventions and attitudes.

2 Fingerings, Touch, and Playing Position

2.1 The Motivation to Study Early Fingerings

One of the numerous questions that a modern performer has to confront is the study of early fingerings. Should we bother to do it, and if we do, what can we get out of it? In the end, the decision remains a personal choice, but in our search for answers we can approach the issue from several different perspectives.

In discussing the hand position, touch, and fingering of the Spanish Renaissance keyboard music, Charles Jacobs writes that "The importance of our studying these matters is manifest: much is revealed about the phrasing and digital expressivity characteristic of the keyboard performers of the time" (Jacobs 1962: 211). Macario Santiago Kastner, too, is in favor of studying early fingerings, observing that "whether we choose to employ these fingerings or not, we cannot ignore them, for they illuminate problems of articulation and phrasing" (Kastner 1987: 10–11). However, Kastner himself had adopted the stand that it is not indispensable to today's interpretations to apply early fingerings (ibid.: 10). According to him: "It is almost impossible to play fluently and without preoccupation while maintaining fingerings which are no longer natural to us" (ibid.). Barbara Hoag presents a similar opinion in her dissertation, writing that "one does not have to use the historical fingerings in performance to maintain authenticity. An equally valid approach is to try them out long enough to teach the ear and the understanding, and then to adapt modern keyboard technique to produce the same result" (Hoag 1980: 222). Kastner likewise advocates studying early fingerings in depth "in order to reproduce their effects and virtues with modern methods of fingering" (Kastner 1987: 11).

I agree with Jacobs and Kastner in that it is good to be aware of the early ways of fingering and other playing technique. Nevertheless, I cannot understand why we could not learn to "play fluently and without preoccupation" (ibid.: 10) with early fingerings when playing repertoire of that era, especially if we are aiming "to produce the same result" (Hoag 1980: 222). I would also be very cautious in using the word 'authenticity' in this context, with the intention of even theoretically being able to "reproduce" or "reconstruct" the early

keyboard playing as such – for the sheer reason that such a project is bound to be a mission impossible. As John Whiteside has aptly expressed it, the ethos that produced the rules and interpretive guides of previous centuries can never be duplicated (Whiteside 1994: 166). However, this is not a reason for us not to try out the early fingerings, thus attempting to learn something more about the essence of early Spanish music, keeping in mind, too, that a great portion – though not all – of the written advice on fingerings was directed to beginners, and that the historic Spanish organs differ both in compass³³ and several other characteristics special to their keyboards, in respect to modern instruments.

2.2 Observations About Early Spanish Fingerings

Compared with England, France, German and Italy, Spain supplies us with the largest quantity of written information on keyboard music. There is a notable similarity between the early German and Italian fingerings. Likewise, the English, French and Spanish fingerings share many characteristics. Thus far, the connections between the Spanish and English keyboard schools have not been sufficiently studied. Nevertheless, one of the pioneers of this work, Macario Santiago Kastner, has considered it possible that "Spanish fingerings were introduced to England during the visit of Philip II to the English court in 1554-1556" (quoted in Rodgers 1971: 168). Kastner also recommends studying the annotated fingerings in works of the English virginalists and J.P.Sweelinck "because these correspond to the Iberian system" (Kastner 1987: 16). There are no fingerings found in the early Spanish keyboard music itself. In the cases of the collections of Antonio de Cabezón, Luis Venegas de Henestrosa and Francisco Correa de Arauxo, the reason is most obvious. The fingerings written to the keyboard tablature consisting mostly of numbers would have been confusing. Musical examples associated with fingerings are given by two Spanish writers, Fray Tomás and Correa. However, Fr. Tomás does not always clearly explain his examples, which he has left unfingered.

The Spaniards were the first to number the fingers as we do today. This system "was not adopted elsewhere until the middle of the seventeenth century" (Parkins 1983: 323), with the exception of Girolamo Diruta. The Spanish keyboardists were also the first to use the thumb extensively. It is notable, too, that only the early Spanish sources give fingerings for the short octave. The tradition of vihuelists strongly influenced the Spanish keyboard music around the middle of the sixteenth century, when the Spanish systems of fingering had already reached a marked stage of development. This development was in connection with the evolution of the independent keyboard repertoire. New kinds of chordal positions, for instance, required and thus produced new fingerings.

The early Spanish sources for fingerings involve numerous examples of the already mentioned ample use of the thumb. As Kastner phrases it: ". . . , unlike those in other parts

³³ A typical compass (although examples also existed of other kinds of compasses) of the Spanish organs in Correa's time was a range of 42 keys $(C-a^2)$, the lowest octave commonly being a short octave.

of Europe, the sagacious Iberian keyboard players never excluded the use of the thumbs" (Kastner 1987: 2). The relatively free use of the thumb is particularly noteworthy in the fingering of scales for both hands. The thumb was used especially for rapid runs. To give an example, Juan Bermudo gave the fingering consisting of repeated groups of 1234 for ascending and descending scales in both hands, which fingering is recommended for the left hand by five out of six Spanish authors between 1555 and 1723. The rather frequent symmetrical approach to both hands is reflected especially in some scale fingerings, the left-hand fingering often being the reverse of the right-hand fingering, generally speaking. Bermudo's above-mentioned repeated groups of 1234 for ascending and descending scales of both hands, Tomás's ascending left-hand fingering 54321 321 plus the equivalent descending right-hand fingering, and Correa's descending, paired left-hand fingering 34343434 and the equivalent ascending right-hand fingering are some cases in point.

Another issue is the actual technique of playing with the thumbs. Rodgers concludes, referring to the publication date of Venegas's Libro de cifra nueva (1557), that "the practice of crossing the third (or fourth) finger over the thumb was probably current at least as early as the 1550's," writing further: "However, the thumb passing under the hand is not mentioned in any of the sources" (Rodgers 1971: 93); and: "During this period, the thumbunder technique was probably not used to any great extent" (ibid.). Hoag, for one, observes that one of Correa's left-hand fingerings "is the first that entails passing the thumb under rather than crossing a finger over," adding that "It is not an entirely new idea, however, for Bermudo gives among his fingerings 4321 for each hand in either direction" (Hoag 1980: 217). In other words, in the case of Bermudo's scale fingerings, one could use the crossing-over technique in playing the 'inward scales' (i.e., left hand ascending and right hand descending), and the passing-under technique in playing the 'outward scales' (i.e., left hand descending and right hand ascending). ³⁵ However, it is highly probable that the most common (if not only) playing technique of scales still consisted mainly of shifting the hand repeatedly to a new position rather than employing the crossing-over or passingunder technique. One additional aspect to keep in mind while studying the early Spanish sources on scale fingerings is that sometimes the authors give their fingerings in strictly numerical order, beginning from the lowest number. The finger which is given first is thus not necessarily the finger which begins the scale.

The important concept of "principal fingers" in Spanish sources means those fingers which begin and end the ornaments, the *redobles* and *quiebros*. In this respect, the principal fingers are ordinarily the third finger of the right hand and the second and third fingers of the left hand. These fingers "usually – but not always – fall on the notes in a metrically

³⁴ The sources in point are Juan Bermudo's *Declaración de instrumentos musicales* (Osuna, 1555), Luis Venegas de Henestrosa's *Libro de cifra nueva para tecla, harpa, y vihuela* (Alcalá, 1557), *Fray* Tomás's *Arte de tañer fantasía* (Valladolid, 1565), Hernando de Cabezón's preface to the collection of his father's works in *Obras de música para tecla, arpa y vihuela* (Madrid, 1578), Francisco Correa's *Facultad orgánica* (Alcalá, 1626), and Pablo Nassarre's *Escuela de música* (Zaragoza, 1723–1724).

³⁵ The helpful terms of 'inward' and 'outward' scales have been used by Robert Parkins (1983: 324).

strong position" (Rodgers 1971: 89), a practice which touches Diruta's famous principle of good and bad fingers, without being identical to it, however.

Besides the already-mentioned issues, the early Spanish sources on fingerings place a special emphasis on four things. First, one should always pay attention to the context when making a fingering for any interval, chord, scale passage or the like. Second, one ought to use adjacent fingers on adjacent notes, especially in fast passages as a rule. Third, whenever possible, one should leave free the hand which plays *glosas*. Fourth, it is impossible to give rules for every kind of fingering.

2.3 Playing Position

Francisco Correa de Arauxo, like most of the earlier Spanish authors, does not write about the playing position. *Fray* Tomás's *Arte de tañer fantasía* thus remains the principal Spanish source containing such information. Among his eight well-known conditions for playing with perfection and beauty, *Fr.* Tomás gives both general remarks on arm, hand and finger position and also more specific recommendations on the hand and finger positions, some of which will be taken up here.

According to *Fr.* Tomás, one's hands should be "hooked" (not curved), the knuckles sunken, the fingers higher than the hand, the fingers drawn in so that the hands resemble "the paws of a cat" (Tomás 1565: 37). The second, third, and fourth fingers of each hand should always move on the keys, whether they are striking the keys or not (ibid.: 37r–v).

Tomás de Santa María asks one to strike the keys with "the fleshy part" of the fingers, meaning the pads of the fingers. One should also strike the keys strongly, or firmly. (Ibid.: 37v.) Moreover, both hands ought to strike the keys with equal force and together, at the same time (this naturally applying to voices, which should be struck simultaneously in a texture of several voices). Fingers should be held close to the keys. They should neither strike the keys very much above nor be raised much after having struck the keys. In addition, the fingers should move straight down when striking the keys. (Ibid.: 37v–38.) *Fr.* Tomás clarifies in his text that the minimizing of finger movements in striking the keys serves two important ends. First of all, the excessive sounding of the keys is avoided, and second, the voices of the music maintain their proper value. (Ibid.: 38.)

According to Fr. Tomás, only the fingers, not the palms, are raised when striking the keys. Both white and black keys ought to be played at their [outer] ends. The keys of the clavichord should be struck in such a way that the proper pitches of notes are maintained. In regard to other keyboard instruments, the keys are to be pressed so that they go down until they are aligned with the cloth which is under the keys. (Ibid.: 38.)

Tomás de Santa María considers it necessary for good playing that one's arms, from the elbows to the shoulders, move aligned to the body, but without applying any force. However, if one plays long ascending runs of *corcheas* and *semicorcheas* with the left hand, one has to separate the [left] elbow from the body. The same applies to the right

elbow when one plays long descending runs of *corcheas* and *semicorcheas* with the right hand. (Ibid.: 37v.) One should also incline one's hand a little towards the direction of the run, mainly in playing *corcheas* or *semicorcheas* (ibid.: 38v). It is difficult to know to what extent Fr. Tomás's advice on playing technique should (or could) be applied to the playing of Correa's works. Nevertheless, Fr. Tomás's recommendations may have relevance to playing the repertoire of Correa's time – keeping in mind that Fr. Tomás's instructions are directed partly to the playing of the clavichord, in particular.

2.4 The Keyboard Player's Touch as Described by Fr. Tomás and Correa

In addition to the sound playing position and the ability to make good fingerings, the keyboard player's touch is by far one of the most important assets on the way to a successful and refined performance. Above all, clarity was wanted. Tomás de Santa María included playing "with cleanness and distinction" among his eight conditions for good keyboard playing (Tomás 1565: 36v). Correa also asks for "power, touch, velocity, and clarity" in playing *glosas* (Correa 1626: 17v, textual part).

Although both *Fr.* Tomás and Correa demand clarity in keyboard playing, their descriptions of good touch appear to be in contradiction with each other at first glance. *Fray* Tomás writes:

Qvanto al tañer con limpieza y distinction de bozes . . . para esto se requieren dos cosas. La primera y principal, es que al herir de los dedos en las teclas, siempre el dedo q[ue] hiriere primero se leuante antes que hiera el otro que immediatamente se siguiere tras el, assi al subir como al baxar, . . . (Tomás 1565: 38v).

(When it comes to playing with cleanness and distinction of voices . . . for this two things are required. The first and principal is that on striking the keys with the fingers, always the finger which strikes first is lifted before another strikes, which follows immediately after it, both in ascending and in descending,)

On the other hand, Francisco Correa de Arauxo writes that to play polyphony skillfully one has to:

... que sepa acomodar los dedos y manos, da[n]do las posturas necessarias ... todo a fin de no leuantar el numero antecedente, hasta que le siga el subsequente en la misma raya ... (Correa 1626: 24v–25).

(... one must know how to accommodate the fingers and hands, giving [them] the necessary positions ... all to the end of not raising the preceding number [of *cifra*, i.e., a note], until it is followed by the subsequent number in the same line [of *cifra*])

^{36 &}quot;Fuerça, toque, velocidad, y limpieza."

These two Spanish descriptions of good keyboard touch have been a starting point for numerous ponderings among scholars and performing artists. Writing about the Iberian keyboard music of the seventeenth century, Barbara Hoag observes that "The basic touch used by keyboard players was slightly detaché," citing the above-mentioned words of *Fr.* Tomás and commenting that "Correa seems to describe something different" (Hoag 1980: 212). Hoag concludes, however, that from the context of Correa's statements, "it seems clear that Correa is primarily concerned with the integrity of each vocal line" (ibid.: 212–13). Kastner, for one, writes that: "As a starting point some keyboard players employed a rather loose legato, almost a non-legato" (Kastner 1987: 7), and: "On the other hand, Francisco Correa de Arauxo recommends . . ." (citing Correa's words presented above), concluding that: "As can be seen, Correa de Arauxo was inclined to prefer the legato" (ibid.: 8–9).

It is true that Correa's above-cited words can easily lead one to the conclusion that at least a legato-like touch was in favor in his time, as Robert Parkins remarks in writing: "But many have assumed that, unless otherwise specified, a continuous legato constitutes the 'normal' keyboard touch, even at the pre-18th-century keyboard" (Parkins 1983: 330).

I tend to agree with Hoag that Correa's words may indeed point to the preoccupation of his, conveyed clearly by several statements in the *Facultad orgánica*, of maintaining the integrity of different voice parts. In addition, I see that Correa may also be referring to careful playing in general, observance of maintaining the proper values of notes. Besides, I consider it possible that Correa may be pointing to a "singing" way of playing, which does not necesssarily equal playing in legato. It is hard to believe that Correa, who is such an advocate of clear playing, would be recommending any manner of playing which would end up in an unhappy mess of themes and voices, as easily results in the acoustical conditions of the Spanish cathedrals.

Furthermore, the descriptions of keyboard touch in early Spanish sources are certainly often connected to the fretting system of the clavichord, which appeared to be the most important practice instrument of the organists. Between the three or four voices belonging to the same choir, it was necessary to have at least a minor separation. Kastner goes as far as to state that "Keyboard touch on the organ was the same as on stringed keyboard instruments" (Kastner 1987: 1).

2.5 Fingerings and Articulation

As has already been discussed in the previous chapter, the Spanish writers regarded "cleanness, clarity and spirit" as the first priority of a good keyboard touch. Consequently, the basic touch must have been detaché in varying degrees. To have a good and controlled touch naturally presumes sound systems of fingerings, which are, for one thing, in close relation to articulation. The relation between fingerings and articulation is not as clear-cut a matter as it first appears to be. Particularly dangerous is the surprisingly common idea that a certain kind of fingering automatically produces a certain kind of articulation.

Even Kastner begins the chapter on fingerings and articulation in his *The Interpretation* of 16th- and 17th-Century Iberian Keyboard Music with a somewhat ambiguous statement that "Articulation is an offspring of fingering" (Kastner 1987: 7). There is some room for interpretation as to whether he means that fingerings are means for articulation or whether they inescapably produce some particular articulation. His words in the same chapter a few pages later incline one to think that he indeed was in favor of the latter view, when he writes: "In conclusion, fingerings lead to articulations; these in turn constitute the body and soul of all music" (ibid.: 16).

An example of the view that fingerings lead to a certain type of articulation is the case of the paired fingerings, which were common in the 16th- and 17th-century Spanish keyboard music. Many performers and writers seem to think that this type of fingering generated a specific articulation. For instance: "... there must have been a strong tendency towards pairing successive pitches as a result" (Hoag 1980: 216); "One may suspect that the custom of pairing fingerings in this way may have contributed in large measure to the popularity of the device of *notes inégales*" (ibid.: 222), and: "... there is reason to believe that certain alterations of rhythmic values introduced in *glosa* patterns of eighth or sixteenth notes originated in the consecutive crossing of two fingers (one strong, one weak, or viceversa) leading to popular accentuations ..." (Kastner 1987: 12). Certainly there is some truth in the views presented above. What should be kept in mind, though, is that fingerings do *not necessarily* produce a definite articulation, although certain fingerings may help in generating certain kinds of articulations.

Needless to say, it is impossible to give any rules covering even sketchily the vast field of musical articulation – whether in playing early Spanish keyboard music or any other repertoire. In regard to early Spanish organ music, however, I find very helpful Kastner's notion of the close relationship between articulation of wind players and keyboardists in 16th- and 17th-century Spain: "In that period the organ was an imitator of wind instruments" (ibid.: 7). He adds that: "On the clavichord and harpsichord too, the musical practices customary on wind, bowed or plucked instruments (harp, lute or vihuela), or in song, were also imitated" (ibid.). One example of the reflection of wind players' articulation in keyboard playing is a convention which Kastner calls "principals of anacrustic respiration." This means that usually one should have a slight separation between notes, which are repeated twice, or alternatively, repeated at the octave, because the repeated notes commonly indicate a beginning of a new musical phrase. (Ibid.: 18.) And indeed, thinking, for instance, of the pieces of *medio registro* as suggesting the playing style of wind players offers new grounds for today's interpretations of these original pieces. It is also plausible that a strong relationship existed between the plucked instruments – such as the harp and vihuela – and the organ, for example. The very titles of keyboard music collections of the time reflect the interaction between these instruments. Cases in point are collections such as Venegas de Henestrosa's Libro de cifra nueva para tecla, harpa y vihuela, or Antonio de Cabezón's Obras de música para tecla, arpa, y vihuela. One possible interpretation of the meaning of the special manner of playing which Correa called ayrezillo (or ayrezillo) is the treatment

of it as a special case of articulation (see Holland 1985: 85–86, for example). *Ayrezillo* is discussed in *Chapter VI*, 4.2 of this dissertation.

2.6 Correa's Instructions on Fingering

Correa deals with fingering extensively in the second main chapter of his *Facultad orgánica*, subtitled *SIGVESE EL ARTE DE PONER POR CIFRA*. Most of this section is divided into *capítulos*, seven of which focus on fingering. Beginning with the fourth *capítulo*, he turns to fingering. (The first three chapters concentrate on how to read *cifra*.)

Correa approaches his subject from several different points of view. In *Capítulo quarto*, he numbers the fingers and then discusses which should be chosen to play a work in which one voice enters alone. In *Capítulo quinto* Correa explains how to finger ornaments. In *Capítulo sexto* and *Capítulo sétimo*, he gives recommendations on how to divide the voices of a composition between the right and left hands, especially when one of the voices is playing *glosas*. *Capítulo otavo* focuses on fingering intervals, and *Capítulo noveno* on fingering chords, while the final chapter, *Capítulo décimo*, is devoted entirely to scale fingerings. Most of the *capítulos* include some notated examples that illustrate Correa's points. In the musical part of the *Facultad orgánica*, however, there are no fingerings indicated – for the obvious reason that the numbers for fingerings would get confused with the numbers of the *cifra* tablature.

2.7 Numbering of Fingers And How to Begin Playing a Work When One Voice Enters Alone

Correa numbers the fingers of both the left and the right hand as we do today, beginning from the thumb, which is number one, and ending with the little finger, numbered five (Correa 1626: 15). The same system was also used by Juan Bermudo, Venegas de Henestrosa, *Fray* Tomás, H. de Cabezón and Pablo Nassarre.

After numbering the fingers, Correa explains how to play a work if one voice enters alone at its opening. When the entering voice is a soprano, Correa recommends beginning with the third finger of the right hand and making a *quiebro* or a *redoble*. If it is the bass voice that enters, one should begin with the second finger of the left hand and likewise make a *quiebro* or a *redoble*.³⁷

In the case of a tenor voice entrance, one plays with the second finger of the left hand (ibid.) or the third finger of the right hand (ibid.: 15v). The left hand is used when the tenor is followed by a higher voice, and the right hand is used when the tenor is followed by a lower voice. In both cases, one should apply a *quiebro* or a *redoble* to the beginning of the

³⁷ Towards the end of *Capítulo quinto*, Correa clarifies that when one voice enters alone at the beginning of a work, one should make a *quiebro* when playing the organ and a *redoble* when playing the *monacordio*.

voice entrance. Similarly, if the alto enters alone and is followed by a higher voice, it is to be played with the second finger of the left hand. If the alto is followed by a lower voice, it is to be played with the third finger of the right hand. In these cases, one should add a *quiebro* or a *redoble* to the beginning of the voice entrance. (Ibid.) Correa's recommendations are summarized in the following table:

Table 2. Correa's recommendations on how to begin playing a work when one voice enters alone

Voice that begins	Hand	Finger	Observations
soprano	right	3	Make a quiebro or a redoble.38
alto	right	3	Begin with the right hand if the second voice which enter is lower than the alto. Make a <i>quiebro</i> or a <i>redoble</i> .
alto	left	2	Begin with the left hand if the second voice which enters is higher than the alto. Make a <i>quiebro</i> or a <i>redoble</i> .
tenor	right	3	Begin with the right hand if the second voice which enters is lower than the tenor. Make a <i>quiebro</i> or a <i>redoble</i> .
tenor	left	2	Begin with the left hand if the second voice which enters is higher than the tenor. Make a <i>quiebro</i> or a <i>redoble</i> .
bass	left	2	Make a <i>quiebro</i> or a <i>redoble</i> .

2.8 Fingering of Ornaments

In the *Capítulo quinto* (Correa 1626: 15v–16v), Correa describes four kinds of ornaments and explains where these ornaments can be used and how they should be fingered. (For the forms and uses of these ornaments, see *Chapter VI*, 1.4 Adornos [Ornaments].)

Correa writes that a simple *quiebro*, *quiebro senzillo*, is made with the third and second fingers of the right hand, finishing with the third finger (ibid.: 15v), or with the second and third fingers of the left hand, finishing with the second finger (ibid.: 16):³⁹

Example 30



Correa's fingering for the quiebro senzillo

³⁸ The ornaments described by Correa are discussed in the next chapter and in *Chapter VI*, 1.4. *Adornos (Ornaments)*.

³⁹ Note values in the following example are arbitrary and not Correa's.

Tomás mentions the same ornament (Tomás 1565: 48v), which in his vocabulary is the quiebro de semínimas. He gives fingerings for a quiebro with either the upper or the lower auxiliary. Tomás includes one fingering for both hands of the lower auxiliary version, two alternative fingerings for the left hand, and one fingering for the right hand for the upper auxiliary version (ibid.: 48v-49). Hernando de Cabezón, likewise, gives two fingerings for both the right and the left hand, though for a quiebro with the upper auxiliary only: the third and fourth or the second and third fingers of the right hand, and the third and second or the second and first fingers of the left hand (H. de Cabezón 1578: 6). 40 Furthermore, Pablo Nassarre presents fingerings for the same ornament, which he calls *aleado*. Nassarre's fingerings are for an ornament with either the upper or lower auxiliary, the upper auxiliary version receiving the fingering of the third and fourth fingers of the right hand and the second and first fingers of the left hand. Nassarre's lower auxiliary version of aleado is played with the third and second fingers of the right hand and the second and third fingers of the left hand. (Nassarre 1723: 470.) Nassarre's fingerings for the upper auxiliary version correspond to one of the two alternatives of H. de Cabezón's fingerings for this ornament, and the fingerings for the lower auxiliary version to Correa's fingerings. In brief, Correa's quiebro senzillo (with the lower auxiliary) receives the same fingering by Tomás, Correa and Nassarre. The version with the upper auxiliary is fingered similarly by Tomás, H. de Cabezón and Nassarre, as can be seen in the following table:

Table 3. A comparative table of fingerings given by *Fray* Tomás, H. de Cabezón, Correa and Nassarre for an ornament, which Correa calls a *quiebro senzillo*

Fray Tomás	quiebro de semínimas	3 2 3 2 3 2	3 4 3 2 1 2 3 2 3
H. de Cabezón	quiebro		3 4 3 2 3 2 2 1 2 3 2 3
Correa	quiebro senzillo	3 2 3 2 2 3 2	
Nassarre	aleado	3 2 3 2 2 3 2	3 4 3

Correa's second type of *quiebro*, *quiebro reiterado*, is played with the second, third and fourth fingers of the right hand, beginning with the fourth (1626: 15v) and with the first, second and third fingers of the left hand, beginning with the first (ibid.: 16):⁴¹

⁴⁰ Reference is made to the sixth folio of the chapter *DECLARACION DE la cifra que en este libro se vsa*. The number of this particular folio is missing from the *Obras de música* exemplar housed at the British Library.

⁴¹ The note values chosen for this example are based on the written-out *quiebros* of Correa's *tientos*.

Example 31



Correa's fingering for the quiebro reiterado

Tomás also describes a similar ornament, which he calls *quiebro de mínimas* (Tomás 1565: 47v). Tomás writes that this particular ornament should be executed with the same right-and left-hand fingerings as the *redoble* (ibid.: 48). For the right hand, the second, third and fourth fingers are given (ibid.: 47v) and for the left hand, either the first, second and third or the second, third and fourth fingers (ibid.: 48). Correa's fingerings are similar except that he does not mention the above second alternative for the left hand.

Regarding longer ornaments than his *quiebros*, Correa recommends that the *redoble senzillo* be played with the second, third and fourth fingers of the right hand (Correa 1626: 15v) and with the third, second and first fingers of the left (ibid.: 16). Both the right- and left-hand fingerings for another kind of *redoble*, the *redoble reiterado*, are identical to the fingering of the *redoble senzillo*, except that one starts the reiterated *redoble* with the thumb of the right or with the fourth finger of the left hand (ibid.).⁴²

Example 32



Correa's fingering for the redoble senzillo

Example 33



Correa's fingering for the redoble reiterado

With respect to the other Spanish sources dealing with fingerings, Venegas de Henestrosa comes closest in describing a left-hand *quiebro* that resembles Correa's *redoble senzillo*. Venegas describes his ornament by explaining that in the left hand, one has to start playing with the third finger, continuing to the thumb, and then alternating with the second and the first (fingers):

⁴² The dashes seen in the following examples are borrowed from Correa's original notation and signify a rest. Correa did not write fingerings in his notated examples. The reason for this is obvious: Correa used number tablature to which the finger numbers would be difficult to apply.

El quiebro de la mano yzquierda se ha de començar con el tercero dedo, y llegar hasta el pulgar: y luego quedarse quebrando co[n] el segundo y primero, . . . (Venegas 1557, the eighth folio, the title page counting as one). 43

Correa's *redoble senzillo* and its fingering differ from Venegas's left hand *quiebro* only in that Correa's ornament has a mordent, a *quiebro senzillo*, at the end of it (Correa 1626: 15v).

2.9 How to Divide Voices Between Hands

Capítulo sexto and Capítulo sétimo deal with how one should divide voices between the right and the left hand in works with textures as dense as four voices. In a two-voice texture one voice is played by each hand. If three voices enter simultaneously, it is most common to play the two lower voices with the left and the highest voice with the right hand in order to leave the highest voice free for ornamentation. This order is meant for such cases where either the three voices involved are the lowest (i.e., alto, tenor and bass), or when the soprano voice and the voices next to it have a great range between them. However, Correa writes that if the soprano and alto are close to each other, it is also possible to play the two highest voices with the right hand in a three-voice texture. In a four-voice texture, one usually plays two voices with each hand, except for some cases that Correa specifies after his general rules about the matter. (Correa 1626: 16v.)

The three lower voices of a four-voice texture are to be played with the left hand if all the voices are within a range of one octave (or sometimes of a tenth). This is the case only when none of the four voices is tied to the following bar. (Ibid.)

If four voices are within a range of a twelfth, then two voices must be played with each hand. The same is true when the range of the extreme voices is a fifteenth or more – unless the distance between either the two highest voices or the two lowest voices exceeds an octave. (Ibid.: 17.)

Further, Correa lists situations when one of the four voices is involved in ornamentation. First of all, if the tenor voice makes an unornamented cadence (*cláusula llana*) in a four-voice texture, it is necessary to execute a *redoble*. For this, two voices have to be played by each hand (even if all the four voices were within a range of an octave). The same is true when the tenor voice has a cadence with a diminution (*cláusula glosada*). (Ibid.)⁴⁴

Correa emphasizes that when one of the four voices is performing *glosas*, such a voice is to be played alone with one hand and the other hand should play the other three voices (ibid.: 17v). Correa explains further that, always when possible, the hand which plays

⁴³ In the exemplar of the *Libro de cifra nueva* (1557) by Venegas de Henestrosa, nowadays in the Biblioteca Nacional of Spain (call number R.6497), this folio has been numbered erroneously as folio three. It is possible that the R.6497 is the only surviving exemplar of the *Libro de cifra nueva*.

⁴⁴ Correa gives notated examples for all the special instances described above. These examples are not produced here because the meaning of the rules presented is clearly conveyed by Correa's text.

diminutions should be left free, "in order to form the *glosa* better and with more power, touch, velocity and clarity":

... siempre que pudiere ser, se a de dexar libre la mano que glosa, para que mejor, y con mas fuerça, toque, velocidad, y limpieza, forme la glosa (ibid.).

In the same paragraph, Correa writes that *glosas* mean eighth or sixteenth notes, sesquialteras or sometimes – although rarely – quarter notes (ibid.).

With respect to Correa's basic rules, it is clear that when the highest or lowest voice performs *glosas*, this voice is to be played by one hand alone. In the case of the freely ornamented alto voice, the soprano is played with the fifth finger of the right hand and the *glosa* with the free fingers of the same hand (ibid.). In the case of the glossing tenor voice, the bass is played with the fifth finger of the left hand and the *glosa* is executed with the free fingers of the same hand. The ornamenting voice can also be helped out with the thumb or the index finger of the other hand if necessary. (Ibid.: 18.) According to Correa, such cases where one "is missing a finger" arise quite often (ibid.: 17v).

2.10 Fingering Intervals

Capítulo otavo focuses on fingering intervals from the unison to the tenth. Correa distinguishes three orders of fingering intervals that I shall briefly describe in detail. The first order is to be used whenever there is no particular reason to use other orders of fingering. The second order is to be used, according to Correa, in four specific situations:

1) when one has to execute a *quiebro* or a *redoble*; 2) when one of the two fingers playing an interval has to jump to another note while the other remains still; 3) when the hand which gives the mentioned positions (i.e., intervals) is involved in playing *glosas* when one of the fingers has to remain still; and 4) when the player must avoid playing two different keys with the same finger. (Correa 1626: 19.)

Moreover, Correa gives a third order of fingering intervals. This order is "less [frequently] used but also possible" (ibid.: 19v). Correa points out that the third order of fingering is for those players who are no longer beginners and who are already licensed to master any organ in any serious parish. These organists can use "other fingers" on such occasions where the difficulty of the music demands it. (Ibid.)

2.10.1 Correa's First Order of Fingering Intervals

According to the first and most common order of fingering intervals, no particular fingers are required to play unisons. However, Correa refers here to his earlier explanations of "how to begin and continue playing a work" where he discusses the fingering of individual voices. For the interval of a second, Correa's instructions are clear. It should usually be played with the third and fourth fingers of the right hand. This fingering concerns voices

sounded simultaneously as well as seconds involved in a cadence formed by the two upper voices. The similar situation in the left hand should be played with the fourth and second or the second and first fingers. (Correa 1626: 18v.)

There is only one fingering suggested for each of the intervals of a third, fourth and fifth. The third and fourth should be played with the second and fourth fingers of both hands. The fifth should be played with the second and fifth fingers of the right and with the first and fourth fingers of the left hand. The fingering of the sixth is similar to that of the fifth except when the upper note of the sixth falls on a black key. In such a case the sixth should be played with the first and fourth fingers of the right hand and with the second and fifth fingers of the left hand. The seventh, octave, ninth and tenth should all be played with the first and fifth fingers of either hand. (Ibid.: 18v–19.)

2.10.2 Correa's Second Order of Fingering Intervals

As already mentioned, Correa's second order of fingering intervals is meant to be used when something prevents the use of the more ordinary, first order. Correa gives these alternative fingerings for the intervals of a second, third, fourth, fifth, sixth, seventh and an octave. No fingering is given for the unison or for intervals larger than an octave.

The second should be played with the second and third fingers of either hand. Both the third and fourth are to be played with the first and third fingers of the right hand or the second and first fingers of the left hand. Intervals of the fifth and the sixth also share the same fingering: these intervals are played with the first and fourth fingers of the right hand or with the second and fifth fingers of the left. The seventh and the octave should be played with the first and fourth fingers of either hand. (Correa 1626: 18v–19v.) Correa specifies, however, that playing an octave with the above fingering requires a particular reason, and he refers to what he has written earlier in the same chapter (ibid.: 19v). See **Table 4** (on page 204) for a comparison of Correa's first and second order of fingering intervals.

2.10.3 Correa's Third Order of Fingering Intervals

Correa's third order of fingering is directed to advanced players. The author of the *Facultad* has decided to offer only one general rule about the matter and leave the further application of the advanced fingering to his readers. Correa's basic rule is, in all its brevity, that one may on special occasions, and particularly in *glosa*, play all or at least most of the previously mentioned "postures" with the same two fingers (i.e., the first and second) (Correa 1626: 19v). Although Correa writes about "all the said postures," by which he refers specifically to the playing of intervals, the largest interval to which Correa applies his third order is the sixth.

Correa illustrates his point by giving eleven brief examples notated by *cifra*. Before each example there is an explanation of what will be demonstrated. The examples themselves have been furnished with little hands⁴⁵ that show the intervals to which his third order

⁴⁵ Correa calls these little hands or pointers *índice* or *manezilla* (see, for instance, f. 19v).

of fingerings should be applied. See **Example 34** for a transcription of Correa's notated examples into modern notation. Under each example is Correa's description of the content of the demonstration to follow.⁴⁶

Table 4. Correa's first and second order of fingering intervals

First order			Second order			
Interval	Left hand Right hand		Interval	Left hand	Right hand	
second	1 or 2 2 or 4	4 3	second	2 3	3 2	
third	2 4	4 2	third	1 2	3 1	
fourth	2 4	4 2	fourth	1 2	3	
fifth	1 4	5 2	fifth	2 5	4 1	
sixth	Like the fifth except when the upper voice is played on a black key, in which case the following fingering is applied:		sixth	2 5	4	
	2 5	4				
seventh, octave, ninth and tenth	1 5	5 1	seventh and octave	1 4	4 1	



The second with the right hand is played with the first and second fingers (supposing that the unison of the soprano is played with the thumb of the right hand)⁴⁷

⁴⁶ The descriptions of the notated examples are found *above* the examples in the original edition.

⁴⁷ The fourth-to-last note in the soprano (e^1) of the second full measure has been erroneously written as g^1 in Holland's transcription of Correa's examples (Holland 1985: 237).

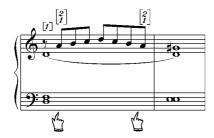


Example of a third with the right hand, played with the first and second fingers, on the first note of *glosa* of the soprano

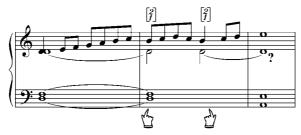
Another example



Example of a fourth with the right hand, played with the first and second fingers, on the first note of *glosa* of the soprano, in respect to the alto



Example of a fifth with the right hand, played with the first and second fingers, on the first note of *glosa* of the soprano, in respect to the alto



Example of a sixth with the right hand, played with the first and second fingers, at the upbeat of the second measure, with the soprano and the contralto



Example of a second with the left hand, played with the first and second fingers, on the second quarter note of the first measure, between the tenor and bass, beginning with the thumb



Example of a third with the left hand, played with the first and second fingers, on the second and fifth eighth notes of the bass⁴⁸



Example of a fourth with the left hand, played with the first and second fingers, between the tenor and bass, on the first note, which is a "seven with a stroke".



Example of a fifth with the left hand, played with the first and second fingers, on the fifth and eighth eighth notes, between the bass and tenor, beginning the *glosa* with the little finger of the said hand

⁴⁸ The second note (a¹) of the soprano is missing in Holland (1985: 241) because he considers this note a probable printing error.

⁴⁹ A "seven with a stroke" (e) refers to the *cifra* notation where notes are presented as numbers, and strokes, dots, or commas added to notes indicate different registers. There is a tie missing between the two e¹ of the alto in Holland's transcription of Correa's examples (1985: 241).



Example of a sixth of the said [left] hand and [the first and second] fingers, on the upbeat of the measure (having begun the second eighth note of the bass with the second finger), interchanging ⁵⁰ the fingers, and playing the mentioned note with the second finger

After these examples, Correa remarks at the end of the *Capítulo otavo* that certain difficult situations might emerge – for instance, when the interval of a second should be played with the first and second fingers or the first and third or the first and fourth or even the first and fifth fingers of the right hand. This fingering occurs when the first finger is held still or sometimes when the two voices are struck simultaneously. One can also give the same consonances, or intervals, with the same fingers of the left hand, or a few [consonances] less. Similarly, when the fifth finger remains still, it might be necessary to play "the said intervals, or consonances," with the fifth and fourth fingers or with the fifth and third or the fifth and second or the fifth and first fingers of either hand. (Ibid.: 21.)

At the end of *Capítulo otavo*, Correa assures the reader that all these hand postures plus others are learnt by long and continuous study by which any difficulties can be conquered:

Todas las quales [posturas] y otras muchas, . . . las a de enseñar el co[n]tinuo y largo estudio, que es el que vence estas y otras mayores dificultades (ibid.).

(All these [positions] and many others, . . . are taught through continuous and long study, which is what overcomes these and other major difficulties.)

A comparison of Correa's directions with other Spanish sources for fingering shows that all the sources dealing with interval fingerings share to a great extent similar lines of thought, especially the *Facultad orgánica* and earlier sources. However, differences also exist. For instance, H. de Cabezón describes as one alternative for fingering the interval of a third with the third and fifth fingers of either hand (H. de Cabezón 1578: 6). Correa does not mention this fingering. In addition, both Tomás and H. de Cabezón give the first and third fingers of either hand as one alternative for fingering the interval of a fifth or sixth (Tomás 1565: 45; H. de Cabezón 1578: 5v–6); this possibility, too, goes unmentioned by Correa.

⁵⁰ Here Correa uses the verb trocar, which has the meaning of 'changing' or 'shifting.'

⁵¹ Correa might be referring here only to the fingering of the interval of a second or possibly to intervals of varying sizes that are formed between the voice that remains still and the other voice that is moving.

The biggest number of differences in the fingerings of intervals from Correa's *Facultad orgánica* appears in Nassarre's *Escuela de música* (1723–1724). For the intervals of a third and fifth in the right hand, Nassarre gives only one fingering for each: the second and fourth fingers and the second and fifth fingers, respectively (Nassarre 1723: 460). In addition to these fingerings, Correa gives the first and third fingers for the third in the right hand and the first and fourth fingers for the fifth (Correa 1626: 19). Both authors give the second and fifth fingers as one alternative for an interval of a sixth in the right hand (Correa 1626: 18v; Nassarre 1723: 460). Besides this, Correa also mentions the combination of the first and fourth fingers (1626: 18v).

Correa's and Nassarre's directions differ most where the interval of a fourth is concerned. Both give the second and fourth fingers of either hand (Correa 1626: 18v; Nassarre 1723: 459, 460) but each has additional, individual suggestions. As another alternative for a fourth in the right hand, Correa gives the first and third fingers (Correa 1626: 19) and Nassarre, the second and fifth fingers (Nassarre 1723: 460). For a fourth in the left hand, Correa gives the combination of the first and second fingers (Correa 1626: 19) and Nassarre, the first and fourth fingers (Nassarre 1723: 459).

Besides the above-mentioned differences, Correa's description of the "third order of fingering" (according to which most of the intervals should be played with the first and second fingers) appears to be unique. See the following **Table 5** for a comparison of Correa's and Nassarre's fingerings of intervals.

	Table 5. A comparison	ı of some inter	val fingerings by	Correa and Nassarre
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Correa			Nassarre		
Interval	Left Hand	Right Hand	Left Hand	Right Hand	
third		4 or 3		4	
umu		2 1		2	
fourth	2 or 1	4 or 3	2 or 1	4 or 5	
iourui	4 2	2 1	4 4	2 2	
C (2.1).		5 or 4		5	
fifth		2 1		2	
.1.41.		5 or 4		5	
sixth		2 1		2	

2.11 Correa's Fingering for the "Closed and Open Consonances"

Correa completes his advice for fingering intervals in *Capítulo noveno*. In the heading for this chapter on folio 21, the author writes about "closed and open consonances" (*las consonancias cerradas y abiertas*), which can also be called "full and empty" (*llenas y vacias*). By closed consonances, Correa simply means those intervals that have been "filled" with a third voice, in other words, chords. Open consonances are intervals consisting of two voices that do not have a third voice between them.

Advice is given for fingering the intervals of a fifth, sixth, seventh and an octave. The ninth and tenth are also mentioned, but their fingering can be reduced to the fingering of the octave.

2.11.1 Right-Hand Fingering

If a fifth is played with the second and fifth fingers of the right hand, a third in the middle voice should be played with the fourth finger. If the fifth is played with the first and fourth fingers, then the third should be played with the second finger. Correa mentions that some players finger the interval of a fifth with the first and fifth fingers; in this case the third should be played with the third finger and a *quiebro* executed with it. (1626: 21.) Correa points out that this fingering is used by *maestros* (ibid.: 21v).

When the sixth is played with the second and fifth fingers, there are two alternative fingerings, depending on the position of the middle voice. If this voice forms a fourth counting from the top, the middle voice should be played with the third finger. If the middle voice forms a fourth counting from the bass, then it should be played with the fourth finger. (Ibid.: 21.) Sometimes it is also customary to play the sixth with the first and fifth fingers of the right hand. In this case, the middle voice is played with the third finger in order to perform a *quiebro* with it. This fingering is used by *maestros* (ibid.: 21v). If the sixth forms the interval of a fourth above, one plays the middle voice of a chord with the second finger (ibid.).

Correa gives three different ways of "closing" the seventh: with the fourth finger if the two upper voices form a third; with the second or third fingers if the upper voices form a fourth; or with the second finger if the upper voices form a fifth. Once again, the third finger is used especially for a *quiebro*. Correa illustrates his point by giving three one-bar examples of the ways of "closing" the seventh. See the following example:

Example 35



Closing a seventh in a third to the superior voice, with the fourth finger



Closing a seventh in a fourth to the superior voice, with the second or third finger



Closing a seventh in a fifth to the superior voice, with the second finger

There are four ways of playing the octave with the right hand, assuming that the extreme voices are played with the first and fifth fingers and depending on whether there is an interval of a third, fourth, fifth or sixth counted from the upper voice. In the case of the third, the middle voice is played with the fourth finger; in the case of the fourth, with the third finger; in the case of the fifth, with the second finger (alternatively, with the third finger; one can execute a *quiebro* with it), and lastly, in the case of the sixth, with the second finger. (Ibid.) See **Table 6** for a summary of Correa's right-hand fingerings for the "closed and open consonances."

Table 6. A summary of Correa's right-hand fingerings for the "open and closed consonances"

RIGHT HAND

Interval	Fingering			
fifth	a) 5 third	b) 4	c) "some play" 5	
	4 (3)	2	3	
	2	1	1	
			- a <i>quiebro</i> with 3	
			- "used among maestros"	
sixth	a) 5 fourth	b) 5	c) 5	d) 5
	3]	4	3	2 ∫ fourth
	2	2 ∫ fourth	1	1
			- a <i>quiebro</i> with 3	
			- "used among <i>maestros</i> "	
seventh	a) 5 third	b) 5 fourth	c) 5 fifth	
	4_	2 or 3 \]	2]	
	1	1	1	
		- 3 for a <i>quiebro</i>		
octave	a) 5 third	b) 5 fourth	c) 5 fifth	d) 5 sixth
	4_	3]	2 or 3 \(\)	2]
	1	1	1	1
		- 3 for a <i>quiebro</i>		

2.11.2 Left-Hand Fingering

In *Capítulo noveno*, Correa gives recommendations for the left-hand fingering of the "closed consonances" of a fifth, sixth, seventh and an octave. Correa also mentions the ninth and tenth, but, as he comments at the beginning of the ninth *capítulo*, these fingerings can be reduced to the fingering of the octave.

If the fifth is played with the first and fourth fingers of the left hand, the note in between the two extreme voices should be played with the second finger. Alternatively, when the fifth is played with the second and fifth fingers, the middle voice should be played with the fourth finger. According to Correa, some also close the fifth with the third finger but this manner "is little used" (Correa 1626: 21v). Correa adds that in some demanding left-hand *glosas* it is customary to play the interval of a fifth with the first and fifth fingers; the middle voice should then be played with the third or sometimes with the second finger (ibid.: 21v–22).

In Correa's words, the sixth is treated in every respect like the fifth; he warns that if the sixth is played with the second and fifth fingers, the middle voice should by no means be played with the third finger, as some play the fifth (ibid.: 22). This is because in the sixth in the left hand there is almost always the interval of a fourth between the two highest voices; therefore it should be "closed" by the fourth finger. However, if the fourth should appear in the lower part of the sixth, one indeed ought to play its middle voice with the third finger. If the fourth is in the lower part of the sixth and the extreme voices are played with the first and fourth or the first and fifth fingers, then the middle voice should be played with the second finger. But if the fourth is in the upper part of the sixth that is played with the first and the fifth fingers, one should play the middle voice with the fourth finger. The latter case is especially apt to appear in *glosa*. (Ibid.)

When the seventh is played with the first and fourth fingers of the left hand, it should be "closed" with the second finger, and when it is played with the first and fifth fingers, it should be "closed" with the fourth finger. In both cases there is an interval of a third between the two lowest voices.

In the octave, the middle voice can be either a fifth or a sixth (counting from the bass), in which case it should be played with the second finger. If the middle voice happens to be an interval of a third, then one should play it with the fourth finger.

In the ninth, there can be a fifth or a fourth in the middle (counting from the bass). In both instances, one should play the middle voice with the second finger. If the middle voice of the tenth is a fifth or a sixth (counting from the bass again), one "closes" with the second finger. If the middle voice is a third, one should play it with the fourth finger. (Ibid.) See **Table 7** for a summary of Correa's left-hand fingerings for playing the "closed and open consonances."

Table 7. A summary of Correa's left-hand fingerings for the "open and closed consonances"

LEFT HAND

Interval	Fingering			
fifth	a) 1	b) 2 or 2	c) 1	
	2	4 3	3 or 2	
	4	5 5	5	
		- "some close the fifth	- in some demanding	
		with 3; little used"	left-hand glosas	
sixth	a) 2 fourth (2	b) 1_	c) 1_	d) 1 fourth
	4 3	27	2 fourth	4_
	5 fourth \(\(\sigma \)	4 fourth	5_	5
				- especially
				in glosa
seventh	a) 1	b) 1		
	2 third	4 third		
	4	5_		
		- 3 for a <i>quiebro</i>		
octave	a) 1	b) 1	c) 1	
	2] fifth	2] sixth	4 third	
	5_	5_	5_	
ninth	a) 1	b) 1		
	2] fifth	2 fourth		
	5_	5_		
tenth	a) 1	b) 1	c) 1	
	2] fifth	2 sixth	4 third	
	5_	5_	5_	

2.12 Correa's Scale Fingerings

2.12.1 The Fingering of Ordinary Scales

Capítulo décimo of the *El arte de poner pof cifra* section⁵² is the last of the chapters dealing with fingering. This chapter focuses entirely on fingerings for scales. In the heading of the chapter, Correa makes clear that the fingerings to follow are directed to those who are already beginning to be *Maestros* (Correa 1626: 22).

In the introduction to the chapter, the author stresses that it is "the impossibility of all impossibilities" that someone could play *glosas* involving accidentals well if the art of replacing⁵³ fingers is not used in the passages of *glosas* that have an abundance of diminutions:

⁵² Note that immediately following the *Capítulo décimo* (Correa 1626: 22–24v) there is also another tenth chapter in *El arte de poner por cifra* section that is called *Capítulo décimo de las advertencias* (ibid: 24v–26).

⁵³ The Spanish verb trocar could also be translated as 'changing' or 'shifting.'

Impossible es de toda impossibilidad, que alguno taña bien accidentales glosados, si en las carreras de glossa muy diminuida, no usa de la industria de trocar los dedos . . . (ibid.).

According to Correa, the ordinary fingers (i.e., fingerings) should be used for the ordinary scales, for *las carreras ordinarias*. Likewise, the extraordinary fingerings should be used for playing the extraordinary scales, *las carreras extraordinarias*. Correa defines the ordinary scales as scales using only white keys and the extraordinary scales as mixing the white and black keys. The ordinary scale of the right hand is played with the third and fourth fingers when ascending and with the third and second fingers when descending. When playing the left-hand ordinary scale, the second and first fingers are used to ascend and the third and fourth to descend. (Ibid.: 22v.)

Several other Spanish sources describe a scale fingering similar to Correa's fingering of the *carreras ordinarias*. Tomás de Santa María gives this fingering as one alternative for scales that consist of *semínimas*, quarter notes (1565: 40–40v). Venegas de Henestrosa (1557)⁵⁴ and Hernando de Cabezón (1578: 5v) also give a scale fingering for the right hand equivalent to Correa's.⁵⁵ In addition, Venegas mentions that sometimes one may begin a right-hand scale with the thumb or the index finger and after reaching the fourth finger proceed by alternating with the third and fourth fingers (Venegas 1557).⁵⁶ Venegas gives two left-hand fingerings for an ascending scale, the second one of which is similar to Correa's "ordinary" fingering. He recommends that a left-hand ascending scale be played with a group of four fingers (beginning with the fourth finger) and then continued with repeated groups of three fingers (beginning with the third finger). Alternatively, one may ascend with the paired fingering of the first and second finger.⁵⁷ According to Venegas, a left-hand descending scale should be begun with the thumb and, when the fourth finger is reached, continued by alternating the third and fourth fingers. (Venegas 1557.)⁵⁸ The latter alternative is also given by H. de Cabezón (1578: 5v).

2.12.2 The Fingering of Extraordinary Scales

The extraordinary scales are played either with groups of three or four fingers that are repeated as many times as necessary. Correa recommends that one start practicing with the groups of three fingers in order to get used to "the way of changing the fingers" (*el modo de trocar los dedos*). It is also highly recommendable to practice the extraordinary scales first on white keys only, although these fingerings are meant to be used especially for the *glosas* involving accidentals. (Correa 1626: 22v.)

⁵⁴ The verso of the seventh folio, the title page counting as one. In the exemplar of the Biblioteca Nacional of Spain (call number R.6497), this folio has been erroneously numbered as folio two on its recto.

⁵⁵ This is the case if Venegas's fingering for the right-hand descending scale is interpreted as really beginning with the third finger (and then alternating with the second finger), although Venegas himself mentions the second finger first (Venegas 1557: 7v, the title page counting as one).

⁵⁶ The verso of the seventh folio, the title page counting as one.

⁵⁷ Although Venegas mentions the thumb first, it is probable that he means a left-hand ascending scale fingering that begins with the second finger.

⁵⁸ The verso of the seventh folio, the title page counting as one.

The extraordinary scale using groups of three fingers should ascend with the second, third and fourth fingers of the right hand. This pattern is then repeated as many times as needed. Correa gives a notated example of the above-mentioned fingering on folio 22v. In the example, there is a three-octave scale (plus two notes) that naturally involves eight repeats of the three-finger pattern used. The extraordinary scale descends with the reverse order of fingering from the ascent, beginning with the fourth finger of the right hand. (Ibid.: 22v–23.)

In the left-hand extraordinary scales using the three-finger pattern, one should start ascending with the third, second and first fingers and then repeat this pattern as many times as necessary. To descend, one should play with the same fingers in the reverse order, beginning with the thumb. ⁶⁰ (Ibid.: 23.)

The extraordinary scales can also make use of a four-finger pattern. In this case, the right-hand ascending scale is played with the group of the first, second, third and fourth fingers that is repeated as many times as necessary in order to complete a scale. To descend, the order is reversed. The left-hand ascending scale should be played with a repeated pattern of the fourth, third, second and first fingers. For the descending scale of the left hand, the fingering is again reversed. (Ibid.: 23–23v.)

In addition to Correa, at least four other Spanish sources of keyboard fingering make use of three- and/or four-finger patterns in scale fingerings. Bermudo is the only one to give solely four-finger patterns for both the ascending and descending scales of each hand (Bermudo 1555: lxj.–lxj.v). Venegas gives a combination of four-finger and three-finger patterns for the ascending left-hand scale and for the descending right-hand scale (Venegas 1557). H. de Cabezón gives a four-finger pattern for the left-hand ascending scale (1578: 5v). Among Tomás's numerous scale fingerings, both three- and four-finger patterns are utilized. For example, repeated groups of three fingers are suggested for the descending right-hand scale in quarter or eighth notes (preferably for eighth notes) (Tomás 1565: 40v) and four-finger groups for both the ascending and descending left-hand scales in long passages of eighth or sixteenth notes (ibid.: 40).

Following the explanation of fingerings for the extraordinary scales, Correa gives a one-bar example for each hand (1626: 23v) to which the four-finger patterns are applied. Correa explains that he gives the examples in order to demonstrate with how much more velocity, clarity and equality⁶² the following *glosas* can be executed with the first four fingers of both hands as compared with other fingerings (ibid.). Both examples have a key signature of three sharps, indicated with three big "natural signs" (*bequadrados*) in the key signature.

⁵⁹ The three octaves extend from the F to the a³ and all the *cifra* signs have been written on a single horizontal line without any indication of rhythm.

⁶⁰ Here, for the ascending scale of the left hand, Correa gives a notated example of three octaves (from the F to the a³) similar to his example for the right-hand ascending scale.

⁶¹ The verso of the seventh folio, the title page counting as one.

⁶² The original text reads "más velocidad, limpieza, y llaneza." Besides equality, llaneza could also be translated as 'smoothness,' 'clarity' or 'simplicity.'

According to Correa, it is also possible to play a scale with the second, third, fourth and fifth fingers of either hand in certain cases: 1) when the fifth finger falls on the last note of a *glosa*; 2) if there is one voice to be held (obviously with the fifth finger) while the other fingers are involved in ornamentation; and 3) when the fifth finger falls on the last note of a *glosa* which then makes a leap of an octave "towards the first finger of the same hand." (Ibid.: 24.)

2.12.3 The Fingering of "Mixed Scales"

Correa ends his *Capítulo décimo* with an explanation of fingerings for the "mixed scales," *las carreras mixtas*. According to him, these fingerings take advantage mainly of two different patterns: the groups of two and three fingers or the groups of three and four fingers. Correa's point is that when using mainly three-finger groups, one may complete a passage with a group of two fingers; while using a system of four-finger groups, one may complete a passage with a group of three fingers if the passage can be conveniently ended this way. (Correa 1626: 24.) To illustrate both cases, Correa gives a brief notated example of each that can be seen in **Example 36**. See also **Table 8** for a summary of Correa's scale fingerings.



Correa's example of "mixed scales": groups of three and two fingers



Correa's example of "mixed scales": groups of four and three fingers

⁶³ In Holland's dissertation, the lower system of the first example has been written one octave too high (Holland 1985: 256).

Table 8. A summary of Correa's scale fingerings

ORDINARY SCALES (white keys only)	Left hand	Right hand
ascending	21212121	34343434
descending	34343434	32323232

ETRAORDINARY SCALES (both white and black keys)	Left hand	Right hand
ascending, a) groups of three fingers	a) 321 321 321	a) 234 234 234
b) groups of four fingers	b) 4321 4321 4321	b) 1234 1234 1234
descending, a) groups of three fingers	a) 123 123 123	b) 432 432 432
b) groups of four fingers	b) 1234 1234 1234	b) 4321 4321 4321

MIXED SCALES	
(mixing different fingering patterns)	
a) groups of three + groups of two, an example of the right hand descending:	432 32 432 32 (see Example 36)
b) groups of four + groups of three, an example of the right hand descending: an example of the left hand ascending:	4321 321 4321 321 (see Example 36)

2.13 Remarks on Correa's Fingerings

Correa numbers the fingers as we do today. The concept of the principal fingers (the fingers which begin and end the ornaments) appears to be more important to Correa than the concept of "good" and "bad" fingers as advocated by Girolamo Diruta, for instance. Nevertheless, both of the said concepts overlap notably.

Correa's advice on fingering is clearly a part of the astonishingly uniform Spanish tradition of keyboard playing from Juan Bermudo to Pablo Nassarre. However, his discussion of fingerings also involves new elements compared to his colleagues. One demonstration of this is his advice on fingering different triadic groupings (the "consonancias cerradas y abiertas"), the growing necessity for which was naturally brought forth by the development of the keyboard repertoire. The Spanish keyboard players used the thumb quite freely in their fingerings. Moreover, the use of the thumb is particularly important in the left-hand fingerings. To these principles, Correa added the use of the fifth finger on certain occasions. The use of the fifth finger did not begin with Correa, however. Fray Tomás had already given examples of fingerings including the fifth finger. Fr. Tomás and Correa are also the only Spanish writers on keyboard fingering to provide some musical examples to demonstrate their instructions.

Correa was the first to differentiate between "ordinary scales" (carreras ordinarias) and "extraordinary scales" (carreras extraordinarias) in regard to fingerings. The first meant scales played on white keys only, the second being scales which involve both white and black keys. Correa recommends the use of paired fingerings for diatonic scales and

groups of three or four fingers for scales including accidentals. The third type of scale fingerings introduced by Correa was the fingering of mixed scales (*carreras mixtas*), which combined different patterns of fingering, "mixing" groups of two and three fingers, for instance. Although Bermudo, too, had already suggested the same fingering in the middle of the sixteenth century, it is worth noting that Correa's left-hand fingering for an ascending scale, using the fingers from one to four, could be understood to call for passing the thumb under the hand. However, this does not necessarily mean a technique that would be exactly equivalent to the modern keyboard technique (hence, for instance, the relatively short ends of keys of the organs and clavichords in Correa's time). The practice of "exchanging" or "replacing" fingers (*trocar dedos*), which Correa describes somewhat ambiguously in the *Facultad orgánica*, might mean a shifting of a hand position rather than a finger substitution – or perhaps both of these practices.

Correa's instructions on fingering reflect great flexibility, which is one characteristic, generally speaking, of the Spanish keyboard tradition as a whole. Correa takes this even further in several respects, offering alternative systems of fingering (for harmonic intervals and scales, for instance), and also taking into account the advanced players (the "third order" of fingering intervals, for example). Moreover, in presenting different alternatives, he often mentions which fingerings are the most commonly used ones.

Correa obviously had a great concern for voice leading, which is reflected, among other things, in his directions for dividing the different voices of a composition between the hands, as well as in the advice on playing various triadic groupings. Like many other Spanish authors, Correa always asks one to pay attention to the context upon deciding one's fingerings and to leave free the hand which plays *glosas* whenever possible. In addition, Correa recommends avoiding playing the adjacent pitches with the same finger in *glosa*, as well as avoiding playing a black key with the thumb in a rapid *glosa*.

In the context of writing about fingerings, Correa once again emphasizes the importance of a "continuous and long study," advising, for instance, practicing the "extraordinary" fingerings (meant for scale passages involving accidentals) first on white keys only – apparently in order for a player to get used to the new technique in a simpler setting. Correa also stresses that there are many other fingerings which are not presented in his book. According to him, for the advanced players, it is enough to open this road, in order for them with their genius to perfect it and to supply what is missing from this treatise:

Toda esta materia de trueque de dedos, pertenece ya para maestros, a los quales basta abrirles este camino, para que ellos con su ingenio lo acaben de perficionar, y suplan lo que a este tratado le falta (Correa 1626: 24v).

(All this material about changing fingers belongs to those [who are] already masters, for whom it is enough to open this road [to them], so that they with their ingenuity would finish it to perfection and would supplement what is missing from this treatise.)

3 Tempo, Time Signatures and Proportions

3.1 Introduction

Tempo issues of Spanish keyboard music of the late Renaissance and early Baroque periods evoke numerous questions relevant to performance practice. Defining an overall performance tempo for a piece can be problematic, not to speak of the relative tempi of adjacent sections within a piece. Additional complications arise from the fact that the original note values have been changed in most modern editions, often without any indication.

The significance of mensural signatures and verbal indications of tempi in the primary sources may remain unclear to the modern performer. Further puzzlement is brought about by inconsistencies and even confusion in the writings of the Renaissance and early Baroque theorists and composers. Not only did the concepts and opinions of different writers vary but many theorists also contradicted themselves. For example, contradictory information is presented about the temporal duration of *tactus* and about the note values implicated by a particular time signature. Consequently, it is not always clear which note value "carries the beat" under different time signatures.

Terminological inconsistencies also abound, the equivocal *compás* being only one example. On one hand, *compás* signifies a (written/printed) measure defined by two consecutive bar lines; on the other hand, it is used to mean *tactus*, a fundamental movement/pulse of music. Following the decay of the proportional system, the terms implying the time signatures **C** and **C** were used increasingly interchangeably. In addition, different kinds of time implicated by particular signatures were each given several names in Spain. For instance, the standard *tactus alla semibreve* (**C**) – whose rhythmic symbols total a semibreve – was called *compasillo*, *compasete*, *compás menor*, *medio compás* or *tiempo imperfecto*. (Jacobs 1964: 15.)

The late Renaissance and the dawn of the Baroque was a period of transition in many respects in the musical life of Spain and also elsewhere in Europe. The former system of mensural signatures had deteriorated during the 16th century (Jacobs 1962: 13). The great state of flux that followed made composers, theorists and musicians of the time react to this change. Some of them clung to the old theories, making a considerable effort in order to justify them. Some others were experimenting with and seeking new means of expressing notation of tempo. Nevertheless, perhaps the most fascinating were the attempts by some theorists to extend the old theories and incorporate them into new concepts of tempo. Francisco Correa de Arauxo presents a particularly interesting attempt at the reconciliation of the old proportional meanings of signatures with their new tempo connotations (Jacobs 1964: 45). Correa's time and the following several decades present a great challenge to performers and scholars alike, in regard to the comprehension of the different aspects of the notation of tempo. As Alejandro Enrique Planchart writes in his article "Tempo and Proportions," "The decadent proportional system of the 17th century, however, is one of the least well studied or understood aspects of the Early Baroque" (Planchart 1990: 140).

3.2 About Tactus (Compás)

By Correa's time, many important changes in regard to theoretical and practical tempo issues had taken place. For instance, the variability of *tactus* had been established and new ways of notating tempo were being developed. Although a fundamental change in *tactus* notation was occurring, the concept of *tactus*, in Spanish, *compás*, continued to be an important one.

Tomás de Santa María in his *Arte de tañer Fantasía* (1565) gives an idea of the situation prior to Correa, stating that all music, whether it is to be sung or to be played, is subject and bound to the *compás*, and not the *compás* to the music:

... toda la musica, assi del cantar como del tañer, esta subjecta y atada al compas, y no el compas a la musica, ... (Tomás 1565: 7v).

Tactus could be defined as "a basic beat, or pulse common to all mensural music" (Wyly 1964: 167) or as "the fundamental interior movement or pulse in the music, which was theoretically an invariable quantity of time, implying in itself neither accent nor phrasing, neither rhythm nor tempo" (Jacobs 1964: 4).

The invariability of *compás* that Jacobs is pointing to, refers to the ideally unchangeable pace of the basic beat of music, governed by a system of proportional tempo signs. According to this principle of the proportional theory of the 15th and 16th centuries, all tempo changes were effected in relation to the basic pulse. It is well to note that *compás* was originally independent of a written measure (or a bar) but gradually became associated with it.

The deterioration of the proportional theory in the 16th century resulted in everincreasing theoretical and practical confusion regarding tempo definition and notation of tempo. By the end of the 16th century, the proportional system was no longer well understood (Planchart 1990: 140). An inconsistent use of \mathbf{c} and \mathbf{c} signatures and the appearance of verbal tempo indications in the musical scores can be taken as examples of phenomena brought about by the decay of the proportional system.

3.3 General Remarks on Correa's Approach to Tempo and Time Signatures

Francisco Correa de Arauxo writes about time signatures, tempo and proportions both in the textual part and in the prefaces to compositions of the *Facultad orgánica*. There are eleven places in the textual part and twenty-seven prefaces which are particularly relevant to tempo issues. Some of Correa's said remarks are made in passing, but there are also such *puntos* in the *ADVERTENCIAS* that are entirely devoted to discussing the subject

⁶⁴ Jacobs is focusing here particularly on Spanish keyboard music of the Renaissance.

of tempo and proportions – such as the *SEPTIMO PVNTO* (fols. 4–4v), the *DECIMO PVNTO* (fols. 5v-5 [6]), and the *UNDECIMO PVNTO* (fols. 5 [6]–5v [6v]⁶⁵).

Correa's first reference to tempos and their signs is found on the recto of the first folio, in the introduction to the *ADVERTENCIAS* proper, where the composer mentions four time signatures (\mathbf{C} , \mathbf{C} , and \mathbf{C}) which are used in the musical part of the *Facultad orgánica*. According to Correa, in his book "You will also find some *discursos* notated with the *tiempo imperfecto* [\mathbf{C}], and others with the *[tiempo imperfecto] partido* [\mathbf{C}]; some with the *[tiempo] perfecto de por medio* [\mathbf{C}], and others with the same uncut [i.e., *tiempo perfecto*, \mathbf{C}]: all this is done in order to distinguish the different speeds [tempos] that there have to be in beating the *compás* [tactus]":

Hallaras tambien vnos discursos puntados con el tiempo imperfecto, y otros con el partido. Vnos con el perfecto de por medio, y otros con el mismo impartible: todo lo qual se haze para distinguir las difere[ñ]tes tardanças ⁶⁶ que a de auer en el lleuar del compas (Correa 1626: 1).

These words of Correa clearly reflect how closely his particular tempo signs are associated with denoting different tempi. Initially, the proportional signatures did not serve as tempo marks (Jacobs 1964: 1).

Like many other theorists, Correa describes his different time signatures by giving the number of notes per measure. For instance, the *tiempo imperfecto* (\mathbf{c}) is assigned to those works which have sixteen notes to the *compás* (Correa 1626: 4). By this, Correa means that in pieces written in \mathbf{c} , the predominant surface movement is in sixteenth notes (or, that a work involves sixteenths as the smallest note value). Sometimes Correa gives a whole range of different note values per measure. For example, in a preface common to four works in *compás ternario* ($\mathbf{\phi}$ 3/2), there are three semibreves, six minims, twelve semiminims and twenty-four eighth notes to the measure, according to Correa (1626: 173v).

Besides giving a list of note values pertinent to each time signature, Correa makes several remarks on the appropriate performance tempo in the prefaces to his works. Correa also deals with different factors which have an effect on the choice of performance tempo and gives advice on how to keep the *compás*. In light of Correa's writings, I will discuss his different time signatures, his notions of performance tempo, and elements having an impact on the choice of tempo in the chapters to follow.

⁶⁵ The number of folio 5 is illegible in the Brussels exemplar and unclear in the two Madrid exemplars. Folio 6 has been erroneously numbered 5 in at least the Brussels exemplar.

⁶⁶ Literally, the word *tardança* (*tardanza* in modern spelling) means 'slowness' or 'detention.' Guy Bovet, in his French translation of the *Facultad orgánica*, uses the expression: "... *tout ceci se fait pour distinguer les différents allures auxquelles if faut battre la mesure*" (Bovet 1986: No. 2: 2; *TI*: 14). Jon Holland has translated the same place in his dissertation as: "... all of which is done to distinguish the different tempos which must be used in playing the music" (Holland 1985: 157).

3.4 Correa's Writings Relevant to Tempo Issues in the Textual Part of the *Facultad orgánica*

The eleven places relevant to issues of time signatures, tempo, and proportions in the textual part of the *Facultad orgánica* are found in the introduction to the *ADVERTENCIAS*, the *ADVERTENCIAS* proper, and the chapter *SIGVESE EL ARTE DE PONER POR CIFRA*. Five of these writings concern theoretical and practical aspects of proportions that I will discuss in my chapters on proportions and *ayrezillo*. Next I will examine the six writings of Correa about tempo issues other than proportions.

As already mentioned, in Correa's first remark about the different elements of tempo, he gives a list of four time signatures (\mathbf{C} , $\mathbf{\Phi}$, $\mathbf{\Phi}$, and \mathbf{O}) whose significance is to distinguish the different speeds that exist in beating the *compás* (Correa 1626: 1) – that is, to show the variability of tactus. A little later, in the introduction to the *ADVERTENCIAS* as well, Correa mentions that in his book there are also works in *compás mayor ternario* [$\mathbf{\Phi}$ 3/2] of twenty-four notes to the *compás* and works in [*compás*] *mayor binario* [i.e., in *tiempo perfecto* (\mathbf{O})] of thirty-two notes to the *compás*, boasting that it is "a new thing and printed by no author of these Kingdoms [Spain] until this day" (ibid.: 1v).

Of Correa's writings concerning time signatures, tempo, and proportions in the *ADVERTENCIAS* proper, the *SEPTIMO PVNTO* (fols. 4–4v) and *PVNTO TREZE* (f. 8) discuss mainly the different time signatures while the *DECIMO PVNTO* (fols. 5v–5 [6]⁶⁷) and *VNDECIMO PVNTO* (fols. 5–5v [6–6v⁶⁸]) focus on proportions. The second extensive chapter of the textual part of the *Facultad orgánica*, the *SIGVESE EL ARTE DE PONER POR CIFRA*, involves one subchapter (f. 18) where the appropriate places of the downbeat and the upbeat in **C** are dealt with, followed by another subchapter (f. 18–18v) where the proper places for the downbeat and for the upbeat in different proportions are examined. In addition, towards the end of the *SIGVESE EL ARTE DE PONER POR CIFRA*, Correa discusses the importance of keeping the *compás* and means of doing so (f. 25⁶⁹).

In the SEPTIMO PVNTO (fols. 4–4v) of the ADVERTENCIAS, Correa concentrates on explaining the differences and significance of the time signatures that he employs. First he points out that he has seen many works of very great masters notated "now with the tiempo imperfecto [C], now with the [tiempo imperfecto] partido [C], indifferently" (ibid.: 4). In Correa's opinion, there is no sense in such use of these two tiempos [time signatures/tempos] which are so different from each other (ibid.). Correa expresses his contentment with the usage of C by Father Manuel Rodriguez coello [Coelho] "in the book which he wrote in canto de órgano for keyboard players etc." because he uses the [tiempo] imperfecto in works of sixteen sixteenth notes to the compás, without mixing [the tiempo imperfecto] with any other time signature (ibid.). According to Correa, the significance of the [tiempo] de por

⁶⁷ The number of folio 5 is illegible in the Brussels exemplar and unclear in the two Madrid exemplars.

⁶⁸ Folio 6 has been erroneously numbered 5 in at least the Brussels exemplar.

⁶⁹ The number of folio 25 is missing in at least the Brussels exemplar and the Madrid exemplar R.14069.

⁷⁰ Correa makes a reference here to Coelho's Flores de música (Lisbon, 1620).

medio [i.e., tiempo (imperfecto) partido, \mathfrak{E}] is to make one measure from two, and this is better done in works of eight notes to the measure. For the said reason, Correa has decided to attribute the tiempo [imperfecto] partido [\mathfrak{E}] to works of eight notes to the compás and the [tiempo] imperfecto [\mathfrak{E}] to those of sixteen notes per measure – "as 'by law' one must in order to make understood the difference there has to be in conveying the compás in one and in the other (ibid.). In theory, two measures in \mathfrak{E} equal temporally one measure in \mathfrak{E} , the relation of the two kinds of time being 1 : 2. However, in the playing of Correa's compositions, it seems necessary to play works written in \mathfrak{E} somewhat more slowly than at the theoretically right "double speed," in relation to works written in \mathfrak{E} . (This practice is not exclusive to playing the works of Correa but was also common elsewhere in Europe.)

In Correa's opinion, there also has to be a time signature indicating a *compás* in between the slow *compás* [of \mathbf{C}] and the rapid *compás* [of \mathbf{C}]. Correa emphasizes the importance of giving a particular sign to this *compás* [tactus] as well, a *compás* which he calls the *tiempo perfecto de por medio* [$\mathbf{\Phi}$] "which gives more value to its major notes" than the [tiempo] imperfecto partido [$\mathbf{\Phi}$] and less than the [tiempo] imperfecto [\mathbf{C}]" (ibid.). In other words, Correa's "medium time signature," the tiempo perfecto de por medio [$\mathbf{\Phi}$], indicates a *compás* slower than implied by $\mathbf{\Phi}$ and faster than meant by \mathbf{C} . According to Correa, the tiempo perfecto de por medio serves well such works, which, even though being of eight notes to the measure, nevertheless, due to their difficulty demand a little slower *compás* than usual and, similarly, those works of eight notes to the measure which are vivid and have rapid glosas (ibid.).

The rest of the *SEPTIMO PVNTO* concerns works having twenty-four or thirty-two notes to the measure, "which require different speed" in the way of conveying the *compás* (ibid.) Correa's words reveal once again that his time signatures imply different tempi. Correa explains that the works of twenty-four notes to the measure are composed of three equal parts and are ternary. Therefore, such compositions have to be notated with the number 3 before the indication of the *tiempo* [time signature] of *compás mayor* [ϕ] or with *proporción mayor* [ϕ] 3]. (Ibid.: 4–4v.) However, the type of works that Correa is just describing demands a little slower *compás* than the aforementioned *compás mayor* and *proporción mayor* usually would. As a result, such works are notated with the *tiempo perfecto de por medio* [ϕ], and with a 3. (Ibid.: 4v.) Thus the time signature for the works having twenty-four notes to the *compás* is ϕ 3. Correa points out that his symbol for the time signature in question has to be such because the *perfecto* denotes grave *compás* and the *por medio* with a 3 denotes *proporción mayor*, the gravest of all [proportions] (ibid.). The works of thirty-two notes to the measure are notated with the *tiempo perfecto absolute*

⁷¹ The original reads "de jure."

⁷² Correa's "sus mayores figuras" could mean either "its more important notes" or "its longer notes."

⁷³ The original reads "... pide[n] diferente mora," which means literally "asking for different detention [or, delay]."

⁷⁴ Naturally, the sign of *compás mayor* plus "the number 3" produces the same result as the sign of *proporción mayor* (\$\epsilon\$ 3). Although Correa mentions that the number 3 is placed "before" the symbol of *compás mayor* (\$\epsilon\$), the three is written normally after the said symbol (i.e., \$\epsilon\$ 3) in practice.

[O] without any additional sign, because this *tiempo* is the gravest and signifies the greatest slowness in the conveying of it (ibid.).

In Correa's works, the length of one (binary [sic!]) measure ⁷⁵ in O is one whole note, theoretically. It is noteworthy, however, that the "greatest slowness" of O in conveying its *compás*, described by Correa, is pointing most likely to a unit of three successive measures instead of a single measure. In that case, the *compás* [tactus] becomes ternary, which is the original proportional meaning of the *tiempo perfecto* [O], while each single measure (restricted by two successive bar lines) is binary and has the duration of one whole note.

Another chapter dealing with time signatures in the *ADVERTENCIAS* is the *PVNTO TREZE* (f. 8), which focuses on playing works which involve either forty-eight or thirty-two notes in the *compás*. First Correa makes it clear that, knowing that in the *compás mayor ternario* [\$\mathbf{c}\$] (commonly called *proporción mayor*) there are three whole notes, six half notes, and twelve quarter notes [in one measure], it follows that there are twenty-four eighth notes and forty-eight sixteenth notes [to the measure] (ibid.: 8). Therefore, one with such fast hands on the keyboard and sufficiently agile reed in the *chirimia* to be able to "pronounce" so many notes in one measure may very well practice them (ibid.). Correa points out that his composing of works of twenty-four notes to the *compás* is not newly invented, although its being printed is new. (Ibid.)

Correa goes to explain that knowing that in *compás mayor binario*⁷⁸ there are one double whole note, two whole notes, four half notes, etc., until the thirty-two sixteenth notes to the *compás*, consequently, it is not without foundation to play works of thirty-two notes to the measure (ibid.). According to Correa, one who possesses such natural ability in his hands and such lightness that he can execute [so many notes] without their lacking the necessary touch, clarity and equality may very well use them. On the contrary, one who does not have this gift should not abandon his way of playing because otherwise he will lose his touch, if it is good. (Ibid.) In addition to a discussion of time signatures, *PVNTO TREZE* thus involves several warnings about not taking up repertoire which exceeds one's skills.

As has been mentioned earlier, besides the SEPTIMO PVNTO and PVNTO TREZE of the ADVERTENCIAS, there are two subchapters in the other main chapter of the textual part of the Facultad orgánica which touch the issue of tempo and time signatures. The first of these subchapters of the SIGVESE ELARTE DE PONER POR CIFRA has the heading DAR Y ALÇAR DEL COMPAS [the Giving and Raising of the compás], and it deals with

⁷⁵ Measure having the significance of a bar (and not a tactus) in this particular context.

⁷⁶ Correa is referring here to a good responsiveness of a reed stop, chirimía normally being a 4' reed.

⁷⁷ Correa means, perhaps, that it is a new thing to get works of twenty-four notes to the *compás* printed in the form of a book.

⁷⁸ In this context, Correa is most probably pointing to the *tiempo perfecto* [o], which is his time signature for notating works of thirty-two notes to the *compás*. Actually, *compás mayor* would normally imply the time signature of ¢, but since Correa's discussed explanation deals with works of thirty-two notes to the *compás*, *compás mayor binario* is likely to refer here to *tiempo perfecto* [o]. Also in his introduction to the *ADVERTENCIAS*, Correa uses the designation *compás mayor binario* when referring to the *tiempo perfecto* (Correa 1626: 1v).

finding the proper places for the downbeat and the upbeat in the works written in **C**. Correa advises one to place the downbeat on the first note and the upbeat on the fifth note in *glosa* of eighth notes in *compasillo* (**C**), the next downbeat coming consequently on the ninth note, which is the first note of the next measure (ibid.: 18). Similarly, in *glosas* of sixteen notes in **C**, one should give the downbeat on the first note and the upbeat on the ninth note, the next downbeat coming on the seventeenth note, which is the first note of the next measure (ibid.). The main point of Correa's subchapter under discussion is to divide one *compás* in *compasillo* (**C**) into two equal halves, giving the downbeat to the first note of the first half and the upbeat to the first note of the second half. The process remains the same regardless of the note values that create the predominant surface movement of a piece – in other words, either the *glosas* of eighth or sixteenth notes, in this case.

The second subchapter of the SIGVESE EL ARTE DE PONER POR CIFRA relevant to tempo issues has the curious title of CAPITVLO DECIMO DE LAS ADVERTENCIAS para perfectamente poner por cifra (the tenth chapter of the ADVERTENCIAS for reading cifra perfectly). Although Correa's title seemingly refers to the chapter ADVERTENCIAS, I consider it to belong rather to the second main chapter of the textual part of the Facultad orgánica. (This subject is discussed further in my chapter on the general outline of the contents of the textual part of the Facultad orgánica.) Correa's chapter to be discussed here involves several points considered crucial by the composer for anyone to be able to read (or play and/or compose) cifra perfectly. Among the eight requirements presented by Correa in this context, the sixth point focuses on the subject of tempo. Correa asks one to play as much in tempo (a compás) as one can, knowing where to give the downbeat and the upbeat, getting used (in all cases) to keeping the *compás* with the tip of the right foot, placing the heel on the floor in order to rock on it, giving the legitimate value and duration to each note; Correa adds that for this it is important to be a very skillful singer 80 [of the canto de órgano] (ibid.: 25).81 Correa's practical advice on keeping the compás reflects clearly the didactic nature of the Facultad orgánica, as well as the importance of being able to give the proper *compás* to a work in the first place.

^{79 &}quot;Poner por cifra" could also be translated here as "playing cifra" or "writing in cifra.

⁸⁰ I believe that Correa is referring here expressly to the ability to **sing** polyphony as one requirement of becoming a good reader and player of *cifra*. The original reads "*muy diestro cantante*" (a very skillful singer), which has been preserved in Bovet's translation of the *Facultad orgánica* ("*très bon chanteur*"; Bovet 1990: No. 1: 2; *TI*: 61) but has been changed in Holland's English translation in his dissertation ("a very clever player"; Holland 1985: 260).

⁸¹ The number of folio 25 is missing in at least the Brussels exemplar and the Madrid exemplar R.14069.

3.5 Correa's Writings Relevant to Tempo Issues in the Prefaces of the *Facultad orgánica*

I consider there to be twenty-seven prefaces in the *Facultad orgánica* which are relevant to issues of time signatures, tempo and proportions. These prefaces are found on folios 1, 42, 45v, 48, 49v, 53v, 55, 57, 59v, 85v [63v], 65, 73, 75v, 84v, 86v, 88v, 102, 110v, 119v, 122v, 124v, 153v, 173v, 179v, 184, 189v, and 203. Some of the prefaces include proportional matters, which I will discuss mainly in my chapter on proportions. In this chapter I focus on Correa's remarks on time signatures and his references to performance tempo. In addition, the different elements which, according to Correa, affect the choice of tempo, Correa's advice on keeping the *compás* through a work and the means of doing so, and some requirements for the player presented by Correa in relation to issues of tempo will be examined. The matter of the two ways of performing the proportion sesquialtera will be touched upon in passing; they are dealt with in detail in the chapters concerning proportions and *ayrezillo*.

3.5.1 The tiempo [imperfecto] partido (¢) and the tiempo [perfecto] de por medio (\$\phi\$)

The obvious tempo connotations implied by Correa's time signatures, already seen in his writings in the textual part of the Facultad orgánica, are further elaborated by the information given in the prefaces in the musical part of the book. For instance, in the preface to the Segundo tiento de primero tono "of eight [notes] to the measure" (f. 42), Correa points out that in this tiento one has to have a light tactus (compás ligero), and for this the work is notated with the tiempo [imperfecto] de por medio [c] because "of two fast measures one can make one good slow measure, and this (strictly speaking) signifies this tiempo" (Correa 1626: 42). In the same place, Correa remarks that the compás has to be even, that is, the chosen tempo must be stable (ibid.). In the preface to the Tercero tiento de quarto tono "of eight [notes] to the measure" (f. 48), written in **c**, Correa likewise writes that one has to play in *compás ligero*, referring to the preface discussed above in folio 42 (ibid.: 48). Similarly, in his preface to the *Tiento de quinto tono* "of eight [notes] to the measure" (f. 53v), Correa points out that one must observe the compás ligero "as indicates the tiempo [imperfecto] partido [\mathfrak{e}] and as has been explained earlier" (ibid.: 53v⁸²). The Tiento de sexto tono "of eight and nine notes to the measure" bears a reference to the three prefaces discussed above. Correa explains his notating the work "with the tiempo [imperfecto] de pormedio [c] because the compás has to be played lightly [ligero] until the *proporción nonûpla* [the nonuple proportion]" (ibid.: 55).

In the preface to the *Tiento pequeño*, y facil, de sé[p]timo tono (small and easy tiento of the seventh tone) "of eight [notes] to the measure," written in ¢, Correa advises playing the *compás* lightly (ligero) "more or less, according to the capacity of the player and the

⁸² There are two successive folios numbered 53 in at least the Brussels exemplar and the two Madrid exemplars of the *Facultad orgánica*. In one Madrid exemplar (R.9279), the erroneous folio number has been corrected by hand. Correa's above-cited words are found in the correctly numbered folio 53.

facility or difficulty that the work demands, which rule has to be observed throughout this book" (ibid.: 85v [63v]⁸³). It is noteworthy that besides the particular time signature being employed, Correa considers the capacity of the performer and the special requirements brought out by the texture of a work to affect one's ultimate choice of tempo. A further element probably having an impact on matters of tempo is the available instrument, which is seen, for instance, in the preface to the Quarto tiento de medio registro de tiple de séptimo tono "of eight [notes] to the measure," written in **c**, where the compás is to be taken lightly (ligero) "as indicates the tiempo [imperfecto] partido placed at the beginning" (ibid.: 73). Correa adds that this work is meant "for players who do not have much agility of hands, and for organs very heavy to play" (ibid.). Since Correa, on one hand, has meant the said work for players who are not yet advanced in skills and, on the other hand, he advises choosing one's tempo according to the capacity of the player (ibid.: 85v [63v]), the tempo of this work is thus presumably a little slower than the tempo of Correa's works written in **c** would be in general. Moreover, because further in the very same sentence – directing the work in question to players with modest skills – Correa points out the work to be for organs with very heavy actions, it is plausible to think that Correa considered the qualities of an instrument to have an effect on the choice of tempo as well.

In the preface to the Tercero tiento de baxón de séptimo tono "of eight [notes] to the measure," written in ϕ , ⁸⁴ Correa makes only a brief reference to the performance tempo, writing that the *compás* is "lively [andado] as the tiempo [perfecto] partido [i.e., tiempo de por medio] indicates" (ibid.: 84v). On the contrary, in the preface to the Quarto tiento de baxón de séptimo tono, a more extensive discussion of the essence of time signatures is found. In the preface to the said work "of eight [notes] to the measure," Correa focuses on the difference between the time signatures of **c** and **c**. He writes that "some who are connoisseurs in the art should note how I notate the discursos of eight [notes] to the measure with this tiempo [imperfecto] partido [c], appropriate to the compás mayor" (ibid.: 86v). Correa refers to folio 42, where he has already clarified the same thing, and emphasizes that he wants to explain here again that one cannot take away the [tiempo] imperfecto [C] nor the slow compás [compás moroso] from the works of sixteen sixteenth notes to the measure, because in C one cannot reduce two measures into one as in works of eight notes to the *compás* (ibid.). Correa's rather complicated explanation boils down to the tempo in works written in **c** being faster than in works notated with **c**. The surface movement of eighth notes is characteristic to the works in **c** while sixteenth notes usually predominate the texture of compositions written in C. Correa's next reference to the performance tempo is found in folio 88v, in his preface to the Quinto tiento de medio registro de baxón de primero tono "of eight [notes] to the measure," whose compás has to be conveyed "somewhat fast as the *tiempo [imperfecto] partido* [**c**] indicates" (ibid.: 88v).

⁸³ Folio 63 has erroneously been numbered 85 in at least the Brussels exemplar and the two Madrid exemplars.

⁸⁴ Kastner has changed Correa's original time signature (φ) to ¢ in his edition of the *Facultad orgánica* (Kastner 1980–1981, Vol. I: 191).

The preface to the *Tiento de medio registro de baxón de noveno tono* "of eight [notes] to the measure" sheds light on the essence of Correa's special time signature, the *tiempo* [perfecto] de por medio. Correa remarks that the mentioned tiento is "somewhat difficult" because in the major part of it two voices are simultaneously involved in executing glosas (ibid.: 102). For this reason, "one has to convey the compás neither as slowly as [the compás in the works] of sixteen [notes to the measure] nor as fast as [the compás in the works] of eight [notes to the measure] but in the middle" (ibid.). Correa adds that he thus notates the composition in question with the tiempo perfecto de por medio $[\phi]$, which has this particular meaning in his works (ibid.).

There are three more prefaces which relate the use of the *tiempo [imperfecto] partido* (�) and a fast tempo. The first one of these is the preface to the *Tiento de medio registro de baxón de sexto tono* "of eight [notes] to the measure," where Correa makes it known that the *compás* is taken hurriedly [apresurado]" as the *tiempo* [time signature of �] indicates" (ibid.: 110v). In the preface to the *Tiento de medio registro de tiple de octavo tono* "of eight [notes] to the measure," Correa indicates the work to be for organs heavy to play and for average players (ibid.: 122v). At the end of the preface Correa writes that the *compás* is light (*compás ligero*), "as the *tiempo [imperfecto] partido* [�] indicates" (ibid.). The last preface commenting on the use of the time signature � is a preface to the *Tiento de medio registro de baxón de duodécimo tono*, where there is a brief mention of the light *compás (compás ligero*) at the very end of the preface (ibid.: 124v).

3.5.2 The tiempo imperfecto (C)

Although the mentions of and comments on the time signature of *tiempo [imperfecto]* partido (i.e., compás mayor, $\mbox{$\phi$}$) are by far the most numerous among all Correa's references to tempo issues in the prefaces of the Facultad orgánica, remarks about other time signatures are found as well. The next most frequent explanations on any individual time signature are those about the time signature of $\mbox{$C$}$ (i.e., tiempo imperfecto, compás menor, compasillo, or compasete). In his preface to the Segundo tiento de quarto tono "a modo de canción" whose opening section is written in $\mbox{$C$}$, Correa writes about three different time signatures ($\mbox{$C$}$, $\mbox{$\phi$}$ 3/2, and $\mbox{$C$}$ 3/2), mentioning that in the tiempo imperfecto ($\mbox{$C$}$), the compás has to be conveyed slowly (a espacio) and equally (Correa 1626: 45v). It is well to take into account, however, that the "slowness" might be particularly relative in the work under discussion, due to the probably exceptional liberty in matters of tempo, implied by the phrase "a modo de canción" in the title of the piece. In the preface to the Tiento tercero de sexto tono "sobre la primera parte de la Batalla de Morales," which begins with a section written in $\mbox{$C$}$, Correa refers to the preface examined above (see f. 45v) as to how the compás has to be treated (ibid.: 59v).

The preface to the *Quarto tiento de quarto tono*, written in **C**, mentions the *tiento* being accommodated to average players because it does not involve much "effort" (*travazón*) (ibid.: 49v). Despite that, the composer has decided to notate the work with the *tiempo imperfecto* because the piece involves "some – although few – sixteen[th notes to the

measure]" (ibid.), for which reason the work should not be played too fast. This preface is thus another demonstration of the relation of Correa's different time signatures and tempo. At the end of the preface to the *Tiento de medio registro de tiple de séptimo tono*, written in \mathbf{C} , there is again a reference to a relatively slow tempo – implied by the use of \mathbf{C} – Correa advising one to take the *compás* "slowly [a espacio], but not much" (ibid.: 65).

The last preface which may be considered to include references to the use of the *tiempo imperfecto* is the preface to the *Tiento de medio registro de tiple de octavo tono*, written in **C**. This preface focuses on recommendations and directions concerning the layout of themes, in pieces of *medio registro* in particular. At the end of the preface, Correa points out that the *tientos de medio registro* require great gravity in their entrances if they are of sixteen or more notes to the measure (ibid.: 119v). In addition to the special layout proper to the entrances of *tientos de medio registro* suggested by Correa, his words may probably also be taken as a reference to the relatively slow tempo implied by the time signature **C**.

3.5.3 The compás ternario (\$\phi\$ 3/2)

The prefaces of the Facultad orgánica relevant to tempo issues include some prefaces discussing the time signature termed *compás ternario* (ϕ 3/2). (Another frequently used name for *compás ternario* is *proporción mayor*.) As Correa writes in the part of the preface which is common to his four successive works written in *compás ternario*, each measure of this time signature consists of three whole notes (and, consequently, six half notes, twelve quarter notes and twenty-four eighth notes) (Correa 1626: 173v). Correa's advice to take the compás "bien aespacio" (literally, the compás is to be conveyed "very well slow") (ibid.) is likewise meant to concern all of the four said works written in *compás ternario*. Correa suggests that one keep the *compás* by one's foot, placing the whole foot on the downbeat (al dar), lifting one part of it (the tip of the foot or the heel) on the second beat (al estar) and, ultimately, lifting the whole foot again on the upbeat (al alçar) (ibid.). The part of the preface in folio 173v which is written for the first of the four successive works in compás ternario, the Tiento de primero tono, does not contain any additional information about the time signature under discussion. In his edition of the Facultad orgánica, Kastner has replaced Correa's original time signature (ϕ 3/2) in all four of the mentioned works by the sign 3/1, retaining the original note values, one measure of *compás ternario* consisting of three whole notes. The *compás* under this time signature results in being slow due to the frequent glosas in eighth notes which create a rapid surface movement per se, and, consequently, "slow down" the overall *compás* in pieces written in *compás ternario*.

In the preface to the second of Correa's four successive works in *compás ternario*, the *Tiento de medio registro de tiple de sexto tono*, the composer mentions the work to be "of twenty-four numbers [i.e., notes] to the measure" and to be "of *compás ternario* [\$\psi\$ 3/2]" (ibid.: 179v). This work involves a lot of *glosas* in eighth notes, referred to by Correa in the preface by the mention of "twenty-four notes to the *compás*." Both the preface to the third work in *compás ternario* (f. 184), the *Canción glosada* (to the tune "*Dexaldos*")

mi madre",85), and the preface to the fourth work in the same time signature (f. 189v), the Síguense dies y seis glosas sobre el canto llano: Guárdame las vacas,86 make a mention of the works having been written in compás ternario. These last two prefaces do not contain any other explanations of compás ternario.

In addition to the four above-mentioned pieces in *compás ternario*, the last three works of the Facultad orgánica use this time signature as well. These works are the Prosa del Santissimo Sacramento⁸⁷ (fols. 199–201v), Canto llano, de la Inmaculada Concepción de la Virgen María⁸⁸ (f. 202-202v), and Síguense tres glosas sobre el canto llano de la Immaculada Concepción de la Virgen María⁸⁹ (fols. 203–204). In the preface to the last of these works, in folio 203, Correa mentions the time signature used (compás ternario) and takes up once more the two ways to perform the sesquialtera proportion. Lastly, in the earlier-discussed preface to the Segundo tiento de quarto tono "a modo de canción" (f. 45v), dealing with several time signatures, Correa advises one to give the downbeat to the first whole note in compás ternario, to stay on the second and to give the upbeat on the third whole note, making the half notes equal, while in the proporción menor (C 3 or C 3/2) one plays with the ayrezillo (ibid.: 45v), a special way to perform that is discussed in detail in Chapter VI, 4.2 Ayrezillo of this dissertation. Correa's tiento "a modo de canción" involves several sections written in different time signatures, as does the *Tiento tercero de sexto tono* "on the first part of the Batalla de Morales" (fols. 59v-85 [63]), to which Correa's advice about the matters of *compás* given in folio 45v also refers. (For a discussion on performing these multisectional *tientos* in regard to tempo issues and proportions, see Bovet [1979a: 3–7 and 1979b: 4–9].)

3.5.4 The tiempo perfecto (O)

There are four works in the *Facultad orgánica* "of thirty-two numbers [i.e., notes] to the measure," notated with the time signature called *tiempo perfecto* (O), which implies the slowest *compás* of Correa. As was the case with the four successive works in *compás ternario*, Correa has written a preface in common to all his four works in *tiempo perfecto*. Besides, each individual work has its own preface. In these pieces the length of one binary measure (i.e., a bar) is one whole note. In his edition of the *Facultad orgánica*, Kastner has changed the original time signature (O) to C in all Correa's works of thirty-two notes.

In the preface to his compositions written in O, Correa points out that he notates all such works "with the *tiempo* (commonly) called *perfecto*, in order to make understood the slowness [*morosidad*] of the *compás*, in respect to the great quantity of the diminution" (Correa 1626: 153v). Correa immediately adds that this slowness (*tardança*) depends on

^{85 &}quot;Dexaldos mi madre mis ojos llorar, pues fueron a amar" (Allow, my mother, my eyes to weep, since they have loved).

^{86 [}Here] follow sixteen glosas based on the song "Keep the cows for me."

⁸⁷ Prosa of the Sacred Sacrament.

⁸⁸ Plainsong of the Immaculate Conception of the Virgin Mary.

^{89 [}Here] follow three glosas based on the plainsong of the Immaculate Conception of the Virgin Mary.

"the greater or lesser fastness that everyone naturally has in his hands" (ibid.). Correa emphasizes that the chosen speed has to be the same in both the plain and the ornamented passages and that he demands "plenty of regularity [ygualdad], touch [toque] and clarity [limpieza] in these works" (ibid.). Correa's advice that the compás must be kept the same in plain texture and in the technically very demanding and virtuoso passages of glosas in thirty-second notes is crucial to any performer of these unique works.

In the preface to the third of his works "of thirty-two notes to the measure," the *Tiento de medio registro de baxón de segundo tono*, Correa remarks that the piece is better suited to be played on *realejos* (small organs) than on great organs whose basses are not able to respond with the necessary speed and whose key action is very heavy and deep (ibid.: 163). Correa's comment naturally refers to the performance of his works involving thirty-second notes in particular, the playing of which poses special requirements concerning both the qualities of the instruments and the skills of the performer.

The latter aspect is touched upon by Correa once more in the preface to his fourth and last work involving thirty-second notes, entitled *Síguese la muy célebre canción Susana*. In this preface, Correa tells his readers that "in this Holy Church of Seville" there was a famous sackbut player, Gregorio de Lozoya, who was specially skilled in making *glosas* with his instrument (ibid.: 167). According to Correa, a critic said that Lozoya had sent to perdition many sackbut players of his time who had, in trying to imitate his *glosas*, revealed weaknesses which they disguised when they played unornamented texture (*llano*). Correa writes that he does not want the same to happen to his organists "in these very ornamented and difficult works [of thirty-two notes to the measure]" and recommends, in the case that they do not possess the necessary natural dispositions and knowledge, that they leave the playing of such works to those who have these abilities and that they tackle instead works more appropriate for them (ibid.).

3.5.5 Remarks on Correa's Proportion-Related Prefaces

Of the prefaces relevant to matters of tempo and time signatures mentioned in the beginning of this chapter, the last three focus mainly on proportions. In a preface to Correa's first work of the *Facultad orgánica*, the *Tiento de primero tono* (f. 1), the composer takes up the two manners of playing the proportion sesquialtera (another one of which is the *ayrezillo*) that are discussed in my chapters on proportions and *ayrezillo*. In the preface to the *Segundo tiento del sexto tono*, Correa mentions the use in many of his works of some figures (i.e., notes) which are not found in the notation of *canto de órgano* (Correa 1626: 57). Correa gives as an example a figure of the duration of five quarter notes, five eighth notes "and others in this manner" which Correa claims to have seen practiced "in *discursos* notated in *cifra* of the most eminent masters of the organ of our Spain" (ibid.). I consider Correa's words to refer mainly to the quintuple proportion. However, in the

^{90 [}Here] follows the very famous [or, celebrated] $canci\'{o}n$ Susana.

⁹¹ Here Correa is most probably referring to his students.

^{92 &}quot;... en estas obras muy glosados y en las muy dificultosas"

work whose preface is under discussion here, Correa uses the septuple proportion and not a quintuple proportion. Also in the preface to the *Quinto tiento de medio registro de tiple de séptimo tono*, Correa mentions that "[we,] masters of organ have many more figures [i.e., notes] than those of *[maestros de] capilla*" (ibid.: 75v), as he points out having stated earlier. Correa's comment is related to his remarks in the beginning of the preface where he makes it known that "in *quiebros* and *redobles* there is no determined number of notes" (ibid.). Correa gives as an example a *quiebro* in measures 29 and 41 whose first notes are of a duration of five sixteenth notes (ibid.).

To summarize the discussion of Correa's different time signatures, their signs, names, and number of different note values per measure (bar) in each of these time signatures, see **Table 9** below, where the time signatures are presented in the order of the relative tempos implied by the time signatures, the fastest tempo being on the top.

Table 9. Signs and Names of Correa's Time Signatures and the Number of Different Note Values per Measure (Bar) in Each of the Time Signatures – Presented in the Order of Relative Tempos Implicated by the Time Signatures

SIGNS OF THE TIME SIGNATURES	NAMES OF THE SIGNS AND/OR COMPASES	NUMBER OF DIFFERENT NOTE VALUES PER MEASURE (BAR) IN THE TIME SIGNATURES						
		Breve	Semi- breve	Mínima	Semí- nima	Corchea	Semi- corchea	(Fusa)
¢	Tiempo [imperfecto] partido, (compás mayor)	_	1	2	4	8	16	-
ф	Tiempo [perfecto] de por medio	_	1	2	4	8	16	-
c	Tiempo imperfecto, compasillo, (compás menor)	-	1	2	4	8	16	-
C 3	Proporción menor	_	1	3				
ф 3	(unnamed)	1	3	6	12	_	_	_
ф 3/2	Compás ternario, (proporción mayor)	1	3	6	12	24	(48, not used by Correa)	_
o	Tiempo perfecto	_	1	2	4	8	16	32

3.6 Proportions

The issue of proportions is closely related to the field of tempo and time signatures. Correa defines a proportion as a relation of one number to another – like the number of notes of

one voice compared to the number of notes of another voice (Correa 1626: 5v⁹³). Correa's definition conforms with the typical definition of a proportion among the theoreticians of his time (Jambou 1968: 67, citing Cerone's *El Melopeo y el Maestro*, 1613, Naples).

In his introduction to the *ADVERTENCIAS*, Correa makes two mentions of proportions. First, he writes that in his book one finds some [previously] "not known" proportions, such as five, nine, eleven, and eighteen notes to the measure, as well as other ones which are in the book of *versos*⁹⁴ (Correa 1626; 1–1v). Second, Correa mentions certain numbers which denote a "difference of *ayres*⁹⁵" within the same proportion, "as in *proporción sexquialtera* of six or twelve notes to the measure, one time put a two, another time a three above [the notes]" (ibid.: 1v).

Considering Correa's list of proportions presented above, the proportion of eleven notes is never used in the music of his known to us. On the contrary, the proportion of seven notes to the measure is used in three *tientos* of the *Facultad orgánica*, although this proportion is not mentioned in the introduction to the *ADVERTENCIAS* by Correa. It seems obvious, too, that the proportions characterized by Correa as previously "not known" had been in use prior to Correa – the proportion of eleven perhaps being excluded. In fact, Correa himself "warns" in the preface to his *Segundo tiento del sexto tono* that "in this [work] and in many others of these *discursos*, I use some figures that are not found in [the notation of] *canto de órgano*, like the figure which is a duration of five quarter notes, five eighth notes, and others in this manner, that I have seen (without exception) practiced in *discursos* [notated] in *cifra*, by the most eminent masters of organ of our Spain":

Aduierto q[ue] en este y en muchos destos discursos, vso de algunas figuras que no se hallan en ca[n]to de organo: como de figura que vale cinco seminimas, cinco corcheas, y otras a este modo, lo qual e visto (sin ecepcion) practicado en discursos de cifra, de los mas eminentes maestros de organo de nuestra España (ibid.: 57).

The second mention of proportions in the introduction to the *ADVERTENCIAS* concerns the two different styles of playing in the sesquialtera proportion and the way of showing this "difference of *ayres*" in notation. This subject will be briefly dealt with in the course of this chapter of my dissertation and more in detail in the chapter about *ayrezillo*.

Besides the introduction to the *ADVERTENCIAS*, there are several other places in the *Facultad orgánica* concerning proportions. The most extensive of these are the *DECIMO PVNTO* (Tenth Point, f. 5v–5 [6⁹⁶]) and the *VNDECIMO PVNTO* (Eleventh Point,

⁹³ The number of folio 5 is illegible in the Brussels exemplar and unclear in the two Madrid exemplars.

⁹⁴ This work that Correa claims to have written has not been found.

⁹⁵ The term *ayre* presents a real challenge to a translation. In my opinion, the "*style d'interprétation*" ("style of interpretation") and the "*manière de jouer*" ("manner of playing") – used by Guy Bovet in his French translation of the *Facultad orgánica* – come closest to the essence of *ayre* in this context (Bovet 1986b: No. 2: 2, footnote 16; *TI*: 15, footnote 116).

⁹⁶ The number of folio 5 is illegible in the Brussels exemplar and unclear in the two Madrid exemplars. Folio 6 has been erroneously numbered as 5, in at least the Brussels exemplar.

f. 5–5v [6–6v]) of the *ADVERTENCIAS*. In addition, there is one subchapter (f. 18–18v) in *CAPITVLO SETIMO* of the *SIGVESE EL ARTE DE PONER POR CIFRA* and several prefaces to *tientos* which take up proportional issues. (The said prefaces are found in folios 1, 45v, 55, 57, 73, 88v, and 203.) There are also some places in Correa's compositions where a particular proportion is shown by the written-out name of the proportion and/or a proportional sign, printed in the margin, or above or below the staffs of *cifra*. Such markings are found, for instance, in folios 58v, 90, 105v, 148, 159–159v, 160, and 161v–162. As a subject, Correa's notions about proportions deal either with the sesquialtera proportion and the two styles of playing it, or with other proportions, such as those having five, seven, nine, or eighteen notes to the measure. Next I will discuss briefly the sesquialtera proportion and then move on to look at the other proportions of Correa.

3.6.1 Sesquialtera Proportion

In this chapter, I view the sesquialtera proportion mainly from the theoretical standpoint, while the challenging and important issue of the interpretation of Correa's *ayrezillo* – one manner of performing the sesquialtera proportion – is discussed in detail in *Chapter VI*, 4.2 *Ayrezillo* which follows.

Basically, the sesquialtera proportion, called either *proporción sexquialtera* or *proporción sesquialtera* in the *Facultad orgánica*, is a proportion of three to two. Correa indicates the use of sesquialtera either by a fractional number 3/2 added to the time signature of the *tiempo imperfecto partido* (�) or by a '3' added to the time signature of the *tiempo imperfecto* (�). Theoretically, the top number of the 3/2 shows that in a new section of a work, three notes replace two notes of the previous section, denoted by the lower number. Sesquialtera can also be described as "a rhythmic figure that consists of three, or multiples of three, notes per rhythmic unit; in other words, it represents triple subdivision" (Holland 1985: 231, footnote 34).

In his VNDECIMO PVNTO (the Eleventh Point) of the ADVERTENCIAS, Correa describes proporción sexquialtera as having six, nine, twelve, or eighteen notes to the compás (Correa 1626: 5 [6]). The VNDECIMO PVNTO is focused on the "two different ways" with which one can play the same number of notes in the sesquialtera proportion. Correa considers the first manner easier than the second. In this first manner, the notes are played "equally" and "without ayrezillo." Correa depicts the first way to be "like the one of the proporción mayor" (ibid.). By this comparison, Correa refers to the three whole notes, six half notes, or twelve quarter notes which proporción mayor has to the compás, and states that these notes are to be played "plain and without ayrezillo" (ibid.). Correa denotes his first manner of playing the sesquialtera proportion with a '2,' placed above the staffs of cifra.

The second way of performing the sesquialtera involves the notes to be played "somewhat unequally and with that *ayrezillo*, and grace of the *proporción menor*" (ibid.). According to the author of the *Facultad orgánica*, the second manner is the one more often used by organists, although it is "difficult." In this manner – more challenging to the

interpretation than the first one – one lingers more on the first note and less on the second and third notes. Similarly, one lingers more on the fourth and less on the fifth and sixth notes. (Ibid.) Correa describes this way of playing "(almost) like making the first note a half note and the second and third quarter notes, or, in half values, [the first note] a quarter note and [the second and third notes] two eighth notes" (ibid.: 5–5v [6–6v]). Correa's sign for indicating the second way of playing the proportion sesquialtera, in other words, *ayrezillo*, is a 3, placed above the staffs of *cifra*. Correa draws a parallel between *ayrezillo* and the *proporción menor*, which has three half notes to the measure. In *proporción menor*, the notes would generally have been played in a fashion in which one divides six notes into two groups of three notes, from which the "grace of the *proporción menor*" derives. This practice is clearly reflected in Correa's subchapter *SESQVIALTERA* (f.18–18v) in the *CAPITVLO SETIMO* (the Seventh Chapter) of the *[SIGVESE] EL ARTE DE PONER POR CIFRA*, explaining where to place the downbeat and the upbeat in different proportions.

First of all, in *glosa* of sesquialtera of six notes to the *compás*, one gives the downbeat to the first note and the upbeat to the fourth note within the measure – if the sesquialtera is notated "with the ayre of prop. [orción] menor, which is, with a [number] three above [the notes]" (ibid.: 18). If the sesquialtera of six notes to the *compás* is notated instead "with the ayre of prop.[orción] mayor, which is with a [number] two above [the notes]," one places the downbeat on the first note and the upbeat on the fifth note (ibid.). Accordingly, in the sesquialtera of twelve notes to the measure, the downbeat is given to the first note and the upbeat on the seventh note if there is a 3 written above the staff of cifra. If there is a 2 above the notes, one places the downbeat on the first note and the upbeat on the ninth note of the *compás*. (Ibid.) In the same place, Correa mentions the sesquialtera of nine notes to the compás, which is "of proporción mayor con [proporción] menor," in which case one gives the downbeat to the first note, rests [or stays] on the fourth note, and gives the upbeat to the seventh note (ibid.). Correa's terming the sesquialtera proportion of nine notes to the compás a proporción mayor with [proporción] menor means that the downbeat and upbeat are placed in a fashion similar to that in the proporción mayor, where the downbeat is twice as long as the upbeat. At the same time, the proportion involves three groups of three notes in each.

In the four prefaces of the *Facultad orgánica* that deal with the sesquialtera proportion (f. 1, 45v, 73, and 203), Correa concentrates on repeating the difference between the two manners of playing this proportion (either "equally" or with *ayrezillo*) and on showing these two ways of performing in notation (with a '2' or with a '3' above the staffs of *cifra*).

3.6.2 Proportions Other Than Sesquialtera

Whereas the VNDECIMO PVNTO of Correa's ADVERTENCIAS focuses on the two particular manners of performing the sesquialtera proportion, the DECIMO PVNTO (Tenth Point) focuses on proportions in general and on how one has to "give" the tactus in different proportions. At the beginning of the DECIMO PVNTO, the author of the Facultad orgánica makes a reference to a table of proportions "which they say is from Pythagoras."

As already mentioned, Correa defines a proportion as a relation of one number to another, as a number of notes of one voice to the number of notes of another voice. (Correa 1626: 5v.) He gives as examples a relation of one against one, which gives an equal proportion, two against one, which produces a duple proportion, and three against one, which gives a triple proportion. Similarly, a relation of four to one gives a quadruple, five to one a quintuple, six to one a sextuple, and a relation of seven to one a septuple proportion. According to Correa, there are also many other proportions in the said table. Correa points out that, in theory, one may create new proportions infinitely but in practice there cannot be more notes per measure than the speed of one's hands allows. (Ibid.: 5v–5 [6].)

The rest of the *DECIMO PVNTO* is devoted to a rather complicated explanation of how one conveys the tactus in various proportions. Correa uses the terms "dar" (to give), "estar" (to be, to rest), and "alçar" (to raise) to describe the movements of "beating" the tactus, the *compás*. "Giving" depicts the gesture of giving the downbeat by a downward stroke, "resting" meaning the hand of the tactus beater remaining still on the second beat, and "raising" signifying raising of the hand on the upbeat. Correa advises one to play "equal and binary" such measures which can be divided into two equal halves while measures divisible into three equal parts have to be played "unequal and ternary," "giving" on the first part, "resting" on the second, and "raising" on the third (ibid.: 5 [6]).

The procedure of finding the proper way of giving the *compás* in regard to numbers of notes which are divisible into neither two nor three equal parts is more complex. Correa gives as examples the proportions of five, seven, eleven, thirteen, fifteen, and seventeen notes per *compás*. According to Correa, these proportions have to be divided into two unequal parts, the larger part of which has to be given to the downbeat and the smaller one to the upbeat in such a way that to the smaller part is added a number of notes that makes it divisible by two or three. The next step is to divide the total number of notes – consisting of the real number of notes of the original proportion plus the added note(s) – by three. The gained result, a third of the total number of notes, then shows how many notes of the original proportion belong to the upbeat, that is, to the smaller part of the measure. (Ibid.) For instance, in the quintuple proportion, one needs to add one note in order to get a number of notes divisible by three, which is six in this case. A third of six is two, which tells the number of notes to be given to the upbeat in each measure (5 + 1 = 6; 6: 3 = 2). In other words, in the quintuple proportion, the downbeat consists of three notes and the upbeat of two notes. In the case of the septuple proportion, one must add two notes to the original number of notes per measure to reach a figure divisible by three (7 + 2 = 9; 9 : 3 = 3). After the calculation, it may be readily seen that one has to give four notes to the downbeat and three notes to the upbeat in the proportion of seven notes per measure. The proportion of nine notes per measure poses no problems and does not need any adding of notes because it is already divisible by three and thus the downbeat receives six notes and the upbeat three

⁹⁷ The number of folio 5 is illegible in the Brussels exemplar and unclear in the two Madrid exemplars.

⁹⁸ Correa uses here the word "*llevar*," which could be translated as "carry" and can refer to playing and/or beating the *compás* in this context, as I see it.

notes (which is a third of the total number of notes). In the proportion of eleven notes per measure, on the contrary, it is necessary to add one note in order to get a number divisible by three (11 + 1 = 12; 12 : 3 = 4). A third of the total number again shows the number of notes to be placed on the upbeat, this number naturally being four in this case. At the end of the *DECIMO PVNTO*, Correa emphasizes that one should not add any notes to proportions "in reality" but only "mentally" (ibid.: 5 [6]). That is, one should neither play nor sing the added notes. The procedure and calculations explained by Correa have the sole purpose of helping one find the right place for the upbeat in different proportions.

Correa mentions the proper places of the downbeat and upbeat for the *proporción sesquiquinta* (the quintuple proportion) also in the [SIGVESE] EL ARTE DE PONER POR CIFRA, in the CAPITVLO SETIMO, under the heading SESQUIALTERA. As in the DECIMO PVNTO, Correa advises one to give the downbeat to the first note and the upbeat to the fourth note in the proportion of five notes per measure (ibid.: 18v). He completes his instructions by adding that in the double of the said proportion, which involves ten notes to the measure, one should give the downbeat to the first note and the upbeat to the seventh, the next downbeat coming on the eleventh note – which is naturally the first note of the next measure (ibid.).

3.6.3 The Quintuple, Septuple and Nonuple Proportions in Light of Some of Correa's Prefaces

As already discussed earlier, Correa declares in the introduction to his *ADVERTENCIAS* that one will find in the *Facultad orgánica* some "[previously] not known" proportions of five, nine, eleven, and eighteen notes to the measure and others which are in the [book of] *versos* (Correa 1626: 1–1v). On the contrary, in the preface to his *Segundo tiento del sexto tono*, Correa writes to have seen the proportion of five notes, and also "others in this manner," practiced in "*discursos* notated in *cifra* of the most eminent masters of organ of our Spain" (ibid.: 57). It seems clear that most of the proportions mentioned by Correa were known and had already been used before him. However, at least the quintuple proportion must have been rare. Guy Bovet points out in his French translation of the *Facultad orgánica* that to our knowledge there does not exist a Spanish piece with quintoles or measures in five, except for those by Correa and one piece by Pablo Bruna (Bovet 1991b: No. 3: 17; *TI*: 75). Concerning the proportion of eleven notes to the measure, I have not so far found any Spanish pieces written in this proportion by Correa, his contemporaries or composers prior to him. There exists a possibility, nevertheless, that Correa used (or planned to use) the proportion of eleven notes per measure in the undiscovered *Libro de versos*.

Besides the preface to the *Segundo tiento del sexto tono* (f. 57), there are two other prefaces in the *Facultad orgánica* which involve important information about the performance of proportions other than sesquialtera. These prefaces are found in folios 55 and 88v. In the preface to the *Tiento de sexto tono*, Correa explains that he uses the *tiempo de pormedio* because the *compás* has to be played lightly, "until the *proporción nonûpla*, which has to go as I said in the *Segundo discurso de quarto tono*" (Correa 1626: 55). By his

reference to the preface of the *Segundo tiento de quarto tono*, Correa wants to repeat that in the proportion of nine notes to the measure one should play in a manner similar to that he describes to be characteristic of the *proporción menor*, that is, "with the *ayrezillo*, habitual of this *tiempo* [tempo, time signature]: more or less slowly, according to the number of notes [per measure]" (ibid.: 45v). The section of the *Tiento de sexto tono* written in nonuple proportion is found in measures 81–91 of the work, in folio 56.

The second preface which gives crucial advice on performing proportions is the one written to the *Quinto tiento de medio registro de baxón de primero tono*. In this preface, Correa points out that in the ninety-seventh measure of this *tiento* there is one little-used proportion called *sexquiséptima*, or *septûpla*, of seven notes to the measure. ⁹⁹ According to Correa, the seven notes of each measure have to be performed "with equality of tempo, without lingering more on one than another [note], as indicates also the two placed below the seven" (ibid.: 88v).

Correa uses the proportion of five notes to the measure, the *proporción quintûpla* (or, sesquiquinta) in three of his compositions (XLI in fols. 104v–107, LVI in fols. 146v–149v and, LIX in fols. 158-162v). The proportion of seven notes per measure, the proporción septûpla (or sexquiséptima), is used likewise in three works (XXII in fols. 57–59, XXXIV in fols. 88v-90, and LIX in fols. 158-162v) while the proportion of nine notes to the measure, the proporción nonûpla, is used in two works (XXI in fols. 55–56v and LIX in fols. 158–162v) of the Facultad orgánica. All three different proportions appear in the Tiento de medio registro de tiple de segundo tono (LIX), which is particularly rich and lively in many kinds of changes and details. In brief, six of Correa's works contain the use of at least one of the proportions of five, seven or nine notes to the *compás*. Louis Jambou hits the mark by noting that although the number of Correa's tientos involving the said proportions is rather limited, the composer, nevertheless, creates the maximum effect by the use of them (Jambou 1968: 70). In addition, Jambou makes the important remark that only a restricted number of Correa's tientos does not present "any irregular modification" (ibid.: 69), although the use of the quintuple, septuple and nonuple proportions is restricted to the above-mentioned six works.

The importance of the issue of proportions to Correa himself is reflected not only in his text proper but also in his notation. Most of the time the composer indicates the proportions of five, seven and nine notes to the measure both by figures and the name of the proportion printed in the margin, or above or below the staff of *cifra*, in the place where the proportion begins. In addition, the figures denoting quintuple, septuple and nonuple proportions are printed either above every measure or above the beginning of every new staff of *cifra* in sections involving any of the said proportions. Some names of proportions are followed by advice on performance, this advice being reproduced in many cases – though not in all – by Kastner in his edition of the *Facultad orgánica*. However, these brief notions on

⁹⁹ In fact, the septuple proportion begins in measure 98 and continues until the beginning of measure 119.100 By "the two placed below the seven," Correa refers to the proportional signature which he uses at the beginning of the section written in the septuple proportion.

performance practice in the course of the pieces go unnoticed easily, especially if one is not acquainted with Correa's special terminology. Next I will go through the indications of the proportions of five, seven and nine notes per measure in the above-mentioned six works of Correa.

In the first of these compositions, the *Tiento de sexto tono* (fols. 55–56v), Correa mentions the *proporción nonûpla* in the preface, referring to another preface in folio 45v, calling for the playing style characteristic to the *proporción menor*, called *ayrezillo*, the tempo being determined according to the number of notes [in the *compás*] (Correa 1626: 55 and 45v). The last notion means that the tempo should be taken neither too fast nor too slowly, taking into account the number of notes per measure. Correa shows the beginning of the section in the proportion of nine notes per measure by $\bf C$ 3, on the third beat of measure 81 (f. 56). The previous section is written in $\bf O$ 3 and contains three whole notes per measure. Thus, the section in nonuple proportion can be considered as triplets in relation to the previous section.

The second of the said works, the *Segundo tiento del sexto tono* (fols. 57–59), involves a brief appearance of the *proporción septûpla* towards the end of the composition. In the preface to the work, Correa mentions his use of proportions which are not found in [notation of] *canto de órgano* (ibid.: 57). Correa denotes the beginning of the two measures in the proportion of seven notes to the measure (f. 58v, meas. 116–117) by a proportional sign 7/2 and by the words "*prop.septûpla*," printed above the measure and staff of *cifra* where the proportion starts. The previous section is written in **C**, and the groups of seven notes of the septuple proportion are in eighth notes.

In the third work under discussion here, the *Quinto tiento de medio registro de baxón de primero tono* (fols. 88v–90), there is a section of septuple proportion, this one also being found towards the end of the work. In the preface to the composition, Correa refers to his use of "a little used proportion called *[proporción] sexquiséptima*, or *septûpla* of seven notes to the *compás* (ibid.: 88v). According to Correa, these notes have to be played with equality of tempo, without lingering more on one than another note, which is also shown by the two below the seven (ibid.). Correa then employs the proportional sign mentioned (7/2) at the beginning of the section in septuple proportion in measure 98 (f. 90), above the staff of *cifra*. In the same place, below the staff, are printed the words "*Prop.septupla, ayre igual*," pointing to the style in which the seven notes in each measure of the proportion are played "equally." The previous section is written in \$\mathscr{C}\$, and the groups of seven notes of the septuple proportion are in eighth notes.

In the fourth work involving a proportion of five, seven or nine notes to the measure, the *Tiento de medio registro de tiple de dozeno tono* (fols. 104v–107), there is a section in quintuple proportion not mentioned in the preface to this composition. Correa indicates the beginning of the proportion in measure 60 (f. 105v) both by a proportional sign 5/2 and the text "Quintù / pla pro- / port. / y sudu- / plade cu / pla." [Quintuple proportion doubled into a decuple proportion], printed in the left margin of the staff of cifra. In the facsimile edition of the Facultad orgánica by Minkoff (1981), only a small part of this

text is visible. In the Madrid exemplar R.9279, the text is seen to a greater extent, and in the other Madrid exemplar, R.14069, the entire text can be seen and is also clearly legible. The said text refers to the "double" of the *proporción quintûpla*, containing ten notes per measure. The previous section is written in **C**, and the ten notes of the quintuple proportion in double receive, basically, the note value of eight notes.

The *Discurso de medio registro de dos baxones de quarto tono* (fols. 146v–149v) is the fifth work which contains at least one instance of the "rare proportions." The section in the quintuple proportion, beginning in measure 83 (f. 148), is denoted by the sign **C** 5/3. The ten notes per measure of the proportion receive the note value of quarter notes, the previous section involving triplets in quarter notes. There is no indication of how the quintuple proportion is to be performed.

The sixth work in the *Facultad orgánica* involving examples of the quintuple, septuple and nonuple proportions is by far the most interesting and complex of all. This composition is the "other" *Tiento de medio registro de tiple de segundo tono* (fols. 158–162v) and one of the four works having thirty-two notes to the measure. The work under discussion contains one instance of the quintuple proportion, three of the septuple proportion and, in addition, one example of the nonuple proportion.

First, there is a short appearance of the proportion of seven notes, lasting for only one measure (m. 50). This is indicated both by the figure 7 written above the measure and the text "septupla prop. ayre igual.," printed below the said measure. Only three measures later, in the latter half of measure 54, is a section in nonuple proportion, terminating at the end of measure 56. Correa has denoted the beginning of the section in nine notes per measure by the proportional sign 9/3 and by the words "Nonupla prop. ayre de sexquial.," printed below the measure where the proportion begins. The septuple proportion is preceded by a section in O (each measure having the total value of one whole note 101), the nonuple proportion being preceded by a section consisting mainly of triplets in sixteenth notes in O.

The texture written in the main time signature O is interrupted again in measure 87, this time by a quintuple proportion, lasting for four measures. The beginning of the proportion is shown by the figure 5 and the words "*Proportio quintupla, ayre igual*," printed under the first measure in the proportion of five. The section in the quintuple proportion is preceded and followed by "ordinary" texture in O.

Towards the end of Correa's extensive *tiento*, astonishing in rhythmic variance and details, there are two reasonably long sections written in the septuple proportion. The first one of these is found in measures 119–129 and the second in measures 139–143. Correa has indicated the beginning of the first proportion in seven by the figure 7 and by the text "Septupla proport. ayre igual.," printed under the first measure of the proportion. The second instance of the septuple proportion is likewise denoted by the figure 7 and by the words "Septupl. proport.," printed under the place where the proportion begins. Both of the

¹⁰¹ It is noteworthy that Correa uses the time signature o for a *compás* whose length is one whole note and not a double whole note, as the use of O would ordinarily indicate.

sections written in the proportion of seven notes to the measure are preceded and followed by Correa's regular texture in O.

Four out of five of Correa's indications of the use of the quintuple, septuple and nonuple proportions in his "other" *Tiento de medio registro de tiple de segundo tono* involve references to performance practice. The denotations of the proportion of five and seven notes per measure are both accompanied with the word "ayre igual," pointing to the "equal" manner of playing the five and seven notes of these proportions. In addition, the indication of the nonuple proportion includes the notion "ayre de sexquial.[tera]," most probably referring to the "second way" of performing the notes in the proportion sesquialtera, the ayrezillo, in which the notes are played "somewhat unequally" and with the grace of the proporción menor.

3.6.4 Remarks on the Performance of Correa's Proportions

As already observed, both Correa's writings and the indications of proportions in the course of his compositions involve hints on performance practice. The performer receives information about how to figure out the proper place for the downbeat and the upbeat in different proportions and whether the notes in a particular proportion are meant to be played "equally" or "unequally." In the sesquialtera proportion, Correa shows the equal playing style with the figure two and the unequal manner of performance with the figure three, both being printed above the staffs of *cifra*. Correa calls the "second manner" of playing the sesquialtera proportion (indicated by '3') *ayrezillo*, which is a term specific to Correa, to my knowledge.

One interesting element of performance practice concerning proportions, besides the playing style of ayrezillo, is the relation of the voice(s) moving in five, seven or nine notes to the measure and their accompanying voices. In light of Correa's advice on the performance of proportions given in the textual part proper, in the proportions under discussion, the larger part of the measure belongs to the downbeat and the smaller part to the upbeat. In theory, in a $comp\acute{a}s$ of the quintuple proportion, three notes ought to fall on the downbeat and two on the upbeat. In the proportion septuple, four notes should be placed on the downbeat and three on the upbeat while in the nonuple proportion, six notes belong to the downbeat and three to the upbeat. However, there are various cases breaking the above-mentioned recommendations in Correa's music. One of the most curious examples is the use of the quintuple proportion in the *Discurso de medio registro de dos baxones de quarto tono* (fols. 146v-149v). See an excerpt of this work in the following example where the division of rhythmic units in the accompanying voices follows a pattern of 2+1+2 instead of 3+2, which would be more in accordance with Correa's instructions on the ideal placement of the downbeat and the upbeat in the particular proportion:

Example 37



Discurso de medio registro de dos baxones de quarto tono,

f. 148, measures 83-85

In the *Tiento de medio registro de tiple de dozeno tono* (fols. 104v–107), the section in the quintuple proportion (f. 105v, measures 60–64) is more in accordance with Correa's advice in the textual part of the *Facultad orgánica*, while in the third work, the "other" *Tiento de medio registro de tiple de segundo tono* (fols. 158–162v), involving a section in the proportion of five notes per measure (f. 160–160v, meas. 87–90), the accompanying voices move regularly in whole notes or half notes (the main time signature being O, having one whole note to the measure), not having any prominent role of their own.

Examining Correa's actual use of the septuple proportion as opposed to his theoretical guidelines, *Segundo tiendo de sexto tono* (fols. 57–59) does not employ the advice given in the textual part of Correa's book at all. In the "other" *Tiento de medio registro de tiple de segundo tono* (fols. 158–162v), in the second of the three appearances of the septuple proportion (f. 161v), the groups of seven notes alternate between different voices, and, as a result, there is no real contrast between the groups of seven notes and the "accompaniment." The same is true of the third instance of the septuple proportion in the said work (f. 162), where the accompanying lower voices move regularly, mostly in half notes or whole notes and do not have any special character. Correa's third work containing a section in the septuple proportion, *Quinto tiento de medio registro de baxón de primero tono* (fols. 88v–90), obeys most the division of rhythmic units into a pattern of 4 + 3. However, also in this section of seven notes to the measure (f. 90), there are examples of other kinds of treatment of the accompanying voices.

In Correa's two works involving use of the nonuple proportion, the first one, *Tiento de sexto tono* (fols. 55–56v), has only two measures supporting the theoretical recommendation of giving six notes to the downbeat and three to the upbeat. In the second of the mentioned works, the "other" *Tiento de medio registro de tiple de segundo tono* (fols. 158–162v), in its brief instance of the nonuple proportion (f. 159v), the accompanying voices move regularly in half notes or whole notes (the main time signature being O) without any reference to the division of notes into a 6 + 3 pattern.

As in so many other issues, Correa's theoretical ponderings on proportions differ a great deal from his practical applications of the quintuple, septuple and nonuple proportions. Today's performers of Correa's works may raise the question of whether in some cases one should change in performance the placement of the accompanying voices in relation to

the voice(s) carrying five, seven or nine notes to the measure, in order to conform better to the literary advice of Correa. Regarding Correa's careful way of notating his pieces and the often-present discrepancy of the theory and practice in the *Facultad orgánica*, I would, nevertheless, stick to Correa's original notation when performing his works – with minor exceptions, perhaps. In my opinion, there is no reason to change and "correct" Correa's obviously very thoroughly considered and notated graphical suggestion for the alignment of different voices in sections of quintuple, septuple and nonuple proportions. (There remains a possibility, though, that certain notes having been positioned in a vertical line could merely be the result of a particular printing technique employed, in which case all of those notes were not, perhaps, necessarily meant to be sounded simultaneously.) Changing the placement of the accompanying voices would reduce greatly the creative solutions and elements of surprise brought out by the composer. (In the case that some performer of Correa's works would consider changing the alignment of voices in the proportions of five, seven, and nine notes per *compás*, one should take care that such changes do not cause incorrect counterpoint.)

Besides respecting the details of Correa's original notation in the quintuple, septuple and nonuple proportions, I consider it very important to pay attention to his notions of the "equal" and "unequal" manners of performing sections in different proportions. Concerning the performance of the sesquialtera proportion, Correa's advice on performance practice is the most explicit of all the proportions, although it does not give anwers to all questions. It is essential that every performer take time to ponder his own solutions in regard to special issues of performing proportions, in particular to the way of playing in *ayrezillo*, taking into account the advice and recommendations given by Correa and studying the original edition of his *Facultad orgánica*. Lastly, it is important to know that Correa's signs '2' and '3,' referring to two different manners of playing, are not always reproduced in Kastner's edition of the *Facultad orgánica*, contrary to the recently published complete edition of Correa's works by Guy Bovet.

4 Special Rhythmic Features

4.1 3+3+2 Rhythm

Despite the fact that there is not much of the three plus three plus two rhythm in Correa's works, a few words about this rhythm, which grew so popular in Spain and in Portugal, will surely be justified here. Although the rhythm became typical of the Iberian keyboard music of the seventeenth century, the story of its origin leads beyond the Iberian Peninsula. The development of this particular rhythm was part of the European development along with the eastern folk music and "primitive" music cultures (Apel 1960: 30). Willi Apel traces the first appearance of the rhythm back to the end of fourteenth-century Greece, referring to the chanson *Le point agu*, which belongs to the Ms. Turin, Biblioteca

Nazionale, J.II.9, written around 1400 in Cyprus (ibid.). Apparently, the first known use of the rhythm in Spanish organ music was in Antonio Cabezón's *Diferencias sobre el canto llano del caballero* where it appears in the theme (Holland 1985: 77). According to Apel's questionably categorical view, the main period of the 3 + 3 + 2 rhythm was the second half of the fifteenth century, in late Dufay, Ockeghem and Obrecht (Apel 1960: 30), and by the sixteenth century it was found practically throughout Europe. Apel gives examples of the use of the said rhythm by Dufay, Cristóbal de Morales, Antonio de Cabezón, William Byrd, Sebastián Aguilera de Heredia, José Jiménez, Mateo Flecha and the tablature book by Johannes von Lublin (ibid.: 30–33). Correa Braga, Pablo Bruna, Gabriel Menalt and Pedro de Araujo also make use of the 3 + 3 + 2 rhythm (Hoag 1980: 280). During the seventeenth century, the rhythm was found mainly in Spanish and Portuguese keyboard music (Apel 1960: 32). Study of the early keyboard repertoire proves that the rhythm was accepted equally in church and in secular music.

Theoretically the 3 + 3 + 2 rhythm can possibly be seen as one specific case of the *aksak* rhythm, which has often been called "Bulgarian." However, Constantin Braïloiu, for instance, has remarked that nothing authorizes one to attribute the term *aksak* to one single country since this rhythm can be found equally in Greece, Albania, Romania and Yugoslavia, with the Turkmen, Armenians, Berbers, Tuaregs, Bedouins and black Africans, in India and even with the Basques and in Switzerland (Braïloiu 1951: 72).

The *aksak* rhythm differs from the classical western rhythm by its "irregularity," meaning the constant usage of two units of duration (short and long) in place of one unit. Moreover, between these units an "irrational" arithmetic relation exists (ibid.: 75). The two units of different durations, particular to *aksak*, permit the formation of twelve simple binary or ternary measures, whose grouping into two or three produce duple or triple combined measures of different types (ibid.: 76). The 3 + 3 + 2 rhythm can thus be regarded as one case of the combined ternary measures (see Table III. [*Mesures composées triples*] in Braïloiu 1951: 77).

It is well to remember, too, that the 3+3+2 rhythm is the basis of many Latin American dances (Bovet 1979b: No. 4: 6) and familiar to us in the form of "bossa nova" (Bovet 1979a: No. 3: 4–5). Some scholars report the rhythm's also belonging to Spanish folk music (García Matos in Hoag 1980: 279). Whatever the reasons were, the 3+3+2 rhythm became very popular, especially in the Iberian keyboard music of the seventeenth century, its most typical form being notated as $| \downarrow \rangle \rangle \rangle | (e.g., Aguilera de Heredia, Bruna)$. Naturally, the same formation in longer note values can also be regarded as instances of this rhythm (e.g., A. de Cabezón).

The measures from 90 to 98 of Correa's sixteenth *tiento*, *Segundo tiento de quarto tono* ("a modo de canción") are usually considered the only case of the 3 + 3 + 2 rhythm in his works (see Holland 1985: 76, for instance). However, if the corresponding rhythms in longer values – often disguised by the way they are notated ¹⁰² – are also taken into account, it is possible to interpret the 3 + 3 + 2 rhythm as being found in other *tientos* of Correa, as

well. Cea Galán claims that the rhythm appears "surely" in Correa's *tientos* I, VII, IX, XVI and XIX (Cea Galán 1990: 16–17). In Correa's case, the "slower" 3+3+2 rhythms are often difficult to notice because the general demands for clarity of the *cifra* notation have dictated the way those rhythms have been written. On the contrary, in modern editions where the type of notation would enable one to bring out all kinds of 3+3+2 rhythms clearly, the editors have not always chosen to do so. For example, Will Apel writes that it is deplorable that in modern editions (of Dufay's *Missa Ecce Ancilla Domini*, for example) the formation of the 3+3+2 rhythm is often obscured, as it is understood as a syncopation within a 4/4 measure (Apel 1960: 30) and has been notated accordingly, which is not its real character. It is interesting, though, that the Spanish theoretician Pablo Nassarre seems to have taken this rhythm expressly as a kind of a syncopation (Nassarre 1724: 237). Eventually, I believe that the deepest essence and charm of the 3+3+2 rhythm is in its dance-like nature, which can be emphasized in playing by means of articulation and accentuation.

4.2 Ayrezillo

The concept of *ayrezillo* is one of the most interesting interpretational issues discussed by Correa in the *Facultad orgánica*. Despite his several attempts to explain the essence of *ayrezillo* in his book, there remain open questions about what it actually means to play "in *ayrezillo*." Yet, every performer of Correa's works is inevitably confronted with the question of *ayrezillo* and has to create his own practical solutions in interpreting it. Looking for grounds of interpretation for this special manner of playing can be initiated by going through Correa's own descriptions of it. There are several places in the *Facultad orgánica* which deal with *ayrezillo* or issues connected with it. Three of them are in the textual part (fol. 1v, 5–5v [6–6v], and 18) and the rest in the musical part (fol. 1, 45v, 73, 88v, 90, 159, 159v, 160, and 203). ¹⁰³

The first mention of the *ayrezillo* (fol. 1v, textual part) is in an introduction to the long chapter called *ADVERTENCIAS*. In this introduction, Correa presents in brief the main contents of the seventeen "points" (*puntos*) of the *ADVERTENCIAS*. Referring to the *VNDECIMO PVNTO* (the eleventh point), the author mentions the existence of different *ayres*, manners of playing:

Hallaras en algunos numeros de figuras de vna misma proporcio[n], notas que significan diferencia de ayres: como en prop.sexquialtera de seys o doze figuras al co[m]pas, vnas vezes puesto vn dos, y otras vn tres encima (Correa 1626: 1v).

¹⁰³ Of the nine places mentioned here, the three first – as well as the last one – deal with *ayrezillo* directly. The rest have to do with the *ayre igual*, the counterpart of *ayrezillo*, in the context of the proportions which Correa calls *quintupla*, *septupla*, and *nonupla*. Of the said places, those on folio 58v, 90, 105v, 159, and 160 refer to words or phrases printed on some pages of *cifra*, in the course of Correa's compositions.

(You will find some numbers among the notes of the same proportion, signs which signify a difference in *ayres*: as in *proporción sexquialtera* of six or twelve figures to the measure, one time a two, another time a three is placed above [the notes].)

The same issue is presented more in detail in the actual *VNDECIMO PVNTO* (ibid.: 5–5v [6–6v]) to which the above-cited place refers. The eleventh point is the most informative one of Correa's writings about *ayrezillo* in the *Facultad orgánica* and is found in the *ADVERTENCIAS*, the first main chapter of the textual part of Correa's book.

Correa commences his *punto* by writing that one can play the "*proporción sexquialtera*" in two different ways, specifying that this proportion has six, twelve, nine or eighteen figures in a *compás* (ibid.: 5 [6]). Correa describes the first manner of playing the sesquialtera proportion as follows:

El primer modo y mas facil, es tañerlas yguales, y llanas, esto es, sin detenerse mas en vna que en otra, y este ayre es como de proporcion mayor, en la qual van tres semibreues, y seys minimas, y doze seminimas al compas iguales, llanas y sin ayrezillo (ibid.).

Next Correa gives a description of the second way:

El segundo modo es, tañerlas algo desiguales, y con aquel ayrezillo, y graciocidad de proporcion menor, y este (au[n]que dificultoso) es el mas vsado de los organistas, y es deteniendose mas en la primera figura; y menos en la segunda y tercera: y luego detenie[n] dose en la quarta, y menos en la quinta y sexta. Y es (casi) como haziendo la primera minima, y la segu[n]da y tercera seminimas, o por la mitad, vna seminima y dos corcheas, y assi prosiguiendo por todas las figuras de cada co[m]pas. (lbid.: 5–5v [6–6v].)

(The second way is to play them somewhat unequally, and with that *ayrezillo* and grace of the *proporción menor* [c 3, c 3/2], and this (although difficult) is [the way] most used by the organists, and it is lingering oneself more on the first figure [i.e., a note]; and less on the second and third: and then lingering oneself on the fourth, and less on the fifth and sixth. And it is (almost) like making the first a half note, and the second and third quarter notes, or in halved [values], a quarter note and two eighth notes, and thus continuing through all the figures of each *compás*.)

¹⁰⁴ The verb 'detenerse' used by Correa is difficult to translate in this context in order to catch its full meaning. Some other scholars who have written about Correa have used the verb 'arrêter' (Bovet 1981c: No. 3: 2; TI: 26), 'detain [oneself]' (Holland 1985: 181), and 'hold' (Schrader 1987: 32) here.

After having described the two manners of playing, Correa explains the signs for denoting them in the music:

Supuesta pues esta disparidad (la qual puede suceder en qualquier tiempo entero, o partido) razon sera que tambien la aya en las senales que las denotan; demodo, que se pueda saber quando se an de tañer las tales figuras o numeros, con ayre ygual, o co[n] ayre desigual (ibid.: 5v [6v]).

(Supposing thus this disparity [which can appear in any *tiempo entero* (uncut time signature), or (*tiempo*) partido (cut time signature)] it is sensible that it also exists in the signs that denote it, in the way that one could know when one has to play such figures or numbers [i.e., notes] with equal, or unequal manner.

Correa's sign for the "equal manner" (*ayre igual*) is the number two, written above a staff of *cifra*. This sign indicates that one must "perform with equality, ¹⁰⁵ in the same way as the number two is equal, being formed of two equal units, [and] parts (ibid.)." Correa adds that what has been said does not seem to be a new thing because he has seen many works of great masters in *cifra* of twelve figures per measure, with a number two above, in place of the three "which we are used to using." [Ibid.)

The second, "unequal manner" (ayre desigual, or ayrezillo) is always written with a three above, which denotes the ayre of proporción menor and of the unequalness of time in the prolation, ¹⁰⁷ or pronunciation of such figures of sexquialtera. Correa refers to the use of the number three as an indication of ayrezillo by Cabezón, Manuel Rodriguez Pradillo and many others. According to Correa, there is no sense in changing this usage, especially because it is founded on reason. (Ibid.)

Correa also touches on the same subject in the second main chapter of the textual part of the *Facultad orgánica*, *SIGVESE EL ARTE DE PONER POR CIFRA*, under the heading *SESQVIALTERA*. In the first paragraph he explains:

En glosa de sesquialtera de seis figuras al compas, si fuere notada co[n] el ayre de prop. menor, que es con vn tres encima, da el compas en la primera, a[l]ça en la quarta, y buelve a dar el compas siguiente en la septima. Y si fuere notada con el ayre de prop.mayor, que es co[n] vn dos encima, da el compas en la prim.[,] alça en la quinta, y buelue a dar el co[m]pas siguiente en la septima. (Ibid.: 18.)

¹⁰⁵ Correa uses here the expression "proferir con igualdad" (Correa 1626: 5v [6v]). 'Proferir' ordinarily means to 'pronounce,' to 'say,' or to 'articulate [words or sounds]' but its older usage also involved such meanings as to 'offer,' to 'promise,' to 'suggest,' and to 'bring out' (Diccionario de la lengua española by Real Academia Española, Vigésima primera edición, Madrid 1992, Tomo II: 1673).

¹⁰⁶ Correa uses actually the expression "que nosotros usamos poner" ("which we are used to put").

¹⁰⁷ Holland points out that the unequal division of the prolation refers to the division of the whole note into three half notes, the downbeat occupying two, and the upbeat one of these notes (Holland 1985: 182).

(In *glosa* of *sesquialtera* of six figures to the measure, if notated with the manner of *prop[orción] menor*, which is with a three above, one gives the *compás* on the first [note], raises on the fourth, and returns to give the next *compás* on the seventh. ¹⁰⁸ And if notated with the manner of *prop[orción] mayor*, which is with a two above, one gives the *compás* on the first, raises on the fifth, and returns to give the next *compás* on the seventh.)

Correa goes on to explain that in *glosa* of *sesquialtera* of nine figures to the *compás*, one gives the downbeat on the first, stays on the fourth, and has the upbeat on the seventh, the next downbeat coming on the tenth (ibid.). In the *sesquialtera* of twelve notes in a *compás*, the principle is similar to the *sesquialtera* of six notes. Namely, one gives the downbeat to the first note, the upbeat to the seventh, and the next downbeat to the thirteenth. This is the case when one has the number three above the notes. If one has the number two, the downbeat comes on the first, the upbeat on the ninth, and the next downbeat on the thirteenth. (Ibid.)

Correa's explanation of *ayrezillo* found in the musical part of the *Facultad orgánica* basically repeats what he has already written in the textual part. In the preface to the first *tiento* of his collection, Correa "warns" that one should play in a manner which depends on whether there is a number two or three above the notes:

Y aduierto que (donde hallaren vn dos encima de seys o doze figuras al compas) an de tañer las tales figuras iguales sin ayrezillo de sesquialtera o proporcion menor, y donde hallaren (vn tres) aquellas figuras an de tañer con el dicho ayrezillo de proporcion menor, deteniendose mas en la primera y menos en la segunda y tercera, y a este modo las demas (ibid.: 1).

(I warn that [where there is a two above the six or twelve figures to the measure] one has to play such figures equally without *ayrezillo* of *sesquialtera* or *proporción menor*, and where there is [a three] these figures have to be played with the said *ayrezillo* of *proporción menor*, lingering oneself more on the first and less on the second and third, and in this way the other [figures, notes].)

In the preface to the *Tiento* "a modo de canción," Correa writes that in the proporción menor one has to play with ayrezillo, customary to this tiempo (ibid.: 45v). He adds that one plays "more or less slowly, according to the number of notes" (ibid). 109

In another preface, Correa once again clarifies the meaning of the numbers two and three as signs of different manners of playing. He writes:

En el tiempo ternario, llamado de proporcion mayor, se a de lleuar a espacio y con ygualdad de figuras donde huuiere numero dos encima, y donde huuiere numero tres, con el ayre deuido a proporcion menor, segun se a dicho al principio (ibid.: 73).

¹⁰⁸ With the words "give" (dar) and "raise" (alçar) Correa refers to the downbeat and upbeat within a measure.

^{109&}quot;... mas o menos a espacio, segun el numero de figuras."

(In the ternary *tiempo*, called *proporción mayor*, one has to play the figures slowly and with equality where there is a number two above, and where there is a number three, with the *ayre* attributed to the *proporción menor*, according to what has been said in the beginning.)

The final notion about *ayrezillo* in the prefaces of Correa's book is in the last preface to the three *glosas* on the plainchant of the Immaculate Conception. The author explains that one has to observe "the numbers" in playing the ternary *compás* of the first *glosa* of *sexquialtera*, the second of *sexquinona*, and the third one again of *sexquialtera*. That which has a sign of ternary, which is a three, has to go with the *ayrezillo* of *proporción menor*, and that which has the sign of binary, with the *ayre* of *proporción mayor*, the notes being equal. (Ibid.: 203.)

Only the sheer number of places in the Facultad orgánica where Correa takes up the practice of ayrezillo proves that this playing style must have been very important to him. Not only did he want to show clearly in notation where ayrezillo should be applied, but he also made several attempts to describe how it should actually be played. On one hand, despite Correa's obvious intentions, all his explanations about avrezillo do not, after all, give a clear picture to the performer of exactly how one should interpret ayrezillo. On the other hand, with Correa's advice we are far better off than without any advice at all, and it is useful to analyze the composer's instructions as thoroughly as possible. Obviously, an "unequal" manner of playing the sesquialtera proportion does not appear in Correa's works only, and the use of the ayrezillo of proporción menor seems to point to a tradition of Iberian organists, such as Cabezón and Coelho, referred to by Correa (Cea Galán 1990: 14). Points in common between Correa's ayrezillo and practices of composers outside the Iberian Peninsula have also been taken into consideration. Works of composers such as Diruta (1609), Frescobaldi (1615), Jullien (1690) and Couperin (1717) and their conventions of unequal performance for equally written notes have been mentioned, Correa's avrezillo - "though differently applied" - having been seen as "a procedure of the same sort" (Hoag 1980: 276). However, the term ayrezillo itself is exclusive to Correa, to my knowledge.

Andrés Cea Galán makes several important remarks in his article on Correa's *ayrezillo*. Among these are the following: 1) there is a clear relation between the concepts of *proporción menor*, *proporción sexquialtera* and *ayrezillo*, as opposed to the *proporción mayor* (Cea Galán 1990: 12); 2) Correa shows in notation where *ayrezillo* should, or should not, be made (ibid.: 13); 3) *ayrezillo* can appear in different contexts, measures and notation (ibid.); 4) unequal interpretation of the sesquialtera proportion was somewhat known and used before Correa by others and, that 5) *ayrezillo* implies a modification of the values of notes, which "appears to result in being difficult for the interpretation" (ibid.: 14).

Correa's own descriptions of *ayrezillo* give grounds for basically two different interpretations. The first possibility is to understand *ayrezillo* as a rhythmic alteration, the second is to take it as an articulation, which implies certain accentuation. There are arguments to support both interpretations.

Cea Galán, who seems to have adopted the view of *ayrezillo* as a rhythmic alteration, ponders the relation of Correa's ternary notation and the rhythm of an eighth note plus two sixteenth notes. He takes up an interesting document, which is found in the MS 964 Braga, where a Portuguese musician from the end of the seventeenth century transcribed Correa's *Tiento de quinto tono* (V) into *canto de órgano* notation. Besides adding numerous variants to the original *cifra*, he transcribed the ternary passage of the final section as groups of an eighth note and two sixteenth notes – Kastner transcribing the same section as groups of three eighth notes. (Ibid.: 15.) Could the said transcription of the seventeenth century point to a particular performance practice intended by Correa?

According to Cea Galán, taking into account the notation used by Correa's contemporaries, by a number three Correa might be referring to a group of three eighth notes to be realized as an eighth note plus two sixteenths, or even to a dotted eighth note followed by a sixteenth and an eighth note. Cea Galán adds that even such a solution as three eighth notes turning into two sixteenths plus an eighth note might be possible, although it differs quite a lot from what Correa has indicated. (Ibid.) Cea Galán also makes the interesting point that the rhythm of a dotted eighth note and a sixteenth plus an eighth note does not appear as such at all in the *Facultad orgánica*, although it was used on the Peninsula by Sebastián Aguilera de Heredia and Hernando de Cabezón, for instance (ibid.: 14). The rhythm of a sixteenth plus a dotted eighth note, used by Coelho, is nonexistent in Correa's works, this rhythm being very rare in Cabezón and his Iberian contemporaries, as well (ibid.: 14–15).

In the same context, Cea Galán also brings up the question of why the rhythm 3+3+2 is so rare in the *Facultad orgánica*, pointing out, however, that although Dionisio Preciado indicates the Tiento XVI as the only instance of such a rhythm in the *Facultad orgánica*, it surely also appears, for example, in *tientos* I, VII, IX, XVI, and XIX (ibid.: 16–17). According to Cea Galán, in these pieces the rhythm has been disguised by the necessity to reach clarity in *cifra* notation (ibid.: 17). Cea Galán asks further if the three [used by Correa] could hide a similar rhythm, suggesting that for the reason of being neither an entirely binary nor ternary rhythm, it is challenging for the interpretation (ibid.) – as Correa writes in one of his descriptions of *ayrezillo* (Correa 1626: 5 [6]). Cea Galán considers the possibility that the three could be understood as a form of simplifying the rhythm of 3 + 3 + 2 (Cea Galán 1990: 17). The author emphasizes, though, that the choice between one or the other rhythmic solution should always be made based on the context. For example, the case where only one voice maintains the *aire de proporción menor* is subject to wider interpretational possibilities than such a case where the three affects the general movement of all the voices. (Ibid.)

Before giving his suggestions for interpretation of "the three of ayrezillo" in several of Correa's tientos, Cea Galán presents categorically three different situations of the

¹¹⁰ Cea Galán does not give any exact reference to Preciado's works.

appearances of ayrezillo in Correa's music. In the first case, ayrezillo figures as a melisma over a rather static harmony, which is typical of medios registros de tiple, and which is generally of twelve notes to the *compás* (ibid.: 15). ¹¹² In the second case, *ayrezillo* appears in imitations of more or less extensive glosa (ibid.). In Cea Galán's opinion, in the first case the possible inegalité can be resolved without too much of a problem, interpreting the groups of three as \square , or \square , without interfering with the progress of the other voices. The second case, the one with glosas, is quite similar when the rest of the voices do not impede the *inegalité*. (Ibid.: 15–16.) However, for short glosas Cea Galán recommends the rhythm of one eighth note plus two sixteenths, especially when the three is found in isolated bars within a general binary movement. According to the author, in such cases the use of the three in cifra serves as a system of simplifying the notation. In the third and last case, ayrezillo appears as a polyphonic framework in which all the voices participate – although not in a completely homophonic manner – in six, nine or twelve notes to the *compás*. (Ibid.: 16.)¹¹⁴ Cea Galán makes an interesting observation that these passages are graphically close to the black notation found in Frescobaldi, Sweelinck, and English virginalists. A glance at this type of notation shows, according to him, that "the limits of this *inegalidad* in Correa are further that has been thought until now." (Ibid.)

In his writings, Charles Jacobs also treats Correa's *ayrezillo* as if it were a rhythmic alteration, calling it, in the context of discussing Tomás de Santa Marías's descriptions of three types of rhythmic alterations, "one other rubato – which probably was used in Spain in the sixteenth century . . ." (Jacobs 1962: 104).

The other main possibility is to regard *ayrezillo* as a matter of articulation and accentuation. As Guy Bovet points out, Correa's *ayrezillo*, which can be translated as "a little manner of playing" or "a gracious manner" was "a style used in the dances in which one gives more weight on the first of the three beats." (Bovet 1986c: No. 3: 2, footnote 194; *TI*: 27, footnote 194). Bovet refers to Correa's words about *ayrezillo* that one plays three half notes almost as a half note and two quarter notes, remarking that this is the same thing as the first half note having a heavy accent, the other two being lighter (ibid.). Holland draws a parallel between the practice of *ayrezillo* and the type of articulation often called

¹¹² Cea Galán gives as an example Tiento XXXVI, measures 56-64.

¹¹³ Cea Galán's examples are Tiento X, measures 29–37, and Tiento XXV, measures 54–57.

¹¹⁴ Cea Galán gives as an example *Tiento* XXX, especially measures 131–150.

"structured legato" by modern organists. In other words, in playing groups of three notes, the first would be held about its full duration, the other two being held about half of their written value (Holland 1985: 87). Thus, the first note receives an agogic accent (ibid.). Although the origin of *ayrezillo* is possibly in the long tradition of dances, it can at the same time be seen to represent something new, already leaning towards the beginning of baroque accentuation ("heavy - light - light").

Although there are arguments to support *ayrezillo* concerning either rhythmic alteration or articulation, one detail in particular in Correa's longest description of ayrezillo in the VNDECIMO PVNTO seems to back up the theory of ayrezillo as articulation. According to Correa, in the "second manner" one lingers oneself more on the first note and less on the second and third, and then lingers oneself on the fourth and less on the fifth and sixth notes (Correa 1626: 5-5v [6-6v]). He completes his explanation by using the interesting expression that "And it is (almost) as making the first [note] a half note, and the second and third [notes] quarter notes, or in half [values], a quarter note and two eighth notes, and thus continuing through all the figures of each *compás*" (ibid.). The use of the word "almost" is one factor which could point to articulation and accentuation rather than to rhythmic alteration. As Holland has pointed out, "In theory, the note values could be divided in two or three parts, but never by any other number except when indicated by a special proportional sign" (Holland 1985: 86); and, "Any division of these values by anything other than two or three would represent a vast departure from both Correa's predecessors and what appears to have been the practice of those who followed him" (ibid.). As I understand it, by his "almost," Correa is probably indeed referring to subtleties of articulation, and not to a very unusual division of notes, which would result if we tried to make the first note almost a half note and the second and third quarter notes (etc.), in the case of interpreting ayrezillo strictly as a rhythmic alteration.

It is also worth noting that in several of Correa's works, the composer has used both the notation of *ayrezillo* in sesquialtera and repeated patterns of one eighth note and two sixteenth notes. If these would really have been meant to be played rhythmically similarly, what was the need for two different notations? Although it has been suggested that these two types of notation could be explained by Correa's wanting to simplify the notation of an eighth note plus two sixteenth notes into the "notation of *ayrezillo*," this does not seem very probable in light of numerous examples of careful and detailed notation throughout the *Facultad orgánica*. There is one instance in the *Facultad* where Correa has indeed simplified the rhythm in his tablature in another kind of context, but he has also taken pains to make it known to his readers. In the preface to the *Tiento de medio registro de tiple de décimo tono*, the author points out that: "In some parts of these *discursos* (and in particular in this, in measure 80) where there is a *corchea* [an eighth note] with a dot, and by necessity a *semicorchea* has to follow [it], I leave notating it for the said reason, and for

¹¹⁵ See, for instance, *Tiento* V (fol. 15v, measures 27–30, and fol. 16, measure 1; KFO I: 31, measures 72–76 and fol. 16v, measures 6–9; KFO I: 32, measures 103–106) and *Tiento* X (fol. 31, measures 2–5; KFO I: 64, measures 41–44 and fol. 31v, measures 6–23; KFO I: 65–66, measures 62–79).

not burdening this work with figures [notes]" (Correa 1626: 92v). In other words, Correa substitutes a dotted eighth note plus a sixteenth note with a dotted eighth note only. (See **Example 5** in *Chapter V*, *1.6.*) The point to make here is that Correa seems to inform his readers carefully about the usage of any exceptional notation.

Besides the already-mentioned issues, there are also other matters to support *ayrezillo*'s having to do primarily with articulation. Namely, this interpretation "preserves what Correa refers to as 'the inequality of time in the prolation' "which points to the inequality between the downbeat and the upbeat of the ternary divisions, the downbeat being twice as long as the upbeat (Holland 1985: 87). Furthermore, the fact that Correa did not advise modifying any other proportions to conform with duple rhythm suggests that his directions about sesquialtera refer to articulation rather than rhythmic alteration (ibid.: 88).

To my mind, there are more reasons to support the interpretation of *ayrezillo* basically as an issue of articulation and accentuation rather than rhythmic alteration. In addition, at least in the great majority of cases, the first choice feels more natural in playing Correa's works, in my opinion. (It is self-evident, though, that this "feeling" cannot be presented as any proof supporting one or another interpretation of *ayrezillo*.) I do not think that anyone can have the final, decisive word on the question of *ayrezillo*. Every performer is bound to make his own choices when playing Correa's music, preferably based on careful and critical examination of Correa's own words and compositions. I believe that the most important point is that one really makes a choice in how one views *ayrezillo* as a phenomenon: as rhythmic alteration, as articulation and accentuation or as something different yet. Another crucial question to be answered by each performer is, Where should – or could – *ayrezillo* be applied? Should we always play in *ayrezillo* when Correa has indicated it with his '3'? Could *ayrezillo* also be applied to some other passages of the *Facultad orgánica* besides those indicated by Correa? To what extent could *ayrezillo* be applied to Spanish repertoire prior to Correa?

Jacobs contends that "It is hard to believe that Correa wanted the 'ayrezillo' to be performed every time '3' appears above the pseudo-staff in the Facultad, inasmuch as the number appears virtually whenever triplet rhythms are used" (Jacobs 1973: 10). On the other hand, he writes elsewhere that "Several glosas do appear in the Facultad and it seems – from the notation – as though the rubato [ayrezillo in this case] is to be used as well in their performance as in the many tientos where it is clearly indicated . . ." (Jacobs 1962, Vol. I: 108).

Based especially on Correa's manner of exact and detailed notation and his emphasis that the places where *ayrezillo* is wanted are indicated by him with the '3,' I believe that it is well-founded to play in *ayrezillo* whenever indicated by the author of the *Facultad*.¹¹⁸

¹¹⁶ As has been explained elsewhere in this dissertation, note values written above the actual numbers of tablature show the changes of rhythm in *cifra*.

^{117 &}quot;Desigualdad de tiempo en la prolacion" (Correa 1626, 5v [6v]).

¹¹⁸ Note that Correa's indications of '2' and '3' are not always reproduced in Kastner's edition of the *Facultad orgánica*, contrary to the recently published complete edition of Correa's works by Guy Bovet.

For the same reason, I would refrain from playing in *ayrezillo* in Correa's works when not indicated. To what extent Correa's *ayrezillo* could be applied to his predecessors' music is a question more difficult to answer because he himself does not give any hint about it. In general, I see no reason why we could not apply *ayrezillo* to Iberian pieces other than Correa's as well. However, this question has to be individually asked and answered every time when confronting a new piece.

5 Registration

5.1 Points of Departure

The information about the registration of early Spanish repertoire is mostly confined to sources such as organ building contracts, registrations listed in libros blancos by organ builders, organ specifications and other descriptions of organs, the remaining historical Spanish organs, and the repertoire itself. Advice given by composers and authors of keyboard tutors is scarce. In collections of keyboard music, the information about registration is usually restricted to titles of pieces, which in certain cases give general implications on registration. Playing and examining historical organs and listening to their special sound and tunings is extremely valuable in seeking touch and comprehension of registrational practices for the early Spanish repertoire. However, old organs, on one hand, are not entirely (or in many cases, not at all) in their original state and much damage has been done too often by hasty and ignorant restorations made in modern times. On the other hand, the historical Spanish organs are fortunately not completely extinct and with the currently increasing endeavors to make careful restorations, which respect the true nature of sound and techniques of construction of the old instruments, I believe that there will be more examples of historical organs in the future, once a new life has been given to them. (The successful restoration of the historical Spanish organs which are still possible to restore naturally depends heavily on the organization and fundraising for this valuable and challenging work.)

The existence of several local organ types in Spain must have had an impact on registrational practices. The art of registration might indeed have had particular local characteristics, difficult to trace at the present time. In regard to probable local varieties, any information found in the *libros blancos*, ¹¹⁹ given by the organ builder on the completion of a new instrument and involving exemplary, often very fanciful registrations, is useful. The few references to registration by Francisco Correa de Arauxo, which will be discussed later in this chapter, are also valuable.

As already mentioned, the titles of pieces can give some general allusions to registration. For example, a piece entitled *tiento de medio registro* involves one or two solo voices to be registrated differently from the accompanying voices. In a *tiento de baxón*, there

^{119 &#}x27;White books,' literally translated.

is one bass solo voice; in a tiento de medio registro de dos baxones, the number of the solo basses is two. Occasionally, a piece for divided registers with one bass solo voice is called a tiento de mano izquierda (a tiento of the left hand). Similarly, a tiento (de medio registro) de tiple involves one soprano solo voice while tiento (de medio registro) de dos tiples has two soprano solos. Analogously to the term tiento de mano izquierda, a tiento which has one soprano solo voice can also be called a *tiento de mano derecha* (a *tiento* of the right hand). The divided registers (medios registros) was an ingenious and extremely practical device by the Spanish organ builders; it enabled one to registrate separately the upper and lower halves of the keyboard. Thus it was possible to create numerous and colorful combinations even with rather small-sized organs. Divided registers began to appear in Spanish organs in the 1560s. (See the chapters on Spanish organs in this dissertation for more details.) Francisco Correa de Arauxo held the technique of the *medios registros* in great esteem, as is reflected in his words in the preface to "another new order of tientos de medio registro," where Correa describes the divided registers and/or the pieces written for them as a "celebrated invention, and much practiced in the Kingdoms of Castille, although in others not known" (Correa 1626: 65). It is well to note that the registers were divided between the c¹ and c¹-sharp on the Castilian organs but in other regions the division between b and c¹ also existed.

Tiento (de registro) lleno or tiento (de registro) entero may refer to a registration which is the same for both halves of the keyboard. However, the tiento lleno can also mean a work to be played on the plenum or a work whose registration involves a mixture called lleno (possible to be included in a combination for registrating a solo voice, too).

The reader is referred to *Chapter III*, 1.7, for a discussion of the families of stops and for information about the central nomenclature for numerous individual stops of Spanish organs. I include some nomenclature applying to the Spanish Baroque organs as well – in order to demonstrate how the registrational possibilities of the historical Spanish organs developed with time.

5.2 General Approaches to Registration of Early Spanish Repertoire

The art of registration was by no means a codified and uniform practice in Spain in Correa's time. One reason for the obviously varied practices of registration was the existence of several local organ types. Today's performer can look for information about registration in sources like organ contracts, organ specifications, and the *libros blancos* provided by the organ builders for the commissioners of their instruments. In addition, the Spanish keyboard repertoire gives some clues to registration, beginning with the titles of compositions. (Naturally, the performer's knowledge of the different compositional types is necessary.) Francisco Correa de Arauxo's *Facultad orgánica* involves some valuable references to registration as well. Last but not least come the special sound and other characteristics of such historical Spanish organs which are still found at least relatively close to their original state.

In pondering upon one's registrations, it is important to pay attention to the compositional type and the time period of the piece to be registrated as well as to the local organ type (and/or the individual instrument[s]) for which the piece was originally composed. If one plays on the historical Spanish organs, the specific acoustical conditions provided by the placement of the instruments, the possible double facades, and the placement of different divisions or individual stops with their particular volume of sound and character should be carefully taken into account. In addition, I consider it of utmost importance that one does not employ stops (in pieces by Correa, for instance) that did not yet exist at the time when a particular work was composed. For example, as a principle, the horizontal reed stops are not to be used in registration for Correa's compositions nor the technique of medios registros in pieces by Antonio de Cabezón. It is also useful to remember that any special combination of stops meant for a particular instrument may not be applicable as such when playing on other organs. Montserrat Torrent writes about the subject in her article "Registración de la música de los siglos XVI y XVII," remarking that one has to pay special attention when applying registrations given to the Cadereta 120 of any individual instrument. In such a case, it is important to know whether the Cadereta in question was the equivalent of the Rückpositiv or whether it was an interior division of the organ. (Torrent 1981: 200.) After having given helpful guidelines for registrating Spanish pieces of the 16th and 17th centuries, taking into consideration the most important compositional types of these centuries, Torrent points out that without disregarding the beauty of timbre by the proper usage of some particular stops, "the musical phenomenon does not have to be relegated to a sonorous phenomenon" (ibid.: 202). She specifies that phrasing, good articulation and a good style 121 will be the prime means by which the organist can express the musical value contained in a work (ibid.).

Agreeing with Torrent on her point that a musical phenomenon does not depend only on the organist's sound choices of registration, I would like to emphasize, nevertheless, that the art of registration figures as a very important element in the process of creating a "historically conscious" musical phenomenon, which at its best is "meaningful" to the listener and the performer alike. On the grounds of my knowledge of sources of Spanish registrational practices, particularly of Correa's time, and the acquaintance with several historical Spanish organs, I have come to the conclusion that variance, fancifulness, colorfulness and the seeking of effective contrasts belong inevitably to the field of Spanish registration and are central elements of this art. In light of the sources available, it is obvious that in the Spain of the sixteenth and seventeenth centuries, the performer was given great liberty in making choices on registration, as has also been expressed by Correa in the very last sentence of his *Facultad orgánica* (1626: 203). Next I will look into the limited information available on the organs that Correa used and discuss Correa's own references to registration.

¹²⁰ Cadereta, Cadireta, (or Cadira in Cataluña) originally meant Rückpositiv. Later, the meaning of the word extended to the second division of the two-manual organ, which could also be located inside the main case.

¹²¹ The original text reads "un buen decir," which could be translated as "a stylish parlance."

5.3 The Organs that Correa Had at His Disposal

5.3.1 The Organs of San Salvador in Seville

Unfortunately, there is little information available about the organs that Correa used during his professional career, which consisted of the posts he held at San Salvador in Seville (1599–1636), at the Jaèn Cathedral (1636–1640), and at the Segovia Cathedral (1640–1654).

There were two organs during Correa's era at the Collegiate Church of San Salvador where Correa worked over a period of thirty-seven years, during which time the *Facultad orgánica* was also published (1626). The smaller organ was built by Diego Liger de Sant Forte in 1589 (Ayarra Jarne 1986: 62) and the bigger organ – originally built for the Cathedral of Granada in 1577 by the Flemish brothers Juan Pérez de Sant Forte and the aforementioned Diego Liger de Sant Forte (Ayarra Jarne 1981: 34). Because San Salvador had earlier been a mosque, its architecture did not allow the usual placement above the choir of the Spanish organs of the time. In 1593¹²³ the big organ was placed "*ensima de la puerta colorada*" (above the red/colored [?] door), replacing one that had been situated in the same gallery and then placed "*ensima de la sacristía vaja*" (above the "low" sacristy) (Ayarra Jarne 1981: 34; idem, 1986: 60).

The bigger organ was originally built in 1577 for the Cathedral of Granada, ¹²⁴ where it was rejected by the *Cabildo*. ¹²⁵ After some years, the organ was put up for sale by Doña Teresa de Almoguera, the widow of Diego Liger de Sant Forte (Ayarra Jarne 1986: 60). By 1592, the *Cabildo* of San Salvador had sent their organist, Hernando de Tapia, to Granada to see the instrument that was for sale (Ayarra Jarne 1981: 35).

The rejection of the organ by the Granadian *Cabildo* was obviously due to the organ's technical deficiencies, the worst of which was the poorly functioning windchest. At first it seems strange that Hernando de Tapia – authorized by the chapter of San Salvador – made a contract in Granada to purchase the said instrument. However, the Flemish organ builder Diego Liger de Sant Forte was already known in San Salvador as the builder some years earlier of its small organ. In addition, the compassion felt towards Diego Liger de Sant Forte's widow in her (most probable) difficult economical situation could also have been a factor in the decision of H. de Tapia and the San Salvador chapter. (Ayarra Jarne 1981: 35; idem, 1986: 61.) What else could have been the reason for purchasing such an instrument?

¹²² In 1981, José Enrique Ayarra Jarne, in his *Sevilla en la vida y la obra del organista Francisco Correa de Arauxo* (Sevilla: Artes Gráficas Salesianas) uses the spelling *Sanforte* instead of Sant Forte. See page 34 for an example. In Ayarra Jarne's *Francisco Correa de Arauxo, organista sevillano del siglo XVII* (Arte hispalense 41. Sevilla: Diputación Provincial), the spelling *Sant Forte* is used (see Ayarra Jarne 1986: 60 for an example).

¹²³ Ayarra Jarne gives the erroneous date of 1793 in his book published in 1986 (p. 60). In his publication of 1981 (p. 34), the date is correctly 1593.

¹²⁴ This was observed by P. José López-Calo in his work "La Música en la Catedral de Granada en el siglo XVI," noted José Enrique Ayarra Jarne in 1986 in his Francisco Correa de Arauxo, organista sevillano del siglo XVII (Arte hispalense 41. Sevilla: Diputación Provincial) on page 60.

¹²⁵ Chapter or Church Council.

The expenses of transferring the organ from Granada to Seville and installing it there resulted in the chapter's paying 574,532 *maravedís* (Ayarra Jarne 1986: 61), obviously a greater cost than ordering an instrument from some local organ builder like the famous Enrique Franco.

Regarding the disposition of the big organ, it is known that it included "mixtura de trompetas," "dulzaina" and "pajarillos," which seems to refer to an organ having at least nine or ten stops. Although the organ had been built in 1577, it was necessary to order a new windchest for it by 1606. Enrique Franco was commissioned to construct the windchest. (Ibid.)

The small organ of San Salvador (during Correa's time in Seville) was placed "en la Capilla junto a Ntra. Sra. de las Aguas" [in the Chapel close to Our Lady of the Waters]. (Ibid.: 62). The instrument is known to have had at least five or six stops, probably including flautado, octava, docena, quincena and lleno, 127 according to Ayarra Jarne (ibid.). Repairs had to be made on the small organ in 1599, only a decade after its construction, at the time that Correa began serving as organist at San Salvador. The repairs included such important parts as "fuelles, conducto y secreto" [bellows, a conduct and a windchest]. The Libro de Cuentas of the year 1599 gives us more details about the accomplished repairs. For instance, the placement of as many as forty pipes is mentioned in addition to the said repairs to the bellows, the conduct and the windchest. In connection to the replacing of forty pipes, the names of several registers were mentioned: flautas, quinzenas, dozenas, una mixtura de pajarillo and a new register, "un registro nuevo y altemblante." (Ibid.) The small organ was not a very high-quality instrument either, judging from the fact that it was already called an "old one" in 1621 and that it was necessary to replace it with a new one, constructed by Pedro Franco, which was placed in a gallery that was built for it above the *coro* (choir). (Ibid.: 63.)

Besides the big and small organs of San Salvador, Correa occasionally played on a third instrument, *el órgano realejo*, meaning a small-size portable organ. This organ was used at Christmas, for example. The *Cabildo* of San Salvador rented the organ annually for the price of twenty-four *reales* per year. As of 1623, the price of renting a *realejo* was increased considerably; consequently, in 1628, the *Cabildo* decided to buy one from the organ builder Diego Gallegos for the price of 1,800 *reales*. (Ibid.)

Although not many details about Correa's organs at San Salvador are known, the résumé by Ayarra Jarne of the characteristics of the big organ – which can be inferred

¹²⁶ *Mixtura de trompetas* seems to imply several trumpet stops (or reed stops, in general). *Dulzaína* (also the old spelling *Dulzayna*) is a reed stop, usually made of short-length trumpet pipes (Wyly 1964: 286). *Pajarillos* refers to a stop imitating bird's song.

¹²⁷ *Flautado* is a principal stop, *Octava* is a Principal 4', *Docena* (the old spelling, *Dozena*) is a 2 2/3' stop, *Quincena* (the old spelling, *Quinzena*) is a 2' stop, made of *Flautado* pipes.

¹²⁸ It is not clear what is meant by the new register, *un registro nuevo y altemblante*. The last word 'altemblante' (as Ayarra Jarne has quoted it [with a question mark] from the *Libro de Cuentas* of 1599 (Ayarra Jarne 1986: 62), resembles the word 'temblante' that was later used to mean some kind of a tremulant. The tremulant was common in Spanish organs as early as the beginning of the sixteenth century and was built in various forms (Wyly 1964: 319).

from the scarce facts available – proves to be useful. First of all, the price of the big organ, 900 ducados paid by the Cabildo, gives some hints about the quality and size of the instrument (Ayarra Jarne 1981: 36). Ayarra Jarne presents as objects of comparison a "positive" built by Pedro Franco, having from four to six stops, considered worth 200 to 250 ducados and a large cathedral organ with nineteen stops constructed by Maese Jorge, worth 23 400 ducados. Second, the mentions in the libros de Cuentas de Fábrica about the cost of repairs to and tuning of the organs include names of stops of the big organ, which together with a certain necessary basis of *Flautados* and *Mixturas* point to an organ whose size is not too reduced. (Ibid.) Third, a study of Correa's writings and music contained in his Facultad orgánica gives some idea about the instruments that Correa had at his disposal at San Salvador. From the information in the Facultad orgánica, one may deduce that the compass of Correa's organ was 42 keys (from C to a²) with a short octave in the lowest octave. It is likely that Correa's organ(s) had divided registers (or at least one, the dulzaína), concluding from the profusion of this type of works in the Facultad orgánica. It is also probable that the instrument(s) at which Correa worked had some pedal keys which functioned as pulldowns. (Ibid.)

5.3.2 The Organ of the Cathedral of Jaén

During Correa's four years at the Cathedral of Jaén, the organ-playing conditions were probably far from satisfactory. Many parts of the Cathedral of Jaén were under construction, and thus the divine services had had to be moved from the *Capilla Mayor* to another part of the church where an old organ, certainly a small and modest instrument, had been moved. (Ayarra Jarne 1986: 96.) However, if the organ in Correa's use in Jaén was the same one that was mentioned in 1660 by Núñez de Sotomayor, it was an instrument built by *fray* Jaime de Vergoños and was considered, nevertheless, to be "at the level of the best [organs] of these Kingdoms, not only for the curiosity of the case and the pipes, but also for the sonority and agreeableness of its harmony and for the ingenious and dulcet effect of its singular and arrogant mixtures" (Ayarra Jarne 1981: 51).

Limited information about the organ that Correa played in Jaén is also given by another author, in a different context. G.A.C. de Graaf in his article "A Spanish registration list of 1789" concentrates on the process of purchasing and constructing a new organ for the Cathedral of Jaén. The new instrument was eventually built in 1788–1789 by Fernando Antonio de Madrid (de Graaf 1976: 76). However, in connection with writing that still upon Fernando Antonio's arrival in Jaén, the Chapter of Jaén Cathedral "was at a loss what to do about the organ" – for which a large organ case had been made in 1736, de Graaf mentions, interestingly, that:

The old organ, no doubt the same instrument played by Fr. Correa de Arauxo when he was organist there from 1636 to 1640, still served and stood in its own case (ibid.: 78).

¹²⁹ Ayarra Jarne has cited Guillermo Alamo Berzosa's work *Iglesia Catedral de Jaén. Historia e Imagen*, 1975, Jaén, pp. 157–158.

¹³⁰ G.A.C. de Graaf 1976: "A Spanish registration list of 1789" in the *Organ Yearbook*, Vol. VII: 76–89.

The author neither goes deeper into the subject nor reveals the source of his knowledge about the "old organ," of which I have not so far been able to find any additional information.

5.3.3 The Organs of the Cathedral of Segovia

In the course of my research, I have come up with practically no data about the organ(s) of the Cathedral of Segovia in Correa's time. Nevertheless, here I will take up some information about those historical organs that are currently in the Cathedral because I gather that the Epistle organ, in particular, might resemble to some extent the organ(s) that Correa had at his disposal in Segovia. Both instruments represent the Castilian style of organ building, although the Gospel organ has three manuals, which was exceptional at the time when the organ was built.

Ayarra Jarne points out that the extraordinary instruments in the Segovia Cathedral today were built be D. Pedro Livorna de Echevarría in 1769, a century after Correa's epoch (Ayarra Jarne 1986: 106). Another musicologist, Rudolf Walter, writes about the two organs of the Segovia Cathedral, calling the one-manual Epistle side organ "the organ of 1747" and naming its builder as José de Echevarría, father of Pedro [de Echevarría] (Walter 1973: 43). Walter also remarks that the contract to build a new Gospel organ for the Cathedral was agreed upon on November 24, 1769. The organ was to be constructed at the expense of Bishop Don Juan José Martínez Escalzo; its builder was Pedro de Echevarría, who was expected to finish the work within two years. Don Juan Maurat of Madrid was commissioned to do the carving and gilding, as he had done earlier for the Epistle organ. (Ibid.) According to Walter, the exact date of the Gospel organ is not clear because "we have only a terminus ante quem." That is to say, in September 1772, the Count of Gazola, who was the Director of the Artillery School of Segovia, expressed to the Cabildo the desire of War Minister Count of Ricla to see and hear the new organ when he visited Segovia. (Ibid.: 44.) However, Gabriel Blancafort gives 1771 as the date for a three-manual organ built by Pedro Echevarría for the Cathedral of Segovia (Blancafort 1983: 22).

Still somewhat different information is given about the two organs of Segovia Cathedral by the Archival Canon of the Cathedral, Hilario Sanz y Sanz. In his short article about the meeting of the International Society of Organ in Madrid in 1967, Sanz y Sanz concentrates on the two organs of the Cathedral of Segovia, which he characterizes as among the most important and valuable organs in Spain (Sanz y Sanz 1990: 655). He writes that the older of the two instruments is situated on the Epistle side and had been "silent" for a number of years until Sr. González de Amezúa had repaired it. The Epistle organ was originally a gift from Bishop Don Bartolomé de Ocampo y Mata, who in 1699 was appointed to the diocese of Plasencia and thus bid the *Cabildo* of Segovia farewell. In a letter sent to his former *Cabildo* in the same year, he wrote about the donations with which a new organ

¹³¹ However, the same date given for both organs is obviously a mistake, probably not originally meant to refer to both organs but only to the Gospel organ.

¹³² This repair was made in modern times.

could be ordered and built. (Ibid.: 656.) After many kinds of obstacles, the new organ was ready in August 1702. (Ibid.: 656–657.)

As regards the building of a second organ for the Segovia Cathedral, according to Sanz y Sanz, the Gospel organ was donated to the *Cabildo* by another illustrious prelate, Sr. D. Juan José Martínez Escalzo, who expressed to the *Cabildo* in October of 1769 his wish to have a second organ built at his expense. The contract to construct a new organ was made in the same year (as already mentioned), and D. José Chavarría and D. Pedro Chavarría were commissioned to undertake the construction of the new instrument. (Ibid.: 657.)¹³⁴ The Gospel organ of the Cathedral of Segovia has three manuals, which was exceptional in the Castilian organ building of the time.

When I had a chance to play both organs of the Segovia Cathedral in 1997, I noted that the year 1702 – which Sanz y Sanz gives for the older organ of the Cathedral – had been carved in the note stand of the Epistle organ. However, both the action and the appearance of the instrument as well as the surprisingly archaic sound of it seem to point to a much earlier date. Blancafort mentions 1665 as a date of a "second manual" having been built by Jaime de Sola for an organ in the Cathedral of Segovia (Blancafort 1983: 22). I have not been able to find out whether the instrument to which a second manual was constructed by Jaime de Sola was still in existence upon the building of the Epistle organ. Moreover, it could be that the date 1747 which Walter gives to the Epistle organ points to some repairs made on it, rather than to an entirely new Epistle organ. One fact supporting this presumption is that Blancafort mentions organs built for the Cathedral of Segovia in 1702 and 1771, but not in 1747, in his list of dates of interest relative to the Castilian organs (ibid.).

Of the dates given by Blancafort, the year 1702 points to the Epistle organ (as Sanz y Sanz states, too) and the year 1771 to the Gospel organ (whose contract dates from 1769). The building of a second manual for an organ in the Segovia Cathedral in 1665, a little more than a decade after Correa's time in Segovia, must refer to a modification of an instrument, which was in use until the building of the organs of 1702 and 1771, and which was likely to be the instrument at the keyboard of which Correa once played. Consequently, we may assume that Correa had at least one (single-manual) organ at his disposal in Segovia. Since it was a common practice to keep old *Flautados* at least upon rebuilding an organ (Wyly 1964: 292), I do not hold it entirely impossible that some pipes of the organ that was in Correa's use would have been incorporated in the present Epistle organ of the Cathedral of Segovia.

¹³³ Hilario Sanz y Sanz clarifies in his article that these organ builders, Pedro and José, were the son and grandson, respectively, of the builder of the Epistle organ (Sanz y Sanz 1990: 657). Note also that despite the different orthography, the surname *Chavarría* is the same as *Echevarría*.

¹³⁴ Walter mentions only Pedro de Echevarría as a builder of the Gospel organ of Segovia (Walter 1973: 43), as does Blancafort (1983: 22).

5.4 Correa's Advice on Registration

Seven prefaces in the *Facultad orgánica* are relevant to practices of registration. Although Correa's advice on registration is scarce, it is worthwhile to have a close look at it. Registrational references by composers in Correa's time are very seldom found, except for the general ones which are involved in the titles of pieces (e.g., *tiento de medio registro de tiple*, *tiento* for divided registers with a soprano solo voice).

Correa's prefaces including issues connected with registration are found in folios 90v, 97, 139v, 143, 150, 163, and 203. Three of these prefaces focus on a 4' registration, and two prefaces discuss the proper number of accompanying voices for the *tientos de medio registro* with two solo voices, besides giving advice on registration. One preface involves a remark about the choice of instrument suitable for a particular type of composition, and the last of the mentioned prefaces contains registrational recommendations for pieces which are in the form of a *medio registro de tiple*.

In the preface to the *Sexto tiento de medio registro de baxón de primero tono* (f. 90v) "of eight [notes] to the measure, adjusted to students of second course, being easy and from my beginnings," Correa advises taking away the lowest *Flautado* (Principal 8') or Bourdon (8') on the large organs of fourteen *palmos*¹³⁵ or more, leaving the *Octava* (Principal 4') or *Flautas* (Flute 4'), in order for the stops to respond better (Correa 1626: 90v). Correa adds that the lowest *Flautado* or *Bourdon* is to be taken away "because from the *desolrre sograve* [D] to the *gesolrreut agudissimo* [g²] one counts in reality the eighteen notes of ambitus of this first tone" (ibid.).

Correa's rather complicated explanation boils down to a recommendation of a 4' registration for the left hand in a *tiento* for divided registers with a bass solo voice. In the said preface, Correa connects his advice on registration to the large organs of fourteen *palmos* or more. I am convinced that we can most likely apply Correa's advice to playing on "organs of thirteen *palmos*," that is, with organs of the common 8' basis. The recommended 4' registration concerns the left hand only while the right hand plays on 8' registration.

Even more complex is Correa's remark about the ambitus of eighteen notes for the first mode. Correa's explanation becomes clear when one considers that in a case where both hands had an 8' registration in a *tiento* in the first mode, there would be twenty-five diatonic notes from the lowest D to the highest g (i.e., g^2) of the organ keyboard of the time. If one replaces the left hand 8' registration with a 4' registration, the ambitus becomes one octave shorter and one ends up having the ambitus of eighteen (diatonic) notes mentioned by Correa. The ambitus naturally becomes one octave shorter because with the 4' registration the ambitus begins an octave higher, from d instead of D. See the following example:

¹³⁵ The organs of thirteen *palmos* are organs with an 8' basis. Thus, the organs of fourteen *palmos* are a little lower in tone than the commonplace 8' pitch.

Example 38 Ambitus of the first mode in 8' and 4' registration for the left hand



Both hands registrated with 8' (25 diatonic notes in total)



Left hand registrated with 4' and right hand with 8' (18 diatonic notes in total)

Also in the preface to the *Tiento de medio registro de tiple de quarto tono* (f. 97), Correa recommends the 4' registration for the left hand and gives a similar kind of explanation of ambitus as in the preface discussed above. This time Correa describes the ambitus of "legitimate nineteen notes" for the fourth tone by declaring that "taking away the bourdon [bardon] for our purpose, one counts the said 19. notes of ambitus from elami grave [e] to befabemi agudissimo [b²], which the large organs of four octaves do have" (ibid.: 97). "Taking away the bourdon" refers to removing the 8' stop of the left hand and replacing it with a 4' stop, judging from the ambitus given by Correa (the 8' stop having been removed).

The third preface in the *Facultad orgánica* which mentions the 4' registration is the one to the *Tiento*, *y discurso de medio registro de dos baxones de octavo tono* (f. 150). There Correa makes it known that the ambitus for the eighth tone "or as well the eleventh tone (finishing irregularly)" is from *delasolrre grave* [d] to *gesolrreut agudissimo* [g²] when the *Flautado* [Principal 8'] is taken away (ibid.: 150). The 4' registration implied by Correa is likely to refer to the left hand only in the *tiento* for two bass solo voices.

In two prefaces Correa touches on the issue of the number of voices in pieces for divided registers having two solo voices, giving advice on registration as well. In the first of these prefaces, to "another" *Tiento de medio registro de dos tiples de séptimo tono* (f. 139v), Correa recommends that the two soprano (solo) voices be played on the *Lleno* of the organ and the lower voices on the *Flautado*. On the contrary, if the work has two bass solo voices, those are played on the *Lleno* or *Trompetas* while the accompanying higher voices are played on the *Flautado*. (Ibid.: 139v.) In other words, the recommended registration for the accompanying voices is the *Flautado*, which ordinarily means a Principal. In pieces for two soprano solos, Correa advises playing the solo voices on *Lleno*, which can mean either plenum or some combination of mutations (e.g., the *Corneta*). In compositions involving two bass solos, Correa recommends registrating the solo voices either with *Lleno* or *Trompetas*, the latter term referring to a reed stop. Correa's advice on registration is based on the "distinct character" of the solo voice and the accompanying voices (ibid.).

In the same preface Correa makes the strong point that, in his opinion, the pieces for divided registers with two soprano solo voices must necessarily have five voices in total "because when the two sopranos cease sounding, three voices remain singing on the *flautado*" (ibid.). Correa emphasizes that the second soprano (solo voice) should by no means move to the *Flautado*, in effect taking the role of contralto, "a thing so inappropriate that some who know little have [yet] wanted to attempt" (ibid.). Correa's discussion about the proper number of voices for *tientos de medio registro* with two solo voices seems to be directed to anyone intending to compose such pieces. Correa touches the issue in at least two other prefaces (f. 136v and f. 143), the latter of which will be examined in the following.

In the preface to the *Discurso de medio registro de dos baxones de segundo tono* (f. 143), Correa points out that the same reasons that oblige the works with two soprano solo voices to be composed in five voices – and not four – apply to works with two bass solo voices as well (ibid.: 143). According to Correa, a further additional reason for composing such pieces in five voices is that two bass solos with their corpulence would obscure the other two higher voices on the *Flautados* if the work were composed in four voices. (Ibid.) The only information about registration in this context is Correa's mention of assigning the accompanying voices to *Flautado*. In light of this preface, it becomes clear that Correa paid a great deal of attention to the good balance of sound, both in composing and registrating his works. (See also the preface in folio 136v about the issue of composing *tientos de medio registro* with two solo voices in five voices.)

The preface to the *Tiento de medio registro de baxón de treinta y dos números al compás de segundo tono* includes Correa's recommendation to play the mentioned work on *realejos* rather than on large organs (ibid.: 163), *Realejo* meaning a small organ, a chamber organ. In Correa's opinion, the basses of the large organs could not respond with the necessary velocity. In addition, the action of the keys of large organs is heavy and deep, according to Correa.

It is not known whether Correa's words refer to any particular instrument besides large organs in general. I think that the "heavy and deep" action of keys might be quite a relative concept, used by Correa to emphasize the difference between the small chamber organs and larger organs. It is obvious, nevertheless, that the composer regarded smaller organs with the implied lighter action and with more responsive bass pipes best suited to performing his virtuoso *tiento* involving thirty-second notes.

The last of Correa's prefaces including information on registration is his preface to the final work of the *Facultad orgánica*, the three *glosas* on the plainsong of the Immaculate Conception of the Virgin Mary. Correa mentions the *glosas* to be "in the form of *medio registro de tiple*" (in the form of divided registers with a soprano solo) and thus one can registrate the *contrabajos* (i.e., the lower, accompanying voices) with a *Flautado* and the trebles with a Mixture which seems best to the organist:

¹³⁶ Although Correa uses the word in the plural form, his advice on registration refers clearly to a single soprano (solo) voice here.

¹³⁷ The term *Mixtura* (a Mixture) may also refer in this context to a combination of stops in addition to a stop called Mixture.

Van en forma de medio registro de tiple, y assi se podra echar el flautado a los contrabajos, y a los tiples la mixtura que mejor vista le fuere al organista (Correa 1626: 203).

Correa's final sentence in his preface to the last work of the *Facultad orgánica* thus involves the composer's significant notion that the registration was greatly at the will of the organist – naturally within the confines presented by the type of composition (for instance, a work for divided registers) to be kept in mind.

6 Musica ficta

In brief, the concept of musica ficta means rules according to which one could – or should – make chromatic changes to individual notes of the medieval musical system by means of accidentals. Further, the rules of musica ficta are closely connected to proper voice leading. It became an increasingly common practice by the composers towards the end of the sixteenth century to indicate most of the accidentals needed. However, some words about the phenomenon and conventions of musica ficta may still be relevant in the context of my work, although in Correa's music, practically all accidentals seem to have been notated, with some minor exceptions, perhaps. Yet, in the few uncertain cases, general background knowledge of musica ficta proves to be helpful. Besides, in studying, playing, or editing early Spanish keyboard repertoire prior to Correa's time – especially of the first half of the sixteenth century – information about musica ficta is absolutely necessary.

In the earlier repertoire, part of the accidentals could be notated, but it was also possible that there were no written accidentals at all. The performer was expected to know the rules governing musica ficta and to fill in the needed accidentals *ex tempore*. As Charles Jacobs describes it, "musica ficta by definition has to do with a performance practice utilized at will by the performer" (Jacobs 1968: 277). Therefore, it is natural that there was often a great difference between the performer's (or editor's) version and the *res facta*, the unaltered version in which the musica ficta has not been notated at all (ibid.). In addition, the versions of individual performers often diverged from each other, as did the practices of composers. Many a theorist has specified "legitimate exceptions" to the rules of musica ficta. Besides, several other liberties were certainly taken outside those allowed by composers and theorists in their writings. Sometimes it is difficult to know whether a particular rule given describes a common practice or whether it reflects just the opposite – in other words, an exceptional convention.

As to the modern editions of early Spanish keyboard music, not all editors have taken the old rules of musica ficta into account. Moreover, regarding the editions of sources with written-out accidentals, the procedures of notation in modern editions do vary. Some editors accept the practice of the early sources themselves that any individual note without a written-out accidental should be played as a natural, even in places where the same pitch has been altered shortly before – for instance, within the same measure. To give one example,

the required cadential accidentals are all written individually in this way of notating. On the contrary, many editors of the early Spanish keyboard music have chosen not to indicate each accidental with an accidental sign within the same measure. In the modern way of notating – in cadences, for example – a sharp or a flat sign is valid until the next bar line if not indicated otherwise by a natural sign.

6.1 Spanish Sources on Musica ficta

The most informative and important Spanish observations of musica ficta are found mainly in contexts of keyboard music (Jacobs 1968: 277). Among the significant Spanish sources including remarks on musica ficta are Juan Bermudo's Declaración de instrumentos musicales (1555, Osuna), Fr. Tomás's Arte de tañer fantasía (1565, Valladolid), Pietro Cerone's El Melopeo y Maestro (1613, Naples), and Francisco Tovar's Libro de Música Práctica (1510, Barcelona). Bermudo's rules on musica ficta are found in Book Four (De tañer el órgano [On playing the organ]) of his Declaración. Cerone's observations about musica ficta consist primarily of paraphrasing and clarifying the writings of earlier theorists (see ibid.: 286, as an example). It is well to remember that Bermudo's and Fr. Tomás's books are in fact contemporaneous because the latter's Arte de tañer fantasía was written rather a long time before it was printed, due to the lack of paper and "many other and evident causes" (Tomás 1565: verso of the title page). Of the above-mentioned sources, Fr. Tomás's work seems to represent the most conservative treatment of musica ficta while Bermudo's comments can be seen as "at once more comprehensive and more in tune with current happenings than are the remarks of [Tomás de] Santa María" (Jacobs 1968: 280). Francisco Correa's Facultad orgánica (1626, Alcalá) also has its say about musica ficta. Due to Correa's work being a later source, the main emphasis of his remarks lies in the discussion of the use of certain dissonances instead of the introduction of the basic rules of musica ficta.

6.2 Five Accidentals

By the sixteenth century, "five accidentals with very specific rôles had been adopted in Spain" (Jacobs 1962: 176), at least in the field of keyboard music. The said five accidentals (F-sharp, C-sharp, G-sharp, B-flat, and E-flat) are mentioned, for instance, in *Fr.* Tomás's, Cerone's, and Hernando de Cabezón's writings. The number of the feasible accidentals in keyboard music was restricted as a result of the meantone tuning since no "enharmonic change" of notes was possible in this tuning system. However, occasional attempts were made to overcome the mentioned restriction because Bermudo tells us that the organs of the royal chapel at Granada each had one flue stop tuned to allow the playing of A-flat

while Vela Nuñez served as organist there ¹³⁸ (Bermudo 1555: 89v). The technical solution found for the organs at the royal chapel of Granada was that there were two pipes for one black key in each octave, the one speaking for G-sharp, the other one for A-flat – in other words, one speaking for *mi* and the other speaking for *fa*. The alternate pitches must have been operated by means of split keys or by switching the flow of air to the desired pipe (and thus making it possible to use the same [unsplit] key for both pitches). Since the organs of Granada were still very exceptional in permitting the playing of A-flat and thus decreasing the need to transpose certain modes, it is no wonder that an organist's ability to transpose and to use accidentals correctly continued to be an important criterion in competing for a post as organist (Hoag 1980: 189). Several kinds of circumstances and conventions called for the adjustment of pitch level by the organist. For example, there was a tradition that funeral music was sung two degrees lower than written (ibid.: 201). ¹³⁹

6.3 Juan Bermudo's and Fr. Tomás's Remarks on Musica ficta

Juan Bermudo's rules concerning musica ficta, given in the *Declaración de instrumentos musicales*, are largely based on Franchino Gaffurio's *Practica Musicae* (1496) (Jacobs 1968: 277). As already mentioned, Bermudo's writings on musica ficta are found in the *Libro quarto*, under the title *De tañer el órgano* (Book Four, "On playing the organ") of the *Declaración*. According to Bermudo himself, his rules apply to perfect consonances both in the course of phrases and in cadences (Bermudo 1555: 88). It is good to know that in his *Arte Tripharia* (1550, Osuna), Bermudo employs the natural sign to indicate a sharp while in the music examples of the *Declaración*, he uses the "ordinary" sharp sign, the one used today (Jacobs 1968: 278). (*Fr.* Tomás and Hernando de Cabezón utilize the modern sharp sign, but they also employ the same sign to cancel a flat.)

As an important principle for his entire discussion of musica ficta, Bermudo states the old rule of the "law of maximum proximity." He gives this rule both in the form of a Latin quotation of the theorist Andreas Ornithoparchus from the latter's *Micrologus* (1516, Leipzig) and in his own Spanish translation of this citation. Ornithoparchus (whom Bermudo obviously valued highly), for one, quotes Franchino Gaffurio's *Practica Musicae* (1496) (ibid.: 280). Bermudo's own translation of the rule is the following:

A las concorda[n]cias impe[r]fectas siempre se siga la consona[n]cia perfecta mas cercana, conuiene a saber a la tercera imperfecta unisonus, a la tercera perfecta la quinta, y a la imperfecta sexta la quinta, y a la sexta perfecta la octaua (Bermudo 1555: 87v).

¹³⁸ Vela Nuñez's term as organist at the royal chapel of Granada was before 1541 (Stevenson 1960: 55).

¹³⁹ Hoag is referring to Thomas Gómez's *Arte de Cantollano, Organo, y Cifra junto con el cantar sin mutanças* (Madrid, 1649, f. 9) and Antonio Martín y Coll's *Arte de canto llano, y breve resumen de sus principales reglas para cantores de choro* (Madrid, 1719, f. 47).

(The imperfect consonances are always followed by the nearest perfect consonances, that it to say, the minor third [is followed] by the unison, the major third [is followed] by the fifth, and the minor sixth [is followed] by the octave.) [140]

In other words, the law of maximum proximity means that an imperfect consonance should be followed by the perfect consonance which is nearest to it. It is also possible to express the law of maximum proximity in such a way that the stepwise approach to a perfect consonance from an imperfect consonance has to be made by one voice moving a half step and the other a whole step (Wyly 1964: 256).

According to Bermudo, there are two exceptions to the basic rule given. First of all, one must not take the rule about the maximum proximity into consideration if its application would cause "fa against mi" in perfect consonances (Bermudo 1555: 88v). The meaning of Bermudo's first exception is easier to understand in light of the music example which he gives in the next folio. In this example, an augmented sixth moves to an octave and under the example the author's words "This cannot be done" ("No se puede hazer") (ibid.: 89) are printed. It seems clear then that the significance of Bermudo's first exception is to forbid the use of the diminished and augmented intervals in harmonic progressions leading to perfect intervals. (See also the analysis of Bermudo's words by Jacobs [1968: 281].) According to Bermudo, in such a case, "not observing the above rule [the initial basic rule] will be good music, for avoiding greater evil", (Bermudo 1555: 88v). Later in his treatise, Bermudo nevertheless describes three legitimate ways to use a diminished fifth, in Bermudo's terminology, fa contra mi en quinta ("fa against mi in a fifth") (ibid.: 139v-139 [140]¹⁴²). In Bermudo's opinion, the diminished fifth was a defensible interval – if well prepared. Bermudo mentions that the diminished fifth is commonly used in cadences (ibid.: 139v). In the same context, he refers to the particular use of the diminished fifth by Gombert and Morales. According to the author of the *Declaración*, he who has best prepared the said interval is "the excellent musician Christoual de morales [Cristóbal de Morales] in the Requiem mass which he wrote for the señor Count of Urueña, in the verse of introit which says 'Te decet,' on the words 'Votum in bierusalem' " (ibid.: 139 [140]). Bermudo gives an example of the said place as following (ibid.): 143

¹⁴⁰ For other English translations of Bermudo's words, see Stevenson 1960: 34 and Jacobs 1968: 280.

¹⁴¹ The italics are mine.

¹⁴² There are two folios bearing the number 139 in Bermudo's *Declaración de instrumentos musicales*. The second of them should be 140.

¹⁴³ I have transcribed the example from the notation used by Bermudo, where he has written all voice parts separately, in a keyboard score.

Example 39



Bermudo's example of the use of the diminished fifth in Morales's Requiem mass for the Count of Urueña

Bermudo's second exception to the rule of maximum proximity concerns the fifth and the sixth, particularly a series of parallel fifths with the sixth as the alternating interval. In such a harmonic progression, described by Bermudo, one voice leaves a fifth to form a sixth and the other voice moves after it to reach another fifth (ibid.: 88v). Consequently, the sixth formed by the two voices has to be a major sixth because the fifth following it "asks for it" (ibid.). In other words, the quality of the sixth has to enable the fifth that follows to be perfect. Although Bermudo amplifies his initial basic rule and gives exceptions to it, the importance of the "law of maximum proximity" is incontestable for the understanding of practices of musica ficta in general.

One example of the other conventions of musica ficta taken up by Bermudo is the cadential major third. Like *Fr.* Tomás (1565: 90), Bermudo writes about the predominance of the major third in cadences. In Bermudo's time, it was still a performer's task to replace a minor third by a major third in final chords of cadences.

Bermudo's discussion of musica ficta illustrates the novelties and changes brought by the "new semichromatic gender," and thereby "a fresh use of chromatic and dissonant intervals in melodic progression," as Jacobs (1968: 283) phrases it. In the nomenclature used by the Spanish theorists of the sixteenth century (and earlier), *semitono cantable* (a "singable semitone") was a step between two notes having different names. *Semitono incantable* (an "unsingable semitone"), for one, was a step formed between two pitches of the same name (e.g., C and C-sharp). The music using the "singable semitones" was called 'diatonic' while music employing "unsingable semitones" was termed 'chromatic.' Such music which involved both kinds of intervals was called 'mixed.' (Wyly 1964: 263.) Knowledge of the above distinction is necessary for understanding early descriptions about the practices of musica ficta. For instance, some intervals forbidden in diatonic *género* (and thus in diatonic music) were fully acceptable in chromatic or semichromatic *género* ¹⁴⁴ (see the chapter on *géneros* of this dissertation).

Although Bermudo, in practice, accepts the melodic use of certain chromatic and dissonant intervals – if well prepared, he at the same time warns about the overuse of accidentals. First the author asks "the excellent players, reading this book [i.e., *Declaración*]

¹⁴⁴ *Género* indicated what kind of accidentals and how many of them were in use in a piece – or whether there were accidentals at all. In this respect, *género* could be compared to the later concept of key signature.

not to grow angry because the differences we have are [only] few" (Bermudo 1555: 73). He goes on to explain that only in two points is there "apparent contradiction," namely, that the mentioned outstanding players commonly perform the fifth and sixth mode with B-flat, which Bermudo forbids. Bermudo adds, however, that the difference of opinion that may exist between those who play organs and himself is only in name. The author gives credit to players who perform the "intense and sharp notes" and the modes that they play with B-flat, writing that it sounds good to him. (Ibid.) Apparently, the seeming difference of opinion between good players and Bermudo exists then simply at the level of nomenclature. Bermudo emphasizes that the white keys belong to the diatonic gender and the black ones to the chromatic gender. If one plays on both the white and black keys, making harmony, it is a compound of two musics with generic difference. (Ibid.) Actually, with the "two different musics with generic difference," Bermudo is referring to mixing of modes. He stresses that he does not have to reprove the singular players but to praise [them] and learn [from them] if, as to the way that some [of them] play the sixth [mode], they would give another name which would fit it, and thus also to the other modes in which they perform intense notes (ibid). Bermudo makes clear that thus "his arguments and contradiction do not run against the clear[-headed] players" but "against the barbarous ones who before knowing the even road of the white keys, meddle in the rocky ground of the new music":

Assi que, mis argumentos y contradiction no corren contra los claros tañedores. Co[n] tra los barbaros (que antes de saber el camino llano delas teclas blancas: se meten en las breñas de la musica nueua) arguyo (ibid.).

Bermudo adds that these players "who learn without a master, without art, and without work, adulterate Music" (ibid.). The author of the *Declaración* writes of having heard "some [players] who bring out [such] a mess on the keys that [it] resembles more a skirmish of cats than musical consonances" (ibid.).

Comparing Bermudo's and *Fr.* Tomás's approaches to questions of musica ficta, the opinions of the latter appear to be more conservative – generally speaking. For instance, in the treatment of dissonances, *Fr.* Tomás allows "stepwise progressions of notes that outline a dissonant interval, except the augmented fourth" (Jacobs 1968: 285), prohibiting their use by leap, which is, on the contrary, permitted by Bermudo in certain cases – if well prepared. Both authors discuss the diminished and augmented fourths and the diminished fifth in their treatises, while *Fr.* Tomás also takes up the augmented fifth, not dealt with by Bermudo (Tomás 1565: 27–28v; Bermudo 1555: 139–139v). Bermudo, for one, treats the augmented prime (Bermudo 1555: 138v), the augmented second and the diminished third (ibid.: 86v–87) in his *Declaración*, as well. According to Bermudo, the augmented second and the diminished third both appear in the new (semichromatic) *género* (ibid).

Fr. Tomás's writings on musica ficta involve interesting discussions on the reasons for adding accidentals in performance. Such reasons are, first of all, some practical necessities emerging in situations such as giving a pitch to the choir or to someone who sings alone

with the organ or with any other keyboard instrument. Second, other weighty reasons for adding accidentals are the necessities "to complete the voices that lack flats and sharps." (Tomás 1565: 3–3v.)

6.4 The Enjoyment of Dissonances and the Effects of Tuning

The earlier mentioned "fresh use of chromatic and dissonant intervals in melodic progression" described by Jacobs (1968: 282) must have been a delight and a cause of great excitement to theorists, composers, performers and listeners alike in sixteenth-century Spain. In the next century, the use of dissonances took increasingly daring forms but already in Antonio de Cabezón's, Luis Venegas de Henestrosa's, and Juan Bermudo's time, one finds such harmonic phenomena as diminished triads in root position and simultaneous cross-relations, the latter of which were later particularly favored by Francisco Correa de Arauxo, who called them *punto intenso contra punto remisso* in his writings. There were also some national traditions and preferences which had their impact on the use of dissonances and, consequently, on the practices of musica ficta. For instance, according to Anglés, the diminished fourths are typical to the Spanish folk song, which may well have encouraged their use in the repertoire of keyboard music as well (Hoag 1980: 199).

The obvious enjoyment of dissonant intervals for their own sound was, however, the decisive factor for the increasing urge to employ them, I believe. There are many places in the sixteenth century keyboard literature where certain dissonances could easily have been avoided if only the composer had wanted to do so. One of the most striking examples of the experiments which the theorists and composers made with the evoking new style of using dissonances is the often-cited example of the "chromatic *género*" given by Francisco de Montanos in folios 21v–23 of his *Arte de Música*, printed in 1592 in Valladolid (Jacobs 1968: 286). Montanos's example has been cited not only by today's musicologists but also by Pietro Cerone, who borrowed it in part on page 761 of *El Melopeo y Maestro* published in 1613 in Naples (ibid.: 286–287). Later on, Correa made a reference to the same example (Correa 1626: 12, textual part). See Montanos's example as it is presented by Jacobs (1968: 294–295):

Example 40



Francisco Montanos's example of the "chromatic *género*" in *Arte de Música* (Montanos 1592: 21v–23, quoted in Jacobs 1968: 294–295)

In pondering the practices of musica ficta, it is well to remember that the meantone tuning of the keyboard instruments had many-sided effects on the composing and performing of keyboard music. Composers of the sixteenth century, in particular, had to take the tuning into account in shaping their melodic line. At least in the diatonic music, the smaller, "unsingable" semitones were to be avoided while the larger, "singable" semitones could be used. In practice, in diatonic music the melodic movement "related any chromatic pitch to degrees of other name and never to the natural pitch of the chromatic tone." For example, B-flat could move to A or C but not to B-natural (Hoag 1980: 204). Naturally, "unsingable semitones" were employed in the "chromatic music" of sixteenth-century Spain. Besides the effects of the meantone tuning on the design of the melodic line, it is also noteworthy that the dissonant intervals sounded very different in that tuning than when performed, for instance, in equal temperament. Lastly, as is clearly seen in the Spanish keyboard repertoire of the sixteenth, and even of the seventeenth century, the prevailing tuning system(s) favored sharps over flats – both in composing and executing musica ficta.

6.5 General Questions Concerning Practices of Musica ficta

Several questions remain to be answered today by anyone trying to grasp the rules and principles which once governed the practices of musica ficta. First, what was the scope of the old rules presented by theorists? Second, what kind of attitude should we take regarding the application of the remaining rules of musica ficta? Third, is it plausible to think that we need a special approach to musica ficta in performing the early Spanish repertoire compared with the keyboard repertoire of the same period of time coming from other countries?

I think that we can at best make good estimates of the scope of the rules of musica ficta given by the theorists and composers of the sixteenth (and even of the seventeenth) century. For example, Samuel Rubio remarks in his *La Polifonía Clásica*, upon discussing and summarizing old rules of cadential treatment, that such rules were accepted, at least in theory, in most of Europe during the fifteenth and sixteenth centuries (Rubio 1956: 75–76, quoted in Wyly 1964: 255–256).

Considering the value of the old rules of musica ficta, it is the task of every performer or editor of the early Spanish keyboard repertoire to take his own stand on the matter. Personally, I am convinced that the knowledge of the rules of musica ficta still available to us, and the attempts to apply them to the music that we are performing and editing, is worthwile. The inescapable fact that the remaining information about the practices of musica ficta is fragmentary does not mean that it is insignificant. At the same time, it is good to be aware that the rules of musica ficta did not cover each and every case and that several systems of musica ficta, not to mention national traits and preferences, coexisted.

One might also doubt whether one should apply the old rules of musica ficta at all in such cases where this produces changes in the form of subjects, answers or repeated motifs in imitative music. In light of the early Spanish repertoire, however, the mentioned changes caused by applying some important rule of musica ficta were regarded acceptable – as exemplified, for instance, by Tomás Luis de Victoria's (1548–1611) motets. (Rubio 1956: 84–86, quoted in Wyly 1964: 261.) Besides, changes of interval size in subjects were not always a mere consequence of the rules of musica ficta, but composers made interval changes in seeking variety, too. One tangible example of deliberately varied subjects and motifs is found in Antonio Cabezón's music.

Since it is not in the scope of the present work to go through even all of the basic rules of musica ficta, I refer the reader to the research made by others on this subject, particularly to the already mentioned summary of the rules of cadential treatment by Samuel Rubio in his *La Polifonía Clásica* (1956: 75–76); 82–84, quoted in Wyly 1964: 255–256; 259–261), the useful summary of the rules of musica ficta "suggested by sixteenth-century Spanish writings" by Charles Jacobs in his article "Spanish Renaissance Discussion of Musica ficta" (Jacobs 1968: 287–288), and the chapter "Musica ficta" of Jacobs's dissertation (1962: 176–208). Karol Berger's *Musica ficta, Theories of accidental inflections in vocal polyphony from Marchetto da Padova to Gioseffo Zarlino* is also a useful source on musica ficta.

Besides studying the rules of musica ficta given in the old treatises and forewords to collections of music, and the early Spanish repertoire itself, it is useful to keep in mind the earlier-mentioned fact about the numerous exceptions to these rules. It might also be helpful in efforts to apply the rules to pay attention to the principle of careful preparation of the dissonant intervals, emphasized almost unanimously by the theorists of the sixteenth century. Last but not least comes the performer's role in fulfilling the composer's probable intentions, the role reflected also in the early sources concerning the performance of keyboard music. As Bermudo phrases it in the context of his discussion of the tritone in the *Declaración*: "And although the fact that the rule follows the practices of the good players is enough to make it valid, with a desire to be absolutely thorough I shall give its cause":

Y au[n]que bastaua por regla, digna de ser imitada hazer lo buenos tañedores: con desseo de sacarlo de fundamento, dire la causa (Bermudo 1555: 85).

6.6 Correa and Musica ficta

Since by the end of the sixteenth century it became customary that the composers notated at least most of the intended accidentals, the emphasis in the treatment of practices of musica ficta in early treatises and forewords to collections of music began to shift from the mere description of the rules of musica ficta to discussions of the essence of dissonances. This tendency is obvious in Francisco Correa's *Facultad orgánica*. His book involves extensive discussion about the nature of the fourth and about his favorite dissonance, the *punto intenso contra remisso*. (See the chapter *Falsas* of this dissertation.) In his writings concerning the use of the *punto intenso contra remisso*, Correa refers to such theorists and composers as Montanos, Gombert, Hernando de Cabezón, and Jannequin.

Although it is evident that in Correa's works practically all accidentals have been notated by the composer himself, there are some places where the performer might be tempted to make minor changes. It is possible that some accidentals may have been erroneously omitted (or, on the contrary, been added) in the process of editing and printing the Facultad orgánica. Some dissonant clashes clearly result from writing for instruments with divided registers. However, most cases in which one might question whether one should avoid strong dissonances by omitting or adding accidentals were really intended by the composer, I believe. Many times the composer's intentions are also clarified by the use of manecillas, the tiny hands which Correa places below the staffs of cifra, pointing to places demanding special attention – to particularly strong dissonances, for instance. Regarding the Spanish keyboard music, Barbara Brewster Hoag hits the mark in her dissertation on the performance practice of the seventeenth century Iberian keyboard music in writing that "For Iberian keyboard literature of the seventeenth century, the emphasis lies much more on what not to remove under the mistaken impression that the composer could not have intended it," instead of focusing on what kind of accidentals one might add (Hoag 1980: 207). Naturally, this attitude is most apt regarding the music of Correa and his contemporaries. During that time, it was already customary for the composers themselves to notate most – if not all – accidentals.

When one encounters special questions of musica ficta in Correa's works, it is important to refer to the original edition of the *Facultad orgánica*, as well as checking Correa's own Errata. This Errata folio is found in the Brussels and Leipzig exemplars of the *Facultad orgánica* and also in the facsimile edition by Minkoff, based on the Brussels exemplar. (See the chapter on the extant copies of the *Facultad orgánica* in this dissertation.) Additionally, it is crucial to know that Correa notates all his accidentals individually, within each measure as well.

Now I will give some examples of questions related to musica ficta and of other notable use of dissonances in Correa's compositions. Of my eleven examples, **Examples 41–43** and **Examples 48–49** are demonstrations of such places in Correa's works where the player could raise the question of whether one should add some individual sharps or flats to the original text. (In four out of the five cases presented here, the possible adding of accidentals concern sharps.) **Example 44**, **Examples 46–47**, and **Example 51** show instances of Correa's intentional use of strong dissonances – as in all of the said examples, the author of the *Facultad* has taken care to point out the dissonances by his tiny "hands," *manecillas*. In **Example 45**, one can see an interesting case where a strong dissonance is caused by Correa's having had to take into account the existence of the divided registers of the Castilian organs of his time. Lastly, **Example 50** shows a place where an individual sharp might have mistakenly been omitted from the original.

In measure 58 of the *Segundo tiento de primero tono*, ¹⁴⁵ one might question whether the second-to-last note of the soprano should be made an f¹-sharp since there is an f¹-sharp

¹⁴⁵ Folio 42v, staff 6, m. 3 of the original edition; *Tiento* XIV, p. 91, first system, last measure in Kastner's edition (Vol. I).

in the same voice shortly before within the same measure. In the original edition of the *Facultad orgánica*, there is no accidental written for the second-to-last note of the soprano nor does the Errata folio contain any mention of the matter. For these reasons, I would play an f^1 -natural here as it has been notated in the original (and also in Kastner's edition)¹⁴⁶, in the belief that the f^1 -natural, contributing to the elegant melodic curve seen in the **Example 41**, was intentional:

Example 41



Segundo tiento de primero tono, meas. 58-59

In *Tercero tiento de quarto tono*, in measure 56, ¹⁴⁷ Kastner has added two editorial sharps (g¹-sharp, f¹-sharp) to the second and third notes of the soprano line, presumably for the reason that these accidentals appear shortly in the same voice in the second half of the measure, except for the last note (g¹) of the soprano. Correa, for one, has notated only one g¹-sharp and f¹-sharp, both in the second half of the measure. Despite the normally forbidden augmented second of the soprano line in measure 56, I would stick to the original notation, except that I would perhaps add a sharp to the last soprano note of the said measure, its thus becoming a g¹-sharp:

Example 42



Tercero tiento de quarto tono, meas. 56-57

There is no comment in Correa's Errata about the measure in question. I consider it possible that Correa has used the f^1 -natural to avoid an augmented octave between the soprano and tenor voices towards the end of the first part of measure 56.

There are exceptionally many places which are particularly interesting in regard to issues of musica ficta in *Tiento de medio registro de tiple de sétimo tono*. First of all, one

¹⁴⁶ The natural sign in the example is mine.

¹⁴⁷ Folio 48v, staff 5, m. 3 of the original edition; *Tiento* XVII, p. 105, first system, last measure in Kastner's edition (Vol. I).

might ponder whether the third-to-the last sixteenth note in measure 31^{148} of the soprano line should be made an f^1 -sharp. There is no mention about this place in Correa's Errata. I would retain the f^1 -natural of the original (and also Kastner's) edition and play the sixteenth notes as notated by Correa:

Example 43



Tiento de medio registro de tiple de sétimo tono, meas. 31-32

Second, there are two dissonant clashes in the same work in measures 72¹⁴⁹ and 75, ¹⁵⁰ which do not need any changes on behalf of the performer but which are interesting as such. (Neither of these places is mentioned in Correa's Errata.) In measure 72, there is a strong dissonance created by simultaneously sounding c of the bass voice and d of the tenor voice in the beginning of the second half of the measure. The effect of the dissonance is softened by the d of the tenor being a dotted half note and thus already sounding when the c of the bass is struck:

Example 44



Tiento de medio registro de tiple de sétimo tono, meas. 72-73

In the original edition of the *Facultad orgánica*, Correa has indicated the said place with one of his *manecillas* (or *apuntamientos*), a tiny hand printed below the measure. Since the *manecilla* is not found exactly below the second half of measure 72, but rather below the

¹⁴⁸ Folio 115v, staff 2, m. 2 of the original edition; *Tiento XLV*, p. 53, second system, second measure in Kastner's edition (Vol. II).

¹⁴⁹ Folio 116, staff 6, last measure of the original edition; p. 54, last system, second measure in Kastner's edition (Vol. II).

¹⁵⁰ Folio 116, staff 7, m. 3 of the original edition; p. 54, last system, last measure in Kastner's edition (Vol. II).

fourth note of the bass line, Correa's "hand" could be denoting something other than the said dissonance, the superposed two fourths on the third bass note (A), for example.

The aforementioned dissonant clash of measure 75, for one, is obviously a result of the piece having been written for divided registers. The melodic line of the soprano solo voice cannot descend below c^1 -sharp; otherwise it would interfere with the accompanying voices. Consequently, at the end of measure 75, one finds a simultaneously sounding c^1 -sharp of the soprano solo voice and c^1 of the alto belonging to the accompaniment:

Example 45



Tiento de medio registro de tiple de sétimo tono, meas. 75-77

In the second half of the *Tiento de medio registro de tiple de sétimo tono*, there are a couple more places which demonstrate well Correa's intentional use of dissonances. (Examining such places proves to be useful upon encountering other places in Correa's works where one might question whether one should add or remove some accidentals of the original edition.) In measure 85¹⁵¹ there is a tritone (b-natural – f) between the bass and tenor voices in the second half of the measure, which Correa has marked with a *manecilla* in the original edition:

Example 46



Tiento de medio registro de tiple de sétimo tono, meas. 85-86

In measure 106¹⁵² there is an even stronger dissonance, this time between the soprano (g¹) and tenor (a) voices, on the downbeat. This clash has also been indicated by a *manecilla*

¹⁵¹ Folio 116v, staff 3, m. 1 of the original edition; p. 55, third system, last measure in Kastner's edition (Vol. II).

¹⁵² Folio 117, staff 1, m. 2 of the original edition; p. 56, third system, last measure in Kastner's edition (Vol. II).

by the author of the *Facultad orgánica*. See the following example showing this clearly intended dissonance:



Tiento de medio registro de tiple de sétimo tono, meas. 105-107

In *Tiento de medio registro de tiple de octavo tono*, in measure 59¹⁵³ one might question whether one should add a flat to the last sixteenth note (e²) of the soprano voice. I would, nevertheless, retain the notation of the original edition (as has been done by Kastner in his edition of the *Facultad orgánica*):¹⁵⁴

Example 48



Tiento de medio registro de tiple de octavo tono, meas. 59-60

(There is no mention of the said measure in Correa's Errata.)

In another work for divided registers, *Tiento de medio registro de baxón de dézimo tono*, Kastner has added editiorial sharps to the bass voice of measures 111–112, ¹⁵⁵ making c in measure 111 a c-sharp. In the next measure, he has made c a c-sharp and F an F-sharp. Correa does not comment on these measures in his Errata, nor has he written any *manecillas* for them. I regard Kastner's editorial sharps as a possibility but by no means a necessity. I would follow Correa's notation strictly here: ¹⁵⁶

¹⁵³ Folio 120v, staff 5, m. 1 of the original edition; *Tiento* XLVII, p. 65, last system, second measure in Kastner's edition (Vol. II).

¹⁵⁴ The natural sign in the example is mine.

¹⁵⁵ Folio 131, staff 7, m. 3–4 of the original edition; *Tiento LI*, p. 90, third system, last measure, and fourth system, first measure in Kastner's edition (Vol II).

¹⁵⁶ The natural signs in the example are mine.

Tiento de medio registro de baxón de dézimo tono, meas. 111-112

In "another" *Tiento de medio registro de dos tiples de séptimo tono*, measure 109^{157} raises the question whether the first sixteenth note of the soprano line should really be an f^1 -natural, as has been notated both in the original edition and in Kastner's edition of the *Facultad orgánica*. Although Correa's own Errata does not mention the said measure, I hold it possible that the f^1 -natural of the original texture could be a mistake. Here is Correa's own notation of measure 109^{158} :



Otro tiento de medio registro de dos tiples de séptimo tono, meas. 108-110

However, in light of Correa's works in general, one cannot totally disregard the possibility that the f^1 -natural was intended, especially since it is involved in a rapid passage of sixteenths.

As a last example of places related to issues of musica ficta in the *Facultad orgánica* to be discussed here, measures 137–138¹⁵⁹ of *Tiento y discurso de medio registro de dos baxones de octavo tono* offer a demonstration of an intentional dissonant clash. In both measures, g¹ and a¹ of the two highest accompanying voices sound simultaneously during most of the time. In the original edition, a *manecilla* has been placed under the second half of measure 137. See the following example:

¹⁵⁷ Folio 142, staff 1, m. 1 of the original edition; *Tiento* LIV, p. 110, last system, first measure in Kastner's edition (Vol. II).

¹⁵⁸ The natural sign in the example is mine.

¹⁵⁹ Folio 152v, last staff, m. 2–3 of the original edition; *Tiento* LVII, p. 133, fifth system, first and second measures in Kastner's edition (Vol. II).

Example 51



Tiento y discurso de medio registro de dos baxones de octavo tono, meas. 137–139

VII COMPENDIUM OF THE RESULTS

When I embarked upon the present research project on Francisco Correa de Arauxo and his Facultad orgánica, I neither knew how challenging this task was to be nor could I anticipate how much hard work it would require. The main objective of this study has been to penetrate into the performance practice of the early Spanish keyboard music of Correa's time, focusing on the information about performance conventions included in Correa's Facultad orgánica. Advice on performance practice by the composers of early Spanish keyboard music was still rarely given in written form in Correa's time, such information being mainly passed directly from a master to his students. The Facultad orgánica is thus an important source of performance practice, containing advice on several performance considerations, such as instructions and remarks on the embellishment of music with glosas and adornos, fingerings, keyboard player's touch, tempo issues, special playing style of ayrezillo, and registration.

From the very start of my research on Correa, I decided to study the performance practice of his time in a "broad sense," meaning that I wanted to place the *Facultad orgánica* and its author in their historical context, to include updated facts about his life and his professional career, about the organs that he played, and about the early Spanish organs and other keyboard instruments used in the Spain of his time. Moreover, since the *Facultad orgánica* involves extensive theoretical discussion, often closely related to practical issues, I have taken up several theoretical topics dealt with by Correa, clarifying the special concepts and nomenclature associated with them, to facilitate both the understanding of his advice on organ playing and of the theoretical ponderings of the author of the *Facultad*. Besides my own analysis of his texts and works, I have wanted to "give the floor" to Correa in the form of numerous citations, trying to maintain the style of the original in my translations of his texts.

I have entered into the dialogue with Correa's *Facultad* agreeing fully with Gadamer's remark in his *Truth and Method* that "The mode of being of a text has something unique and incomparable about it" which presents a special dilemma of translation to the understanding. In Gadamer's words: "Nothing is so strange, and at the same time so demanding as the written word." (Gadamer 2004: 156.) In the challenges of endeavoring to understand texts written in 16th- and 17th-century Spain, I have taken as a point of departure the hermeneutical idea that I am prepared for those texts to tell me something (see ibid.: 271), accepting the fact that "the subject presents different aspects of itself at different times or from different standpoints" (ibid.: 285).

In the course of my research on Correa, I have been taken by surprise by the inconsistency and inexactness, until recent years, of much of the musicological literature concerning Correa's dates and even nationality. The number and the location of the extant exemplars of the *Facultad orgánica* have also been among the questions which have not been examined thoroughly previous to this study, in which I present an updated list of the currently known exemplars of Correa's book. Another big research challenge has been the dispersed nature of the information about performance practice in the *Facultad orgánica*, although the book is a relatively well-organized work. For an analysis and discussion of each practical or theoretical matter, it has been necessary to first assemble all the relevant pieces of information concerning each particular topic from throughout Correa's work. In addition to the textual part proper of the *Facultad*, the prefaces add another substantial body of text, involving information connected with performance practice.

The most important occasion in the field of Correa research during my own research process was the publishing of the third modern complete edition of the Facultad orgánica in spring 2007 by the Swiss Guy Bovet (Ut Orpheus Edizioni, Bologna). This new Urtext edition is loyal to Correa's original text; besides the sixty-nine works of Correa transcribed from cifra to modern notation, the volume includes the English, French and German translations of most of the textual part of the Facultad orgánica, the translation in Japanese being available separately. In addition, Bovet's edition involves all of Correa's prefaces and their concise translations into English plus the editor's commentaries on the prefaces. Regrettably, I was not able to consult Bovet's creditable work until the very last stages of my research. On the basis of my own study on Correa and his book, I hold the work of Santiago Macario Kastner, Miguel Bernal Ripoll and Guy Boyet – thus far the only editors of complete modern editions of the Facultad – in great esteem. Through my study I have come to understand that the transcription of Correa's works from the original notation of cifra, with the numerous difficult editorial choices that it inevitably requires, is a very challenging task – not to speak of the organizing of, translating of, and commenting on the textual part and prefaces of the Facultad.

Correa lived in a period of transition in many respects, which is reflected in a fascinating way in the folios of the *Facultad orgánica*. For instance, in Correa's book one finds an interesting attempt to reconcile the old proportional meanings of time signatures with their new tempo connotations. This is one of the aspects which makes the issues of tempo and notating time very challenging in Correa research, as well as in the research of these issues in the period between the late Renaissance and Early Baroque, in general. I must admit that my research results on dealing with tempo and tempo notation in Correa's works are bound to be only a modest beginning for a work requiring a lifetime at least. (For instance, the important issue of performing Correa's *tientos* having several sections written in different time signatures – practically not discussed at all in the present study – needs to be examined in the future.) Another interesting element which has caught my attention during the research process is the combination of Correa's different roles, the *Facultad*

involving remarks by him as a virtuoso organist, as a church musician, as a pedagogue, as a composer, and as a theoretician.

Next I will present the main results of the present study, giving first a brief account of the structure and contents of the *Facultad orgánica* and of the number and the location of the extant exemplars of it. After that I will focus on the information about different aspects of performance practice discussed by Correa – the primary research objective of my dissertation. In the last part of this compendium, I ponder the future challenges of Correa research.

1 The Structure and Contents of the Facultad orgánica

Although printed and published in one volume, Francisco Correa's *Facultad orgánica* involves two main parts. The first one is theoretical and the second one musical, consisting of sixty-nine organ pieces, with prefaces written to each of them. The textual part proper of 26 folios is preceded by a few folios of introductory matter. The musical part contains 204 folios, written in *cifra* tablature. The textual part itself is further divided into two main chapters: *ADVERTENCIAS* (Warnings or Reminders) and *SIGVESE EL ARTE DE PONER POR CIFRA* (Follows the art of playing from *cifra*). Following a short prologue, the first main chapter is subdivided into seventeen *PVNTOS* (points). The second main chapter consists of ten *CAPITVLOS* (chapters) plus *CAPITVLO DECIMO DE LAS ADVERTENCIAS para perfectamente poner por cifra* (the tenth [sic] chapter of the *Advertencias* for reading/playing *cifra* perfectly, *E[X]CEPTION* (An Exception), *ADVERTENCIA* (A Warning or a Reminder), and *MODO DE TEMPLAR MONACORDIO* (A way to tune the clavichord).

Despite the fact that the *Facultad orgánica* is a fairly well-organized work as such, it is, nevertheless, a work which is rather difficult to read, involving an intricate style of writing. The considerably abundant information related to performance practice (and theoretical matters) is scattered because each particular topic is often discussed in many places of the *Facultad*. Besides the textual part of Correa's book, the prefaces that he wrote to all of his compositions are of importance. Correa himself emphasized that anyone wanting to play/read *cifra* perfectly should first read – and also understand – the prefaces. In the Gadamerian sense, these particular words of Correa, involving his exhortation to seek true understanding of his texts as the basis of performing his works, have led me to the present study on him and his book. As Gadamer puts it, "Understanding begins . . . when something addresses us. This is the first condition of hermeneutics" (Gadamer 2004: 298).

One of the main goals of the present study has been to make Correa's valuable and important book easier to approach for anyone interested in having an insight into his explanations and comments on issues relevant to performance practice as well as into his theoretical ponderings. To reach this aim, I have introduced briefly the contents of each of Correa's *PVNTOS*, *CAPITVLOS*, and prefaces (mainly in *Chapter IV* of this dissertation) and discussed his notation, most important theoretical concepts, and advice on

performance practice matters in more detail in *Chapter V* (theoretical issues) and *Chapter VI* (performance practice issues), having gathered information related to each particular topic from throughout the *Facultad*.

The full title of the Facultad orgánica, LIBRO DE TIENTOS Y DISCURSOS DE MVSICA PRACTICA, Y THEORICA DE ORGANO, intitulado Facultad organica, reveals the twofold nature of the book, which is both practical and theoretical. On the title page, Correa writes that "any average player" can take advantage of the Facultad, "with moderate study and perseverance." Therefore, it seems clear that he directed his work to those who already possessed some skills and experience in organ playing. However, in several places in the Facultad, Correa takes into account beginners and very advanced players, as well. Exceptional for his time, he has arranged the table of contents concerning his compositions in order of difficulty, obviously to facilitate choosing repertoire suitable for one's students or for one's own level of playing.

Contained in the few introductory folios, which precede the textual part proper, is a *PROLOGO EN ALABANÇA DE LA CIFRA* (A Prologue in praise of *cifra*), where Correa lauds the *cifra* notation, in which all his *tientos* are written, and presents a good account of the various advantages of this notation. Correa is right in stating that *cifra* is the most practical of those tablature notations based on numbers that were in use in his time in Spain. Perhaps the greatest advantage of *cifra*, compared with the other number tablatures, is its clarity, reached primarily through a more limited number of signs and figures than in other number tablatures. Another main factor contributing to the clarity of *cifra* is the fact that one can follow the voice leading with ease, seeing all the voices simultaneously, contrary to the usual keyboard scores of the time. *Cifra* proves indeed to be a very practical and precise notation for polyphony and was also the notation employed for two other substantial Spanish collections of early keyboard music besides Correa's, namely, those by Venegas de Henestrosa (1557) and Antonio de Cabezón (1578).

In addition to the *cifra* tablature, Correa deals with numerous other topics in the textual part and in the prefaces to his compositions. Among the most important subjects discussed are: 1) the use of *apuntamientos de manos/manecillas* (little hands printed in the *tientos* and musical examples to show important places in the music); 2) the importance and ways of determining the *género* of a piece; 3) explanations concerning the twelve modes that Correa employs (involving the introduction of concepts of modal terminology such as *diapasones* and their arithmetic and harmonic division); 4) the use of certain time signatures, *compases* (i.e., different tactus), and proportions; and 5) the two ways of playing the same number of notes in *proporción sexquialtera* – one of which is the famous *ayrezillo*, a playing style proper to the "grace of the *proporción menor*." Correa also discusses *falsas* (dissonances) and the much-disputed nature of the interval of the fourth and provides grounds for composing (and playing) works in thirty-second notes and for composing *tientos de medio registro* with two solo voices definitely in five instead of four voices. Certain parallel movements in music and other *virtualidades* ("virtualities") or licenses allowed to composers on particular occasions are considered by Correa, and his favorite dissonance,

the *punto intenso contra punto remisso*, is given special attention, the seventeenth (and last) *PVNTO* of the *ADVERTENCIAS* being devoted to it.

The second main chapter of the textual part of the Facultad orgánica, in particular, is oriented towards practical issues, such as the rudiments and details of reading (or playing from) cifra (including the introduction of the different géneros), extensive advice on fingering, the description of four ornaments and their use, and the place of the downbeat and the upbeat in various compases. The last of the "actual" ten CAPITVLOS of the second main chapter of Correa's textual part is followed by another chapter, which also is curiously entitled the Tenth chapter of the ADVERTENCIAS. To my mind, the said chapter could well have been titled the eleventh CAPITVLO of the second main chapter of the textual part since it summarizes, in nine brief pieces of advice, elements ("warnings") which are indispensable to those who aim at becoming perfect players/readers (/composers) of cifra. Good control of one's fingerings and tempo figures importantly among Correa's advice to performers.

The prefaces to Correa's *tientos* add another substantial portion of text to the *Facultad* orgánica. As in the textual part proper, these prefaces include both practical and theoretical matters, many of which have been touched upon in the textual part. Nevertheless, Correa's prefaces give additional and/or complementary information and advice in regard to several different topics discussed in the textual part – such as modes, tempo signs and *compases*, playing in ayrezillo, remarks on performance tempi, the performance of the ornaments, the level of difficulty of many tientos, details of notation, and characteristics of good composing. Besides the more general topics of discussion, almost every preface involves Correa's explanations of modal issues particular to each piece, like the description of the diapasón of the mode and the *género* of the piece. There are also some rare registration instructions to be found in them. In his prefaces, Correa takes pride in both the cifra notation and the tientos de medio registro, a compositional type designated for organs with divided registers and characterized by him as a "celebrated invention and very well known in the Kingdoms of Castile." The pedagogical nature of the Facultad shows throughout the prefaces in the author's concern about not playing repertoire which exceeds one's skills and in an emphasis on the importance of playing in tempo (tañer a compás), of using proper fingerings, and observing carefully the voice leading.

2 The Extant Exemplars of the Facultad orgánica

A survey of the musicological literature and different catalogues concerning the number and location of the extant exemplars of the *Facultad orgánica* has proven to be confused and inexact. Moreover, the information available is inconsistent and fragmentary, many of the sources even being in contradiction to each other to some extent. I took up the task to update the information about the number and location of the surviving exemplars and was soon to find out that this mission was both challenging and time consuming.

As the result of extensive correspondence during a period of several years, I have been able to verify the existence and location of twelve exemplars out of my hypothetical list of fourteen copies. These twelve exemplars of the *Facultad orgánica* are found in Belgium (Brussels), Germany (Leipzig), Great Britain (Oxford), Holland (Utrecht), Portugal (three exemplars in Lisbon), Spain (two exemplars in Madrid and one in Bueu, Pontevedra), and the United States (one in New York and one in Washington). At the moment it seems that the French (Paris) exemplar and the third American exemplar (Stanford) do not exist despite their having been reported in *RISM* of 1972 (concerning the French exemplar) and *NUC* (1970) (concerning the American exemplar). I have had access through correspondence to both the Bibliothèque Nationale of France and the Stanford University Music Library, and no exemplar of the *Facultad orgánica* could be located. The earlier-reported existence of the exemplars of Paris and Stanford is probably the result of a cataloguing error. A minor possibility exists that the French countess Geneviève Thibault left an exemplar of the *Facultad orgánica* to some of her heirs before donating the bulk of her collection to the Bibliothèque Nationale.

The results of the inquiries concerning the surviving exemplars of Correa's book have revealed that most of the twelve exemplars are reasonably well preserved – except for the third Spanish exemplar at Bueu, which has been reported to be in bad condition. There are microfilms of at least five exemplars. However, it is particularly alarming that the Bueu exemplar, which is apparently the least well preserved of all the exemplars, has not been microfilmed so far. The rare errata leaf, prepared by Correa himself, is found in only two of the twelve exemplars, namely, those of Brussels and Leipzig.

3 Advice on Performance Practice in the Facultad orgánica

Correa's Facultad orgánica involves a considerable amount of valuable instructions and comments on different elements of performance practice. His pieces of advice are found both in the textual part of his book and in the prefaces written to the sixty-nine compositions. The issues concerning performance practice in the Facultad are of great importance since it was not yet a commonplace convention to present such information in written form in Correa's time. Despite his book being generally a well-organized work, it is necessary to collect instructions on each specific issue of performance practice from several places of the Facultad in order to get as coherent a picture as possible of Correa's opinions on performance – knowing that, in the end, this coherence is bound to remain relative. I have tried to accomplish the mentioned task as one of the main objectives of the present study, dividing Correa's advice on performance practice into six categories: 1) glosas and adornos; 2) fingerings, touch and playing position; 3) tempo, time signatures and proportions; 4) special rhythmic features; 5) registration; and 6) musica ficta. In regard to coherence, I want to emphasize to the reader that even if a historical presentation commonly strives towards coherence as its ideal, at the same time, one must realize that

there is always the danger of trying to see the ideas, ideals, and phenomena which one takes as objects of one's research as being factually more coherent than they are in reality.

3.1 Decorating Music With Glosas and Adornos

Decorating music was carried out in the early Spanish keyboard music by two different means, embellishing music with *glosas* (diminutions) and adding various kinds of *adornos* (ornaments). The formerly improvised *glosas* began to be incorporated into the compositions to an increasing degree by the end of the sixteenth century – a practice followed by Correa, too. In regard to *adornos*, the Spanish keyboard music composers of the sixteenth century usually did not indicate the places of ornaments by any symbols. According to the Spanish musicologist Dionisio Preciado, Correa was the first Spanish organist to show places of ornaments by means of symbols.

Prior to Correa, there were two clearly differing approaches to the adding of *glosas* to pieces, even though improvising them was a practice of the sixteenth century, in particular. The writings of Juan Bermudo, for instance, reflect his cautiousness towards adding *glosas*, especially to the works of other composers. In Bermudo's opinion, the adding of *glosas* is pretending to correct a work, and one who uses this practice is instead confusing the voices of a composition. *Fray* Tomás, for one, was a great advocate of *glosas*, giving advice on the art of making *glosas* in his *Arte de tañer Fantasía* (1565), involving numerous exemplary *glosas* for different melodic intervals.

Correa's *Facultad*, having being printed in the early seventeenth century, and more than half a century after Bermudo's and *Fray* Tomás's treatises, does not involve any written instructions on forming *glosas*, probably due to the fact that he had already incorporated *glosas* into his compositions. I also hold it very likely that the author of the *Facultad*, who obviously had a great concern for and strong views about the laws of "good composition," was not enthusiastic about the idea of other composers or performers adding *glosas* to his works.

Although Correa neither gives advice on the form of *glosas* nor recommends adding diminutions in performance, he nevertheless has made some remarks concerning *glosas* in his book. These places in the *Facultad* include technical details of playing, such as how the *glosas* of a work have to be taken into account upon deciding one's fingerings in order to be able to play them with the necessary clarity and velocity. In some of Correa's brief remarks on *glosas*, the abundance of diminutions and the technical difficulty of a piece are related, while in some others compositional details are dealt with. It is noteworthy that Correa's technically oriented discussion on *glosas* involves, notwithstanding, one important piece of advice which is related directly to performance practice. Namely, he emphasizes that the *compás* (in this context, a tempo) within a piece has to be the same in passages of *glosas* (of even thirty-two notes) and in plain passages. This said piece of advice is given in the preface common to his four works in thirty-second notes. If Correa's guideline is followed

in performance, his *tientos* in thirty-seconds result in demanding a virtuoso technique of the players of these works – or else, in having too slow an overall *compás*.

For those performers of today who want to become well acquainted with the art of improvising glosas – an important element of performance practice in sixteenth-century Spain and still relevant in Correa's time, studying the printed advice and glosa tables of theorists and composers and, particularly, the compositions involving glosas is worthwhile. As has already been mentioned, Correa's works basically do not need glosas added by the performer since he has obviously written out his glosas. In the end, it is a matter of choice by each performer to decide whether he will, nevertheless, add some occasional, improvisatory glosas to pieces by Correa. However, in light of having studied Correa's writings and music in detail, I would be very careful in improvising embellishments to his works, in which the refined balance of the vivid and the more tranquil sections has been throroughly worked out by the composer.

Besides *glosas*, another means of decorating music was the addition of *adornos*, ornaments. Correa devoted one entire chapter of his *Facultad* to the art of playing ornaments. He focuses on describing the forms and uses of four different kinds of ornaments, giving fingerings for them, as well. Among his four "prototypes" of ornaments are two *quiebros* (*quiebro senzillo*, *quiebro reiterado/doblado*) and two *redobles* (*redoble senzillo*, *redoble reiterado/doblado*), of which the *quiebro senzillo* resembles a mordent and the *quiebro reiterado* at turn – in modern terms – while the *redoble senzillo* and *redoble reiterado* are kinds of trills. Correa was probably the first Spanish keyboard music composer to indicate the places of ornaments by symbols. In his *tientos*, about 220 'R' signs can be found, showing places of *redobles*, whereas Correa does not employ any symbol for indicating his *quiebros*.

It is notable that Correa gives only a lower note version of the *quiebro senzillo*, which is, basically, a mordent. If such an emphasis on the variant of the *quiebro senzillo* was really intentional on his part, it is one more demonstration of his music's already embracing the Baroque style. Correa's *quiebro senzillo* can consist of either a whole step or a half step. The ornament is recommended to be played at the beginning of a *verso* or other "little work," the latter probably meaning the *tientos*, as well – as seems to be conveyed by one particular preface of the *Facultad*. Correa gives the whole notes, half notes, quarter notes, and (rarely) eighth notes as note values on which one may perform *quiebros* in the course of a piece when one's hand is not occupied with playing *glosas*. The chosen note value depends on the *compás* [tactus/tempo] of the piece.

Correa's second type of *quiebro*, the *quiebro reiterado* (or *quiebro doblado*) resembles a turn, and it can involve a semitone, although not necessarily. Additionally, if there is a semitone included, it can be either in the upper or the lower part of the ornament. Correa is thus much more flexible in the involvement and placement of a semitone in the particular ornament than some of his Spanish colleagues. For instance, *Fr.* Tomás is of the opinion that the ornament in question – which is *quiebro de mínimas* in *Fr.* Tomás's vocabulary – must necessarily involve a semitone, which has to be placed in the lower part of the ornament.

Correa recommends that the *quiebro reiterado* be played at the beginning of long and serious works. In the course of pieces, the *quiebro reiterado* can be employed on whole notes and half notes not occupied by *glosa*. Correa's advice on the use of *quiebros* seems to refer to a relatively great abundance of ornaments added in performance. However, at the same time, he makes the remark that it would be good to leave some notes unadorned every once in a while.

The other two ornaments described in the *Facultad orgánica* are *redobles*, kinds of trills. Correa gives an example of both the *redoble senzillo* and the *redoble reiterado*, notated in *cifra*. On the basis of these examples, it is clear that the form of each *redoble* type is the same for both hands and that the *redoble senzillo* and *redoble reiterado* differ in that the latter has one more note in its "prefix," which precedes the main part of the ornament. Both *redoble* types can be seen to include three parts: a three- or a four-note prefix, the actual repercussions, and a three-note ending, which is "like a mordent" (with a lower neighbor).

Although Correa's notated examples of *redobles* do not involve any implications of their rhythmic execution, several instances of written-out prefixes in his tientos show that those prefixes are meant to be played before the beat. Correa emphasizes, as well, the recommendation that the *redobles* contain a half step. Consequently, typical places for redobles are the leading tones in cadences and other cadence-like, half-step relations. According to Dionisio Preciado, Correa seems to be the first Spanish theorist who has clearly related the word cadence to the issue of employing redobles. Correa advises using a redoble at the beginning of large works when playing on the clavichord and when the entering voice forms the lower part of a half step. According to him, it is better to play a quiebro in such a case when playing on the organ. The said advice is one indication of his making a distinction between the techniques for different keyboard instruments, taking into account the matters of sonority. Marking the places of ornaments with special symbols was also a new practice in Correa's time, and the author of the Facultad explains carefully to his readers that an 'R' sign in his music shows in which voice a redoble is to be played. The great majority of Correa's R signs have been written for half notes, and the most common voice part to be adorned with redobles is the soprano, although there are appearances of ornament signs in all the voices. Some of Correa's works do not involve any R signs, whereas there is one tiento with as many as thirteen such signs.

As to Correa's written-out ornaments – besides the written explanations of his own adornos, there exist a very limited number of written-out quiebros and various examples of (especially partly) written-out redobles. The study of Correa's partly or completely written-out ornaments reveals that his adornos can take richly varied forms, compared with the four "prototype ornaments" presented in the textual part of his book. For instance, in the case of the two written-out quiebros in the Quinto tiento de medio registro de tiple de sétimo tono, to which Correa refers in the preface to this work, it seems that he also considered acceptable an inverted version of the quiebro reiterado. In addition, in the very same preface, Correa makes the important point that quiebros and redobles "do not have a

determined number of notes," meaning most probably that in performance one can freely add more repercussions to *redobles* than, for example, the notated basic examples of these ornaments involve. Another noteworthy issue concerning Correa's *quiebros* is that the few written-out examples of them in the *Facultad orgánica* seem to show that at least the *quiebros reiterados* are played before the beat. In a similar fashion, he notates the prefixes of his *redobles* before the beat.

Correa's strong emphasis on the necessity of having a semitone involved in the *redobles* proves to be a flexible practice, too, upon looking at the written-out *redobles* in his music. Although *redobles* involving a semitone are more common, several demonstrations of written-out *redobles* whose repercussions are a whole tone apart can be found. Moreover, there are examples of prefixes of *redobles* which have a double number of notes in comparison with the basic *redobles* and examples of prefixes having been notated as mirror images of their more ordinary form.

3.1.1 On Interpretation of Correa's Adornos

There are several important elements to be observed in adding ornaments to Correa's music and in playing the ornaments notated by the composer. First, Correa emphasizes velocity in the playing of both his quiebros and redobles. The desired rapid execution of the ornaments is natural, taking into consideration the "inexpressive" character and different function of the ornaments in the early Spanish keyboard music compared with glosas, whose emphasis is on their melodic context. The fact that in the ornaments of Correa's time a consonance was usually on the beat also contributes to the rapid playing style of adornos. Second, Correa's written-out ornaments suggest performing the first three notes of the *quiebro reiterado*, as well as the prefixes of *redobles*, before the beat. Consequently, a consonance falls on the beat both in quiebros and in redobles. Third, there is no fixed number of notes in regard to the number of repercussions of quiebros and redobles, according to Correa. Fourth, despite Correa's strong recommendation to involve a semitone in a redoble, redobles "between two whole steps" are also acceptable. Fifth, although Correa's written instructions seem to point to a relatively great abundance of ornaments, the final choice about the proper amount of ornaments is left to each performer, taking into account the approximately 220 'R' signs added by Correa to his music, nevertheless. Sixth, despite the pedagogue Correa's having described only two basic types of both quiebros and redobles, his highly creative variants of these ornaments, demonstrated by his writtenout ornaments, are a good source of inspiration for the performers of his works. In the chapter of the Facultad orgánica which focuses on ornaments, its author tellingly remarks that "other redobles" have been invented by other masters, Correa leaving the discovery and use of those ornaments to the discretion of his readers. Once again, Correa gives a free hand to performers, after having first explained the rudiments of embellishing music. Although the writings of Spanish theorists and composers from the sixteenth century up to the eighteenth century let us understand that practicing ornaments was an important device for developing one's technical abilities, the art of playing and adding various kinds

of *adornos* at proper places was – first and foremost – a substantial means of embellishing music and at best could make the music more charming, to paraphrase Pablo Nassarre.

3.2 Fingerings and Other Elements of Playing Technique

3.2.1 The Importance of Studying Early Fingerings

Although the study of early fingerings naturally belongs to the activities of those who are engaged in learning to play or research early keyboard music, even among distinguished writers it is still surprisingly common to question the benefits of using these fingerings. To my mind, one can learn much about articulation and phrasing belonging to the music of a particular period of time by studying the old fingerings. Similarly, it is easiest to bring out the subtleties of early music by the usage of such fingerings, which "go with the music." In addition, the attempts to reproduce the effects of old fingerings with modern fingerings is problematic upon playing on historical instruments or well-made style copies. Albeit the extant information about early fingerings is not complete, that is not a reason for disregarding the knowledge at hand.

3.2.2 Early Spanish Fingerings in General

Compared with other nationalities, the Spanish writers on keyboard music supply us with the largest quantity of written information on fingerings. The Spanish and English fingerings, in particular, have many characteristics in common, and the interrelations of these keyboard schools have not yet been studied extensively and thoroughly enough. Kastner has regarded it possible that Spanish fingerings were introduced in England during the visit of Philip II to the English court. The descriptions of early Spanish fingerings are found in the form of written instructions rather than music furnished with fingerings. This is natural, keeping in mind that the important collections of Spanish keyboard music by A. de Cabezón, Venegas de Henestrosa, and Francisco Correa de Arauxo were notated in *cifra*, a number tablature to which numbers of fingerings would have been difficult to apply. However, *Fray* Tomás and Correa provide musical examples in the context of explaining fingerings.

The Spaniards were the first to number the fingers in the manner employed today. With the exception of G. Diruta, this system was not adopted elsewhere until the middle of the seventeenth century. The use of the thumb figured importantly in Spanish systems of fingering, and the fingerings given for the short octave seem to be exclusive to Spanish sources. The development of fingerings reflected the evolution of keyboard repertoire, one demonstration being the new chordal positions requiring – and producing – new fingerings.

The ample use of the thumb can be seen especially in the fingerings of scales for both hands – for rapid runs, in particular. For example, Bermudo's fingering of repeated groups of 1234 for either hand, and for both ascending and descending scales, is recommended

for the left-hand scale by five out of six Spanish authors from the middle of the sixteenth century to the first decades of the eighteenth century. Early Spanish fingerings show a relatively frequent symmetrical approach, especially in certain scale fingerings. The study of early Spanish sources on fingerings gives the impression that the technique of crossing the third or fourth finger over the thumb was a common practice as early as the 1550s. It has been observed by some scholars that although the technique of passing the thumb under the hand is not mentioned by any of the Spanish sources, there remains the possibility of this technique having, nevertheless, being used to some extent.

The concept of "principal fingers" is emphasized in several Spanish sources. The principal fingers begin and end the ornaments and are usually the third finger of the right hand and the second and/or third fingers of the left hand. Often – but not always – these fingers fall on notes which are in a metrically strong position. The Spanish concept of principal fingers resembles G. Diruta's principle of good and bad fingers to a certain extent. Besides the principal fingers and the other already-mentioned elements of fingerings, Spanish sources emphasize the necessity of carefully observing the context upon making decisions on fingerings, using adjacent fingers on adjacent notes, leaving free the hand or fingers playing *glosas* whenever possible, and the impossibility of giving rules of fingering for each and every case.

3.2.3 Playing Position and Touch

Most of the Spanish authors, including Francisco Correa de Arauxo, do not write about the playing position. In trying to get an overall view of the playing position and keyboard technique of Correa's time, *Fray* Tomás's instructions for arm, hand, and finger positions are thus bound to be the most relevant source of information, especially his famous eight conditions "for playing with perfection and beauty." *Fr.* Tomás's pieces of advice emphasize exact and "economic" movements of fingers, some of his advice being particularly directed to the playing of the clavichord.

In addition to the sound playing position and well-balanced fingerings, the keyboard player's touch is an important device on the way to a successful performance. Both Fr. Tomás and Correa stress the clarity of one's touch, although they describe the desired good touch so differently that many scholars have taken their explanations to be in contradiction to each other. The seeming contradiction derives from the fact that Fr. Tomás asks one to always lift the finger which has struck a key before another finger strikes, whereas Correa advises one not to raise the preceding note until it is followed by the next note in the same line. Consequently, many readers of the texts of Fr. Tomás and Correa have taken Fray Tomás to advocate a non-legato touch while Correa has been seen to favor a legato touch.

As I see it, *Fr.* Tomás's and Correa's descriptions of a good keyboard touch – which both authors considered as a means of reaching clarity in playing – do not need to be understood as contradictory practices. It is probable that what was wanted was a slightly *detaché* touch, which enabled one to play clearly, retaining at the same time the integrity of

each voice of a composition. While *Fr.* Tomás's emphasis is on guaranteeing the necessary clarity of playing, Correa stresses conscientious playing in which one pays attention to maintaining the proper values of notes and playing each voice part solidly. Additionally, *Fr.* Tomás's description of a good touch can at least partly be related to the fretting system of the clavichord.

3.2.4 The Relation of Fingering and Articulation

Well-worked-out fingerings are in close relation to a subtle and controlled articulation, which is essential to the successful performance of early keyboard music. Certain fingerings are particularly apt in producing certain kinds of musical articulation and phrasing. For instance, with the paired fingerings which were common in the Spanish keyboard music of the sixteenth and seventeenth centuries, it is easier to pair successive pitches than with some other kinds of fingerings. Studying old fingerings can in many cases provide valuable hints as to how the music of a particular period of time was perhaps articulated. However, surprisingly many modern performers and scholars seem to think that certain fingerings automatically generate certain kinds of articulation, and, as a result, certain accentuations as well. This one-sided and biased thinking can lead to dull and lifeless performances of early keyboard pieces. Besides studying the old fingering systems, a good way to find ideas for articulation is to have a look at the extant information about the articulation of wind, harp, lute, or vihuela players of the time. Especially between the organ playing and the playing style of wind players, a strong connection obviously existed in Spain, including during Correa's time.

3.2.5 Correa's Advice on Fingering

As many as seven *capítulos* of the second main chapter of the *Facultad orgánica* focus on different aspects of fingerings, such as which numbers are given to which fingers, which fingers are chosen for the beginning of a work where one voice enters alone, fingering of ornaments, how to divide voices between the right and left hands (especially when one of the voices is involved in playing *glosas*), fingering of chords, and fingering of scales. Correa supplements many of his *capítulos* on fingering with musical examples.

Correa's numbering of fingers corresponds to today's numbering, beginning from the thumb, which is number one, and ending with the little finger, which receives the number five. Bermudo, Venegas, *Fray* Tomás, and Nassarre employed the same kind of numbering.

In Correa's advice on which finger and hand is chosen for the beginnings of compositions where one voice enters alone, Correa takes into account the musical texture that follows after the entrance of the first voice. Because Correa recommends making a *quiebro* or a *redoble* on the first note of the voice entering alone, the fingers with which one can best execute the ornaments are chosen: the third finger of the right hand and the second finger of the left hand, the "principal fingers."

In the context of his description of four different kinds of ornaments and instruction on their usage, Correa gives fingerings for his ornaments. In these fingerings, also, the principal fingers figure importantly. As to fingerings for the *quiebro senzillo*, Correa presents only the lower auxiliary version of this ornament while *Fray* Tomás, A. de Cabezón, and Nassarre give fingerings for this short *quiebro* with both the upper and the lower auxiliary. The fingering for the ornament with the lower auxiliary is uniform in all the above-mentioned authors, including Correa, with only the name of the ornament varying from author to author. Whereas Correa calls this mordent-like ornament a *quiebro senzillo*, *Fray* Tomás terms it *quiebro de semínimas*, Cabezón a *quiebro*, and Nassarre an *aleado*. Correa's longer *quiebro*, the *quiebro reiterado*, which resembles a turn, is given the same fingerings by Correa and *Fr.* Tomás, the latter calling the ornament *quiebro de mínimas*.

In regard to Correa's longer ornaments, *redobles*, the fingerings of the *redoble senzillo* and *redoble reiterado* are identical, except that the longer "prefix" of the *redoble reiterado* requires one more finger at the beginning of the ornament, compared with the *redoble senzillo*. Except for the ending of the ornament, Venegas de Henestrosa describes a left-hand *quiebro* which is very similar to Correa's *redoble senzillo*, to which he gives the same fingering as Correa.

In Correa's instructions on fingering musical texture consisting of from two to four voices, the author's concern for leaving free the hand which is involved in playing ornamentation is clearly seen. Correa's advice takes into account the ranges of voices in planning proper fingerings. For instance, whereas it is normally recommended to play the two lower voices of three simultaneously entering voices with the left hand, in order to free the right hand for ornamentation, it is sometimes also recommended to play the two higher voices with the right hand – if the soprano and alto are close to each other. Correa gives examples of some particular situations where one of the four voices is involved in playing ornamentation. Such situations arise in cadences, for example. There are occasions as well where the ornamenting voice may be helped out by the thumb or index finger of the other hand if one is "missing a finger," which happens rather frequently, according to Correa.

Correa distinguishes three "orders," different systems of fingering intervals, focusing on intervals from the unison to the tenth. The most ordinary first order is meant to be employed whenever there is no particular reason for using other orders of fingering. The second order is especially for four specific situations, such as when one must execute a *quiebro* or a *redoble*. According to the author of the *Facultad*, the third order of fingering intervals is "less used but also possible." It is directed to advanced players on occasions where the difficulty of the music poses special requirements. Correa remarks that, in regard to the third order, it is enough to give one general rule and leave the further applications of the advanced fingering to his readers. His basic rule is that on special occasions, and particularly in *glosa*, one can play all or at least most intervals with the same two fingers, which are the first and second. He gives eleven notated examples to demonstrate the use of the third order, showing with tiny hands to which interval this order is applied in each of the examples. In his demonstrations, the third order is employed in the intervals from a

second to a sixth. Correa emphasizes at the end of the *capítulo* which deals with interval fingerings that all the explained hand "postures" plus others are learned by continuous and long study, by which it is possible to conquer any difficulties.

Except for Correa's third order of fingering – which appears to be unique and exclusive to him – other sources of early Spanish fingerings share the same principles to a notable extent. Nevertheless, some differences also exist, of which most are found in comparing Correa's and Nassarre's advice on fingering intervals. This is understandable, thinking of the time stretch between the publication of the works of the said authors. As far as the interval of a fourth – whose fingerings differ most in Correa and Nassarre – is concerned, both writers share one fingering but give additional, individual suggestions.

Correa completes his instructions on fingering intervals by writing about the fingering of "closed and open consonances" (or "full and empty" consonances). In practice, the open (empty) consonances mean intervals consisting of two voices, without a third voice between them, while the closed (full) consonances are chords, intervals which have been "filled " with a third intermediary voice. Correa's advice on fingering closed and open consonances concentrates on the intervals from a fifth to an octave, the fingerings for the ninth and tenth being mentioned in passing and being reducible to the fingering for the octave. In addition to his written explanations, Correa gives three notated examples of different ways to "close" a seventh. In the right-hand fingerings for chords, one can once again see the principle of the principal fingers being practiced, the fingers having been chosen regarding the effortless execution of *quiebros*. In the case of some individual fingerings, Correa occasionally points out a particular fingering having been meant to be used especially in the playing of *glosas* or in "some demanding left-hand *glosas*." He also makes comments now and then about whether some particular fingering is "little used" or is used "among masters."

Correa finishes his extensive instructions on fingerings with a *capítulo* concentrating on scale fingerings. To begin with, he makes it clear that the directions which follow are for those players who are already beginning to be *Maestros*. The author of the *Facultad* stresses that it is the "impossibility of all impossibilities" that somebody could play *glosas* involving accidentals well if the art of replacing (or changing, shifting) fingers is not used in such passages. I see Correa's words on the ability to replace (or change, shift) fingers as simply referring to the skill of working out such fingerings, which enable one to play scales involving accidentals fluently and rapidly enough. In particular, in the case of scale passages containing accidentals, it is important to repeat certain groups of fingers – instead of solely alternating with a pair of fingers – to reach the desired result.

Correa presents three different systems of scale fingerings, namely, the fingering of ordinary scales (*las carreras ordinarias*), the fingering of extraordinary scales (*las carreras extraordinarias*), and the fingering of mixed scales (*las carreras mixtas*). Correa's ordinary scales consist of only white keys and the extraordinary scales of both white and black keys, mixed scales taking advantage of "mixed" fingering patterns.

Correa's fingerings for ordinary scales are composed of paired fingerings for each hand, several other Spanish sources describing similar scale fingerings. The extraordinary scales

are to be played either with repeated groups of three or four fingers. In each alternative, one uses the groups of the same (three of four) chosen fingers both in ascending and descending – naturally in a reversed order. Correa advises one to begin to practice playing the extraordinary scales first with groups of three fingers in order to get used to "the way of changing the fingers." Similarly, practicing first on white keys only is recommendable, although, in the end, the extraordinary fingerings are particularly designed for the playing of *glosas* which involve accidentals. Correa's advice on the way to practice the demanding scales containing accidentals and plenty of ornamentation reflects the pedagogical nature of his writings. He gives one notated example of the usage of groups of three fingers and of four fingers for each hand and explains his giving examples of four-finger patterns to demonstrate with how much more velocity, clarity, and equality the following *glosas* can be played with such patterns in comparison with other fingerings. Correa also makes the remark that in certain cases one can play a scale with the second, third, fourth, and fifth fingers of either hand – for instance, when the fifth finger falls on the last note of a *glosa*.

In addition to those of Correa, there are descriptions of three- and/or four-finger patterns in scale fingerings in at least four other early Spanish sources. Bermudo gives only four-finger patterns for ascending and descending scales of both hands while both three- and four-finger patterns are included in Fr. Tomás's numerous examples of scale fingerings. Venegas gives a combination of four-finger and three-finger patterns for the ascending left-hand scale and for the descending right-hand scale while H. de Cabezón presents a four-finger pattern for the left-hand ascending scale.

Correa's third and last category of scale fingerings for mixed scales combines two different groups of fingers, in basically two different patterns: the combination of the groups of two and three fingers and the combination of the groups of three and four fingers. In the first alternative, one usually finishes the scale with a pair of fingers, while in the second alternative, the playing of the scale is completed with a group of three fingers – if convenient. Correa gives a notated example of both cases, the first one of which consists of "white keys" only, the second one involving several accidentals. As already mentioned, in addition to Correa, Venegas gives a combination of three- and four-finger patterns for the ascending left-hand scale and for the descending right-hand scale.

Correa's advice on fingering is part of the notably uniform Spanish tradition of keyboard playing, demonstrated in the works of Bermudo, Venegas, *Fr.* Tomás, Cabezón, Correa, and Nassarre. However, Correa's fingering instructions contain some new elements, as well – such as the advice on fingering chords and his taking up special occasions in which it is recommendable to use the fifth finger. In addition, Correa was the first to establish a difference between "ordinary scales" and "extraordinary scales," to which a particular kind of fingering is applied. Aside from *Fr.* Tomás, Correa is the only Spanish writer to demonstrate keyboard fingerings with musical examples.

Correa's emphasis on the importance of carefully planned, proper fingerings shows his great concern for voice leading – in the advice on dividing the voices of a composition between the right and left hand and on playing various triadic groupings. Similarly, leaving

free – whenever possible – the hand and/or fingers which play *glosas* is stressed. Although Correa's writings on fingerings are in accordance with the other Spanish sources in the relatively free use of the thumb, especially in rapid *glosas*, he asks one to avoid playing a black key with this finger. Great flexibility in fingerings is another trait common to early Spanish sources of keyboard technique. The *Facultad orgánica* is not an exception, Correa giving alternative fingerings in many places, mentioning quite often which fingerings are the most commonly used. He also makes it clear which ones of his fingerings are particularly directed to advanced players and gives practical suggestions on the practice of different scales. Lastly, Correa emphasizes that there are many other fingerings which are not presented in his book, advanced players being able to complete what is missing from his treatise. In the context of interval fingerings, Correa remarks that with long and continuous study one can learn all the explained (and also other) positions of the fingers.

3.3 Tempo and Time Signatures

3.3.1 Correa's Time Signatures and *Compases* Implied by Them

The different elements of the issues of tempo and tempo notation of Correa's time and the following several decades present a real challenge to research, perhaps the most considerable reason for this being the decadent proportional system of the 17th century, which has been termed by some scholars one of the least well understood and studied subjects of the Early Baroque era. The deterioration of the proportional theory – involving the system of mensural signatures – during the 16th century gave birth to a great state of flux, which was manifested in various kinds of attempts to cope with the changing situation and to reform the notation of tempo. In Francisco Correa's *Facultad orgánica*, once can see an interesting attempt at reconciliating the old proportional meanings of time signatures with their new tempo connotations. Although the variability of *tactus* had been established by Correa's time, his indicating different tempi by particular time signatures was a new and still exceptional practice.

There are remarkably many places both in the textual part and in the prefaces of the *Facultad* which deal with different issues of tempo, time signatures, and proportions, the longest explanations being found in three particular *puntos* of the *ADVERTENCIAS*. In the introduction to his *ADVERTENCIAS*, in the context of mentioning four time signatures (\mathbf{C} , $\mathbf{\Phi}$, and \mathbf{O}), Correa makes it clear how closely his tempo signs are associated with denoting different tempi by remarking that his works are notated with the stated four time signatures in order "to distinguish the different speeds [tempi]" necessary in the beating/conveying of the *compás* [*tactus*]. (In the former proportional theory, the proportional signatures were not used as tempo marks but all tempo changes were carried out in relation to the ideally unchangeable pace of the *tactus*, the fundamental basic pulse, or interior movement in the music. It is also useful to note that the same word, *compás*, is used to describe both tactus and a written measure [a bar] in the Spanish sources of keyboard music.)

Besides giving their signs and names, Correa describes his different time signatures by listing the number of notes per measure in each of them, which was the common practice of other Spanish theorists, too. For instance, in the prefaces to works in the *tiempo imperfecto* (**C**), he usually mentions such works as having "sixteen notes to the *compás*," which describes the predominant surface movement of the piece being in sixteenth notes, or that sixteenths are the smallest note values used under the particular time signature. In addition to pointing out the note values used, Correa makes numerous remarks on the appropriate performance tempo, discerns several factors which figure in the choice of tempo, and gives advice on how to keep the *compás*.

It is noteworthy that in his writings about tempo and time signatures, Correa pays a great deal of attention to the difference of the time signatures of the tiempo imperfecto/ compasillo/compás menor (C) and the tiempo (imperfecto) partido/compás mayor (C), criticizing the indifferent use of them by many other composers. He refers to the use of c and by Manuel Rodriguez Coelho, with which he expresses his contentment because Coelho uses the time signature of C strictly for works of sixteen sixteenth notes to the measure, without mixing it with any other time signature. So does Correa, reserving C for works "of sixteen notes to the measure" while he employs **c** for compositions of eight notes per measure. Thus, according to Correa, one can understand that a distinction has to be made in conveying the *compás* in **C** and **C** and that the significance of *tiempo partido* (**c**) is to make of two measures one measure, which is better done in works of eight notes to the *compás*. In other words, Correa's explanation means that in theory, two measures in **c** would equal temporally one measure in **c**. However, the study and playing of Correa's works reveal that it seems recommendable to play his works in @ somewhat slower than at the "double speed," compared with the works in C. Correa's discussion of the differences and the relation of **C** and **C** is an important one because the inconsistent use of those signatures - to which he himself disappointedly refers - was exactly one phenomenon brought about by the decay of the proportional system, to which Correa actively sought – and found – his personal solution.

Also essential among the explanations of Correa's tempo system is his description of the *tiempo perfecto de por medio* (ϕ), which is a kind of "medium time signature," indicating a *compás* in between the slow *compás* of \mathbf{C} and the fast *compás* of \mathbf{C} , which has to exist, in his opinion. *Tiempo de por medio*, invented by Correa, is recommended, for instance, for such works which have eight notes to the *compás* but due to their difficulty demand a little slower *compás* than the "works of eight" usually would. It is significant that Correa created his special time signature, the *tiempo de por medio*, and consequently, the intermediary *compás* that it indicates, having in mind the characteristics and technical level of the musical texture. The sign of the *tiempo de por medio* appears in Correa's works either as such or combined with a number. It is remarkable that the sign of the *tiempo de por medio* seems to be employed by him as a sign indicating that a tempo change between two sections is a non-proportional one and that one should take the *compás* rather "more or less slowly, according to the number of notes" per measure.

The description of the *compás ternario/proporción mayor* (ϕ 3/2), meant for works having twenty-four notes to the measure, links, as well, the time signature and the performance tempo conveyed by it. The tactus in the works written in the *compás ternario* is to be taken "very well slow," which is due to these works involving a lot of *glosas* in eighth notes. To indicate his slowest *compás*, Correa uses the sign of the *tiempo perfecto* (O). The "slowness" of it seems to refer to a unit of three successive measures rather than to one binary [sic] measure, consisting of one whole note. Correa uses the *tiempo perfecto* for his four works of thirty-two notes to the measure, that is, having *glosas* in thirty-second notes.

In regard to the relative performance tempo of the different *compases* of Correa, the prefaces of the *Facultad orgánica*, in particular, make several mentions which concern tempo. According to Correa, in the works notated with the sign of the *tiempo (imperfecto) partido/compás mayor (\mathbf{c})*, in eight notes to the measure, one should play in light *compás (compás ligero)*, somewhat fast (*algo veloz*), or hurriedly (*apresurado*). However, the fast speed of the *tiempo partido* is subject to some variation since Correa advises one to play the *compás* lightly, "more or less, according to the capacity of the player and the facility or difficulty that the work demands." According to him, this rule must be observed throughout his book. In light of Correa's writings, a further element which can have an impact on the choice of one's performance tempo is the available instrument, his mentioning in one preface to a work in \mathbf{c} the said *tiento* being meant for players who do not have much agility of hands and for organs which are very heavy to play – probably recommending that one play in a bit slower *compás ligero* than in the works of eight notes in general.

Whereas the sign of the *tiempo (imperfecto) partido* (**c**) indicated a fast and light *compás*, the *compás* of the *tiempo imperfecto/compasillo/compás menor/compasete* (**c**) is relatively slow. The *tiempo imperfecto* is the most commonly used time signature in the *Facultad orgánica*, and it is meant especially for compositions having sixteen notes to the measure. Theoretically, one measure of it corresponds temporally to two measures in **c**. Correa asks one to convey the *compás* in the *tiempo imperfecto* slowly (*a espacio*) and equally, adding sometimes that one must play "slowly, but not [too] much." Occasionally, he characterizes the *compás* indicated by **c** with the words *compás moroso*, the meaning of which is a slow *compás*, as well.

A still slower tempo is indicated by the *tiempo ternario/proporción mayor* (ϕ 3/2), which is Correa's time signature for works of twenty-four notes to the measure – as has earlier been discussed. He asks one to take this *compás* "very well slow" (*bien aespacio*). In the same context, Correa advises keeping the *compás* steady with one's foot, placing the whole foot on the downbeat, lifting the tip of the foot or the heel on the second beat, and, lastly, lifting the whole foot again on the downbeat.

In the case of the time signature of the *tiempo perfecto* (O), which implies Correa's slowest *compás*, the author of the *Facultad* explains that he uses this time signature for his works involving thirty-two (thirty-second) notes to the measure, in order to make understood the slowness (*morosidad*) of the *compás*, in respect to the great abundance of

diminution. However, Correa immediately hastens to add the significant remark that the said slowness depends on the greater or lesser fastness that each player naturally has in his hands – taking into account, once more, the varying level of abilities of performers. In the preface to his last work involving thirty-second notes, Correa gives a warning example of some sackbut players who were sent to perdition by their attempts to imitate the skilled glosas of the famous sackbut player Gregorio de Lozoya, who once worked "in this Holy church of Seville." With this example, Correa obviously wants to reinforce his frequent warnings about not playing a repertoire which exceeds one's skills, writing that he would not want the same thing that had happened to the foolhardy imitators of the sackbut virtuoso to happen to his organists (probably meaning his students). Indeed, if one heeds Correa's important advice on performance practice, according to which one ought to keep the same compás both in the plain sections, consisting of long note values, and in the passages of glosas in thirty-second notes, these pieces of his are readily noted to be only for those with a solid, and even virtuoso, technique. Whereas he earlier gave the available instrument as one factor which can have an impact on one's choice of tempo, in respect to his works of thirty-two notes per measure, Correa also advises choosing the instrument in regard to the requirements posed by the particular type of composition, recommending that such pieces be played on small organs (realejos) rather than on big organs whose basses cannot respond rapidly enough and whose key action is very heavy and deep.

On the whole, in the Facultad orgánica, one can see an interesting and personal solution for partly reconciling the old proportional meanings of time signatures with new ways of expressing tempo in notation. While many of Correa's pieces which have several sections notated with different time signatures can be played proportionally without a problem, the remarks by the composer and his cleverly designed tempo notation suggest from time to time a certain freedom in the handling of tempo. One means of indicating such freedom in notation is Correa's tiempo de por medio (ϕ) , a compás "in between," and his advice at times to determine the tempo according to the capacity of the performer and the difficulty of the work to be played. In addition, in a preface to his tiento "a modo" de canción" (in the style of canzona), Correa advises playing the proporción menor (C 3) with the special playing style of ayrezillo, "more or less slowly, according to the number of notes." However, the freedom in dealing with tempo suggested by Correa is always wellfounded and deliberate. Many pieces of the Facultad orgánica prove that the theoretical correctness and exactitude were important to its author – as one can see, for instance, in his discussion on the difference and use of the tiempo imperfecto (C) and tiempo (imperfecto) partido (c). In practice, in the playing of Correa's works, the proportional approach to successive sections under different time signatures is often relevant, but at the same time, the performer should be alert and sensitive enough to notice when a special freedom and a nonproportional choice of tempo is insinuated. In the challenging performance considerations of Correa's multisectional tientos, such as the Segundo tiendo de quarto tono, a modo de canción, and the Tiento tercero de sexto tono, sobre la primera parte de la Batalla de Morales, I refer the reader to the creditable account by Guy Bovet in his articles "Les

problèmes de proportions dans le Tiento XVI de Correa de Arauxo: Segundo tiento de cuarto tono (a modo de canción)" and "Essai d'un résumé des principales règles d'interprétation de la musique d'orgue espagnole et de leur utilisation sur un orgue moderne," both published in *La Tribune de L'Orgue* (1979, No 3 and 1979, No 4, respectively), and the textual part and commentaries on Correa's prefaces in his complete *Urtext* edition of the *Facultad orgánica*, recently published by Ut Orpheus Edizioni (2007, Bologna).

3.4 Proportions

In accordance with the common definition of a proportion by the theoreticians of his time, Correa terms a proportion as a relation of one number to another. Correa mentions the proportions of five, nine, eleven, and eighteen notes to the measure in the introduction to his *ADVERTENCIAS*, as well as "a difference of *ayres* [manners of playing]" within the same proportion, in the sesquialtera proportion. In addition, a reference is made to "other proportions" involved in the book of *versos*, Correa's work which he claims to have written but which has not been found. In practice, the proportion of eleven notes is not used in the *Facultad*. On the contrary, there are some instances of the proportion of seven notes, the septuple proportion (not mentioned by Correa at the beginning of his book), as well as appearances of the quintuple and nonuple proportions. Besides the said proportions, another issue of proportions which has been discussed rather extensively in the *Facultad orgánica* concerns the two different styles of playing in the sesquialtera proportion and the way of indicating these in notation.

The sesquialtera proportion is basically a proportion of three to two. If a fractional number 3/2 is involved in the time signature in the sesquialtera proportion, in theory the first number shows that in the following section of a work three notes replace two notes of the previous section, which is denoted by the lower number. Another way to describe the sesquialtera proportion is as a rhythmic figure consisting of three, or multiples of three, notes per rhythmic unit. Correa, too, writes the sesquialtera as having six, nine, twelve, or eighteen notes to the measure.

Particularly noteworthy is Correa's advice on the two ways of performing the same number of notes in the sesquialtera proportion. In the first and "easier" manner, the notes are played equally and without ayrezillo, and this way of playing is "like the one of the $proporción\ mayor\ (\phi\ 3/2)$." The first manner is indicated in notation with a '2' above the staffs of cifra. The second way of playing the sesquialtera proportion is the one more often used by organists, despite its being difficult. In this manner of playing, one has to play the notes unequally and with $ayrezillo\$ and grace characteristic of the $proporción\ menor\ (C\ 3)$. According to Correa's description, this is accomplished by "lingering" more on the first and less on the second and third notes, and similarly, by lingering more on the fourth and less on the fifth and sixth notes – in a way almost making the first note a half note and the second and third notes quarter notes (or, in half values, a quarter note and two eighth notes).

In notation, a '3' above the staffs of *cifra* indicates the second manner of performing the sesquialtera proportion. (The important playing style of *ayrezillo* is discussed in detail in *Chapter VI*, 4.2 in this dissertation.)

Besides giving a list of the kinds of proportions and describing the two different styles of performing the sesquialtera proportion, Correa explains carefully (and every so often, complicatedly) how one conveys the *tactus* in different proportions by using the terms *dar* (to give), *estar* (to be/to rest), and *alçar* (to raise) to depict the hand movements of the *tactus* beater. "Giving" is the downward stroke showing the downbeat, "resting" describing the hand to be still, and "raising" signifying the raising of the hand of the *compás* beater to mark the upbeat. Correa advises one to play in equal and binary manner those measures which can be divided into two equal halves while measures divisible into three equal parts ought to be played in an unequal and ternary way, having the downbeat on the first part and the upbeat on the third part of the measure. For such proportions (e.g., proportions of five, seven, eleven, thirteen, fifteen, and seventeen notes to the measure), which are divisible into neither two nor three equal parts, Correa provides a procedure to find a proper way of conveying the *compás* through unnecessarily complex calculations whose sole purpose is, nevertheless, to help one find the right place for the downbeat and the upbeat in various rather unusual proportions.

Although the theoretical considerations of Correa are substantial, it is by far the most interesting to see how he uses the different proportions in his music, his making occasional remarks in the prefaces in regard to the performance of proportions. It is probable that Correa had wanted to make some use of the rarer proportions as well because he had – according to this own words – seen the proportion of five notes and "others in this manner" practiced in *discursos* notated in *cifra* by the most eminent Spanish masters of the organ. Among Correa's important advice on performing proportions is the remark that the notes of the septuple proportion must be played with equality of tempo, without lingering more on one note than another.

Correa employs the quintuple proportion in three of his works and the septuple proportion likewise in three works, the nonuple proportion having been used in two works. Six of his compositions use at least one of the said proportions, and in the amazingly varied, lively, and complex *Tiento de medio registro de tiple de segundo tono* of thirty-two notes to the measure, there is one instance of the quintuple proportion, three of the septuple proportion, and one of the nonuple proportion. Although Correa's use of the rarer proportions is rather limited in number, I agree completely with the musicologist Louis Jambou that Correa, nevertheless, creates the maximum effect by even the restricted use of these proportions. The importance of the rare proportions which Correa employs is also reflected in the conscientious indications of the different proportions in notation, often both by proportional signs (such as 5/3, 7/2, or 9/3) and by the name of the proportion having been printed in the margin, or above or below the staff of *cifra* where the proportion begins. Some of these names are accompanied by a reference to a way of performing the particular proportion, the words "ayre igual," referring to the equal playing style of notes being added

many times to the printed names of both the quintuple and septuple proportions. Moreover, one indication of the nonuple proportion involves both the name of the proportion and the words "ayre de sexquial.[tera]," implying most probably the "second manner" of playing the sesquialtera proportion, the ayrezillo.

An important element in playing the different proportions in Correa's pieces that confronts every performer of this music is the relation of the voices moving in the rare proportions to the accompanying voices. If Correa's advice on the proper places of the downbeat and the upbeat is followed, the larger part of the measure in the quintuple, septuple and nonuple proportions belongs to the downbeat and the smaller part to the upbeat. However, there are several exceptions to this rule in his actual notation of the sections with rare proportions. One is easily tempted to raise the question of whether one should change the placement of the accompanying voices, at least in some instances, in order to conform with Correa's written explanations of the proportions. As regards his obviously thorough and conscientious way of notating his music in general, and the frequently displayed discrepancy between the theory and practice in the *Facultad orgánica*, I would not change the alignment of voices in sections of the proportions in question, as a rule. On the contrary, the indications by Correa which clearly refer to a certain style of playing in the sections in different proportions should be observed – if one is aiming to be loyal to the wishes of the composer.

3.5 3+3+2 Rhythm and Ayrezillo

In Correa's works, there is surprisingly little of the three plus three plus two rhythm, which was a typical feature of the Iberian keyboard music of the seventeenth century – the first example of the use of this rhythm in the Spanish keyboard music probably being found in A. de Cabezón's *Diferencias sobre el canto llano del caballero*. By the fifteenth century, this rhythm had spread throughout Europe but during the seventeenth century, it was found mainly in the Iberian keyboard music.

The origin of the 3+3+2 rhythm leads beyond the Iberian Peninsula – to Greece, for instance. The 3+3+2 rhythm was employed in both church music and secular music and can possibly be regarded as one specific case of the *aksak* rhythm which can be found in the music of numerous countries, despite its having often been called "Bulgarian." The characteristic feature of the *aksak* rhythm, compared with the classical western rhythm, is its irregularity, created by the combination of two units of duration (short and long) in place of one unit, enabling the composition of twelve simple binary or ternary measures whose grouping into either two or three produces various kinds of duple or triple combined measures. The 3+3+2 rhythm can be seen as one case of the combined ternary measures. The rhythm is found in Spanish folk music, as well, and today it is familiar to us in the form of the Latin American "bossa nova," for example. In the Iberian keyboard music of the seventeenth century, the 3+3+2 rhythm is typically notated as two successive groups

of a quarter note plus an eighth note, followed by a quarter note, although the rhythm can appear in longer note values, too.

As to Correa's colleagues, Aguilera de Heredia, Bruna, and A. de Cabezón made use of the 3+3+2 rhythm. In Correa's works, a section written in this rhythm in the *Segundo tiento de quarto tono, a modo de canción* is often regarded as the only instance of such a rhythm in his *tientos*. However, if the similar rhythms in longer note values are taken into account, there are several more works by him which employ the 3+3+2 rhythm. Although the opinions of different performers may vary as regards the number of appearances of the said rhythm in Correa's *tientos*, I consider it important to bring out the dance-like nature of this rhythm – wherein lies its real essence – by refined articulation and accentuation.

As has already been mentioned earlier, another special feature of Correa's works which is associated with rhythmic elements is the special playing style of *ayrezillo*, held to be important and strongly advocated by him. The author of the *Facultad* takes up the way of playing in *ayrezillo* in several places of his book – both in the textual part of it and in the prefaces to compositions, making the first reference to *ayrezillo* in the introduction to the *ADVERTENCIAS*. *Ayrezillo* is, generally speaking, one of the two different *ayres*, manners of playing, the sesquialtera proportion of six, nine, twelve or eighteen notes per measure. Correa shows the two styles of playing by placing either a '2' or a '3' above the notes, the number three indicating *ayrezillo*.

According to Correa, the first manner of playing the notes of the sesquialtera proportion, indicated by a '2' above the notes, is to play the notes equally, without keeping oneself longer on one than on the other. He depicts this way as being like that of the *proporción mayor* [$\mbox{$\phi$}$ 3/2, $\mbox{$\phi$}$ 3/2], in which there are three equal whole notes, six half notes, and twelve quarter notes per *compás*, plain and without *ayrezillo*.

On the contrary, in the second manner, shown by a '3' above the notes, the notes are played somewhat unequally and "with that ayrezillo and grace of the proporción menor [C 3, C 3/2]." Correa explains that the second way is the one most used by organists, although it is difficult. In the playing of ayrezillo, one lingers more on the first note and less on the second and third, and, similarly, more on the fourth and less on the fifth and sixth notes. Correa writes that this is almost like making the first note a half note and the second and third notes quarter notes, the same pattern being applied to the second half of the measure, as well as to all the succeeding measures of the section in ayrezillo. In his explanations concerning the stated two manners of playing, Correa terms the first, equal manner of playing as ayre igual, and the second, unequal playing style as ayre desigual (i.e., ayrezillo). In the same context, he remarks that the said "disparity" (of the two alternative styles of playing) can occur in any uncut or cut time signature. Correa refers to the use of a '3' as an indication of ayrezillo by Cabezón, Pradillo, and many others. However, the term ayrezillo seems to be exclusively his.

Correa's several descriptions of the special playing style of *ayrezillo* in the *Facultad orgánica*, as well as the frequent indications of it in the notation, lead one to understand that he considered this manner of interpretation substantial. It seems obvious that the "unequal"

manner of playing the sesquialtera proportion was not unique to Correa's works. Rather, the "ayrezillo of proporción menor" appears to allude to a tradition of Iberian organists.

The Spanish scholar Andréas Cea Galán gives an illuminating account of different elements that are associated with Correa's *ayrezillo*. Among these are, first of all, the earlier-mentioned close relation between the concepts of *ayrezillo*, *proporción sesquialtera*, and *proporción menor*, as opposed to the *proporción mayor*. Second, Correa shows in notation where the playing style of *ayrezillo* is wanted. Third, *ayrezillo* can be employed in different contexts, measures and notation. Fourth, the unequal interpretation of the sesquialtera proportion was known before Correa. Lastly, *ayrezillo* implies such modification of the values of notes which is challenging to the interpretation.

Despite Correa's numerous explanations of ayrezillo, it is still hard to know exactly how one should (or could) interpret ayrezillo. His own advice on playing in ayrezillo offers grounds for two different approaches, namely, ayrezillo being regarded as a rhythmic alteration or as an issue of articulation and accentuation. Those (e.g., Cea Galán) who consider ayrezillo to be mostly a rhythmic alteration of notes have pondered the relation of the rhythm of an eighth note plus two sixteenth notes and Correa's ternary notation – in other words, whether the places in Correa's works calling for avrezillo should be transformed into groups of an eighth note and two sixteenth notes or possibly to a dotted eighth note followed by a sixteenth and another eighth note, or even to two sixteenths plus an eighth note. However, thinking of the several places in the Facultad orgánica where Correa himself notates groups of an eighth note and two sixteenths, I consider it very unlikely that the groups of eighth notes with the number three above them were meant to be changed into the rhythm which usually receives an exact notation by the composer himself elsewhere in his pieces. Another hypothesis taken up by Cea Galán is the possibility that the number three, which is Correa's indication for ayrezillo, would suggest transforming the groups of three eighth notes into the rhythm of 3+3+2. Nevertheless, because Correa has notated the 3+3+2 rhythm himself, at least in the tiento "a modo de canción," it is very probable that his sign '3' implies something other than the 3+3+2 rhythm.

The other main possible interpretation of *ayrezillo* is to regard it as a matter of articulation and accentuation. Guy Bovet, for instance, draws a parallel between *ayrezillo* and a style used in dances in which the first of the three beats is given more weight than the second and third beats. In this respect, I hold the term *ayrezillo*, which could be translated as "a little manner" or "a gracious manner," a very telling one, pointing to a dance-like style of playing. A further fact supporting the hypothesis of articulation and accentuation figuring importantly in the playing of *ayrezillo* is Correa's own choice of words in his most detailed description of this particular playing style, the composer writing that lingering more on the first note and less on the second and third notes is *almost* like making the first note a half note and the second and third quarter notes (or a quarter note plus two eighth notes, in halved values). The word "almost" is likely to refer to a relatively heavy accent on the first note, the second and third notes being accentuated more lightly. Another scholar, Jon Holland, who has done research on the *Facultad orgánica*, has compared *ayrezillo* with the

modern concept of "structured legato" where, in the case of playing groups of three notes, the first would be played to about its full duration, the other two notes being held to about half of their written value. I see Correa's *ayrezillo* to be a style of playing coming close to the beginnings of Baroque accentuation.

In regard to the suggestions of Correa possibly implying the transformation of the groups of eighth notes in sections of *ayrezillo* into clearly some other kind of rhythm, such a practice is unlikely, in light of his usually very detailed and consistent notation. In another kind of case where Correa has – based on his own words – indeed wanted to simplify the notation, namely, of the rhythm of a dotted eighth note followed by a sixteenth note into a dotted eighth note only, he has carefully pointed this out to his readers. Moreover, Correa does not advise modifying any other proportions to conform with duple rhythm, which can be regarded as suggesting *ayrezillo* to be a matter of articulation and accentuation rather than a rhythmic alteration of notes. It is self-evident that each performer himself has to evaluate the interpretational possibilities of *ayrezillo*. As a performer myself, I consider it important that one choose whether one views *ayrezillo* primarily as a rhythmic alteration or as a practice connected with issues of articulation and accentuation.

In general, the choices made by the performer do indeed matter because a work of art presents itself through a performance, and in it (Gadamer 2004: 118). As Gadamer beautifully phrases it, ". . . it is in the performance and only in it – as we see most clearly in the case of music – that we encounter the work itself, as the divine is encountered in the religious rite" (ibid.: 115). Moreover, he adds that "A drama really exists only when it is played, and ultimately music must resound" (ibid.).

In pondering the interpretational choices of *ayrezillo*, it can be helpful to observe the different contexts in which Correa's indications of *ayrezillo* are found. Agreeing with Cea Galán, I see that such cases where practically only one voice carries out *ayrezillo* over a quite static harmony might offer wider opportunities for interpretation than instances where all the voices of a composition are affected by the sign of *ayrezillo*.

The issue of how often *ayrezillo* should be played in Correa's works is another question to be answered individually by every performer. During the study of Correa's texts and compositions, I have come to the conclusion that it is well-founded to always play in *ayrezillo* when indicated by Correa in notation, since he repeatedly indicates with a '3' when the "*ayrezillo* of the *proporción menor*" is called for – in playing six or twelve notes to the measure, for instance. For the same reason, I would not play in *ayrezillo* in Correa's *tientos* when not indicated by the composer. Since *ayrezillo* seems to point to a tradition of Iberian organists such as Cabezón and Coelho, I see opportunities to apply *ayrezillo* to some works by other Iberian composers of keyboard music besides Correa.

3.6 Registration

Information about registration given by the composers of Spanish keyboard music is scarce. Besides the limited number of registrational remarks in keyboard tutors and collections of compositions, some information about registration is provided in organ-building contracts, organ specifications, and exemplary registrations suggested by organ builders in their *libros blancos*. Regrettably, the majority of the historical Spanish organs are far from their original state today, but fortunately we are not completely deprived of examples of instruments which allow us to become acquainted with the sound of the old Spanish organs. With skilled and careful restorations, it might be possible to get some more of these valuable instruments into playable condition. Too many precious old organs have been lost by either deterioration with time or overdue and otherwise unsuccessful and/or hasty restorations.

The titles of organ pieces provide general implications of registration rather frequently. Cases in point are, for instance, the *tientos de medio registro*, which are meant to be played on organs with divided registers (*medios registros*), involving a solo voice in the soprano (*tiento de medio registro de tiple*) or in the bass (*tiento de medio registro de baxón*). A *tiento* with a soprano solo voice can also be termed a *tiento de mano derecha* (a *tiento* of the right hand) while the alternative title for a *tiento* with a bass solo voice is a *tiento de (mano) izquierda* (a *tiento* of the left hand). Correa held the technique of the divided registers – appearing in Spanish organs in about the 1560s – in great esteem, and his *Facultad orgánica* involves numerous *tientos* of this compositional type. It is noteworthy that the scarce information about registration given by him is entirely presented in the context of discussing *tientos de medio registro*.

Generally speaking, significant in the art of registration were the contrast-generating families of stops (such as *flautados*, *nazardos*, and reeds) of historical Spanish organs. It is very probable that local varieties in the registrational practices also existed – especially since there were several local organ types in Spain in the sixteenth, seventeenth and eighteenth centuries. Local differences in the technical solutions and structure of the organs could also vary considerably, the different division point of the divided registers (c1/c1-sharp in the Castilian organs and b/c1 in Catalonian organs) being only one example. In addition to the effective contrasts that could be created through the clearly profiled families of stops, there were various devices with which one could produce elements of suprise and interesting sounds, such as stops generating a bird twitter or timpani effect.

I want to stress that the art of registration cannot have been a uniform practice in Spain in Correa's time. Based on my source material, I have received the impression that a performer was given a relatively free hand in creating his registrations, a convention referred to by Correa himself. However, it is always a good starting point to pay attention to the compositional type and the time period of the piece on whose registration one works. Other aspects worth considering are the possible relation of the piece to some local tradition of organ building or even to some individual instrument. In regard to playing on

the historical Spanish organs today, the particular acoustical conditions of different churches, the placement of organs and/or their divisions, the sound volume and character of individual stops, and the possible double facades are factors which have further impact on registrational choices. Besides the above-mentioned issues, I consider it of utmost importance that the performers of Correa's works would not use such stops which were not even in existence in his time when they make registrations at the keyboards of historical Spanish organs (or proper style copies). For instance, the horizontal trumpets were not in Correa's use when he composed the works of the *Facultad orgánica*, the fully developed *trompetería* being a product of the Spanish organ builders designing their mature Baroque organs.

The little information that we have about those organs which Correa played during his professional career in Seville, Jaén, and Segovia gives hardly any clues for registrating Correa's works. Nevertheless, it it useful to know that at least the bigger of the two organs in the church of San Salvador of Seville included some reed stops, "*mixtura de trompetas*," and a *Dulzaína*.

The Spanish musicologist and the present organist of the Seville Cathedral, José Enrique Ayarra Jarne, has estimated that Correa's smaller Sevillian organ had at least five or six stops and the bigger organ a minimum of nine or ten stops. In addition, on the basis of the information contained in the *Facultad orgánica* itself, it is probable that at least one of the organs at Correa's disposal in Seville had a compass of 42 keys (from C to a2), the lowest octave being a short octave. It is also likely that Correa's organ(s) had one or several divided stops. Otherwise he would hardly have included so many pieces of this type in his *Facultad orgánica*.

For any player aiming at a deeper comprehension of the principles of registration of the early Spanish organ music, it is useful to study organ dispositions from different periods of time and from different localities. In this way, one can get at least a general idea of how the registrational facilities in Spain developed with time. I have included in the chapter on registration three organ dispositions to serve the above-mentioned purpose. Although the large-size Spanish Baroque organs often have an outstanding lengüetería – besides numerous other families of stops, a variety of toy stops, some pedal ranks, and possible echo effects, it is as impressive to see what varied possibilities for registration even small-sized organs with divided registers offered. Studying organ-building contracts and specifications of old organs and seeing and playing the extant historical instruments show that effective contrasts, colorfulness, acoustical effects and elements of surprise were essential in the art of registrating early Spanish organ repertoire. The fine acoustical effects were made possible by the special placement of organs, with possible double facades – and, after Correa's time, by horizontal trumpets and echo effects. It is noteworthy that the obvious Iberian fondness for color, exciting acoustical effects, and occasional moments of surprise was not restricted to sonorous phenomena only, as is displayed by the splendidly decorated and colorful cases of many Castilian organs and the arsenal of horizontal reeds, to give some examples.

As regards Correa's own advice on registration, there are seven prefaces in the *Facultad orgánica* which concern this issue. His instructions are valuable, keeping in

mind that registrational references by the Spanish composers of organ pieces – other than those implied by the titles of pieces – were rare in Correa's time.

In three prefaces, Correa recommends using a 4' registration for the left hand instead of an 8' registration. All three remarks concern *tientos de medio registro*, two of them having solo voice(s) in the bass. In the preface to a *tiento* with one solo voice in the bass, Correa observes that he recommends the 4' registration for the left hand in order for the stops to respond better. In two other prefaces touching upon registration, he discusses the issue of the proper number of voices in *tientos de medio registro* with two solo voices. In Correa's opinion, such pieces definitely have to be composed in five voices because otherwise there would be only two voices left when the solo voices have pauses. In addition, in the case of two bass solos, the "corpulence" of the solo voices would easily obscure the accompanying voices if there were only two of them. Correa's recommending the total number of five voices for pieces with two solo voices is related to the fact that the author of the *Facultad* regarded it highly inappropriate that one of the solo voices would be "lent" to the accompaniment when the solo voices have ceased sounding. He makes the cutting remark that, notwithstanding, "some who know little" have attempted to compose pieces with two solos in four voices.

Correa advises one to registrate the two soprano solo voices with the *Lleno* and the lower, accompanying voices with the *Flautado*, while in works with two bass solos he recommends registrating the solo voices with either *Lleno* or *Trompetas*. The composer gives grounds for his registrational advice by emphasizing the "distinct character" of the solo voices and the accompanying voices. One should note that by *Lleno* Correa can, in this context, mean either plenum or some combination of mutations – like the *Corneta*. In his time, "*trompetas*" likely referred to short-resonator reeds, such as regals.

In one of the other two prefaces involving remarks on registration, Correa recommends playing one of his works "of thirty-two notes to the measure," having a solo voice in the bass, on a realejo (a small organ, a chamber organ) rather than on a large organ, the key action of the latter being heavy and deep and the basses of large organs being unable to respond with the necessary rapidity. Correa's last remark on registration is found in the preface to the final work of the Facultad orgánica. According to him, the three glosas on the plainsong of the Immaculate Conception of the Virgin Mary are composed in the form of medio registro de tiple. The accompanying voices can be registrated with a Flautado and the soprano solo voice with a mixture, that is, a combination "which seems best to the organist." The last sentence in the preface to his last work reflects once again the freedom given to a performer, Correa clearly letting it be understood that the registration was to a great extent at the will of the organist – paying attention, however, to the compositional type of the piece to be registrated and to a good balance of sound, the latter being particularly stressed by him. (Correa's underlining, in several places of the Facultad orgánica, the freedom of the performer – that is, the responsibility given to him, as I see it – touches the issue taken up by Gadamer that the performance of dramatic or musical works is – and must be – different on different occasions and at different times [Gadamer 2004: 141].)

3.7 Musica ficta

The art of musica ficta, the chromatic changes of individual notes by means of accidentals—often carried out *ex tempore* by the performer, is not a very relevant part of the performance practice of Correa's time, since by the end of the sixteenth century, the composers themselves were already indicating at least the majority of the needed accidentals. However, some knowledge of the once-important field of performance practice called musica ficta is useful to performers of Correa's works—and inevitable for scholars and/or performers who are studying, editing, or playing Spanish keyboard repertoire prior to Correa. Whereas Bermudo's and *Fray* Tomás's treatises involve theoretical ponderings and rules about musica ficta, Correa's *Facultad* discusses the essence of particular dissonances and proper voice leading, both elements being of importance in the earlier explanations about the rules governing musica ficta as well.

In the Spanish sixteenth-century treatises, a frequent mention is made of the five accidentals (F-sharp, C-sharp, G-sharp, B-flat, and E-flat) which had been adopted by then in keyboard music. The number of the accidentals was restricted by the characteristics of meantone tuning, generally used at that time. Despite some individual attempts to allow the playing of the A-flat – for instance, the special arrangements made for one stop of the organ at the Royal Chapel of Granada, reported by Bermudo in his *Declaración*, the correct use of the said five accidentals and the organist's ability to transpose were emphasized in early Spanish treatises.

Bermudo's *Declaración* (1555) is one of several sources of the time that presents the important principle of the old rule of the "law of maximum proximity" as one basis for his explanations of musica ficta. Bermudo cites the Micrologus (1516) of the theorist Andreas Ornithoparchus – obviously held by Bermudo in great esteem, who quotes a still-earlier source, Franchino Gaffurio's Practica Musicae (1496). In brief, according to the law of the maximum proximity, an imperfect consonance has to be followed by a perfect consonance which is nearest to it. In other words, the stepwise approach to a perfect consonance from an imperfect consonance has to be carried out by one voice moving a half step and the other voice a whole step. Although the law of the maximum proximity was a significant principle, some exceptions to it were allowed. For instance, Bermudo advises one not to take the law of the maximum proximity into consideration if its application would create "fa contra mi" (fa against mi) in perfect consonances. In light of Bermudo's further explanations and a musical example, it seems clear that he wants to forbid the use of the diminished or augmented intervals leading to perfect intervals. To refrain from such harmonic progressions, it is better to break the basic rule, "for avoiding greater evil," in the opinion of Bermudo. However, further in his treatise he describes three legitimate ways to employ a diminished fifth, "fa contra mi en quinta," observing the careful preparation of the interval and making a reference to the Requiem mass by Cristóbal Morales as an exemplary way of preparing the diminished fifth. One other subject pertaining to the practices of musica ficta considered by Bermudo is the cadential major third.

Providing that those intervals are well prepared, Bermudo accepts the melodic use of several chromatic and dissonant intervals to a greater extent than does Fray Tomás, for example. A freer use of dissonant intervals was, among other things, brought about by the new "semichromatic género" discussed in the theory books of the time. The special nomenclature of the "singable semitone" (semitono cantable), meaning a step between two notes having different names, and of the "unsingable semitone" (semitono incantable), signifying a step between two pitches of the same name (such as C and C-sharp), figured importantly in the discussions about 'diatonic' music produced by the usage of singable semitones and 'chromatic' music, employing unsingable semitones. Music combining both singable and unsingable semitones was termed 'mixed.' It is notable that some intervals which were approved in chromatic or semichromatic gender were strictly forbidden in the diatonic gender - and vice versa. In addition to Bermudo's allowing certain chromatic and dissonant intervals, he at the same time warns about the excessive use of accidentals. He writes that he has heard some players who produce such a mess on the keys [by their improper use of accidentals] that it resembles "more a skirmish of cats than musical consonances." The particular remark is directed to players "who learn without a master, without art, and without work." Bermudo emphasizes that he is by no means against the clear-headed players but only the "barbarous ones."

Study of the early Spanish keyboard repertoire reveals that by the time of A. de Cabezón, Venegas and Bermudo, one can find harmonic phenomena such as diminished triads and simultaneous cross-relations, the latter becoming particularly favored by Correa, who called them *punto intenso contra punto remisso*. Correa's works are cases in point for demonstrating the process of the Spanish composers incorporating daring forms and uses of dissonances into their works during the seventeenth century.

The source material which I have studied gives the impression that the obvious enjoyment of dissonant intervals must have been a primary reason for the increasing interest in using them. In many places of Spanish pieces dating from the sixteenth century, one can see instances of strong dissonances – often breaking the conventional theoretical rules – that could have been easily avoided if their composer had so desired. Among the most striking demonstrations of the experiments made on dissonances is Francisco de Montanos's example of the chromatic gender in his *Arte de Música* (1592). Correa, too, made a reference to Montanos's example in his *Facultad orgánica*.

Another element connected with the issues of musica ficta is the fact that the meantone tuning of the keyboard instruments of Correa's time (and earlier) had notable effects on composing and performing keyboard music. The prevailing tuning systems had to be taken into account by composers in shaping their melodic lines, for example. It is useful to remember, as well, that many a dissonance which is "nothing new" to us as such sounds very different and often very striking when performed with an instrument having been tuned in meantone (which favored sharps over flats, as one can see by studying the early keyboard repertoire).

I consider the study of at least the basic rules of musica ficta worthwhile, despite this information being fragmentary. Becoming acquainted with the rules governing musica ficta is particularly important for those who are editing early music, for players wanting to become skilled in "style improvisation" – including making *glosas* on repertoire earlier than Correa's, and for scholars and/or performers who want to be able to evaluate reliably the modern editions of early Spanish keyboard music. In trying to get a grasp of even the most important and general rules about musica ficta, it is worth noting that the old rules do not cover each and every case and that there are a lot of exceptions – approved by the theorists and composers of the sixteenth and seventeenth centuries – to the given rules. Based on the study of the early Spanish sources of keyboard music, it seems clear, though, that a careful preparation of the dissonant intervals was practically unanimously called for, and the sometimes puzzling changes in the form of themes or motifs in imitative music as the result of applying rules of musica ficta were often accepted. Fine examples of intentionally and discreetly varied subjects are found, for instance, in A. de Cabezón's works.

As has already been mentioned, Correa does not include rules of musica ficta in the *Facultad orgánica*. Instead, his book contains extensive discussion of the nature of the fourth and the dissonance of the *punto intenso contra (punto) remisso*. Practically all the needed accidentals have been notated by Correa in his works. However, there are some individual cases where one might question whether there has been an erroneously omitted (or added) accidental. That kind of possible minor mistake could have occurred in the process of editing or printing. Besides the few doubtful places, the many strong dissonances found in the *Facultad* seem to be completely intentional – as is frequently shown by Correa's placement of the tiny hands (*manecillas*, or *apuntamientos*) pointing out special musical phenomena, including particularly strong dissonant clashes.

To demonstrate different kinds of instances and uses of forceful dissonances in Correa's compositions, I have given eleven examples of them in the chapter on musica ficta. These examples include some cases where one might be tempted to add an accidental/accidentals, most of these tentative accidentals being sharps. Other examples involve one case where an individual sharp might have been mistakenly omitted from the original, an interesting occurrence of a strong dissonance, produced by Correa's avoiding the soprano solo voice to cross the division point of the divided registers, and lastly, examples of particularly striking, intentional dissonant clashes, marked by *manecillas*.

In making decisions on the occasional doubtful places in regard to the possible adding or omitting of accidentals in Correa's works, it is recommendable to first have a close look at his original notation and his errata list and to pay attention to whether he has used a *manecilla* to refer to some notable harmonic or other musical phenomenon. In regard to the complete modern editions of the *Facultad orgánica*, Guy Bovet's edition is very loyal to Correa's original notation (including Correa's *manecillas*), while Kastner has used more editorial accidentals. Based on my own study of the *Facultad orgánica*, upon pondering the accidentals in the few questionable places, I deem it often best to stick to Correa's own notation. Regarding choices to make concerning musica ficta, I have found very apt the

remark by Barbara Brewster Hoag (a scholar who has done research on the performance practice of the Iberian keyboard music of the seventeenth century) that in such music, instead of focusing on what kind of accidentals the performer should add, the emphasis lies much more on what accidentals not to remove – under the mistaken impression that they could not have been intended by the composer.

4 The Significance of the *Facultad orgánica* as a Source of Performance Practice and the Applicability of Francisco Correa's Advice

At the beginning of my research project on Francisco Correa's Facultad orgánica, I postulated that his work is of importance as a source of performance practice – meaning that Correa's book contains information about how the keyboard music of his time and his own tientos, in particular, were performed. Upon completing my study on the Facultad orgánica, I have come to evaluate Correa's work as being of considerable significance in reflecting performance conventions of the organ/keyboard music of the early seventeenth century. Correa has his say on several aspects of organ playing, such as the embellishment of music, fingerings and touch, tempo, time signatures, the playing of proportions – to which the special manner of playing, called ayrezillo by Correa, is closely associated, and occasional remarks on registration. Additionally, Correa gives advice on how to read the number tablature of cifra in which all his compositions are notated. As regards musica ficta, he does not furnish the reader with any rules concerning this practice but focuses instead on pointing out – both in written form and in the form of tiny hands printed in his music – particularly strong and/or otherwise notable dissonances, of which the author of the Facultad obviously was fond.

The amount of information about performance practice given by Correa is bound to be "relative," depending on the way in which each performer and/or scholar views the *Facultad orgánica* and on which facts are given the most emphasis. On one hand, considering that it was still very rare in Correa's time to find any written information about different elements of playing, the *Facultad* proves to be an impressive source of performance practice of early Spanish keyboard music involving a large amount of advice on practical issues – in addition to the rather extensive theoretical discussions. On the other hand, upon reading Correa's book one wishes many times that its author had provided more information on different aspects of playing. Despite Correa's several descriptions of *ayrezillo*, for example, it is not possible to be certain exactly how he meant the sections in *ayrezillo* to be performed. His recommendations on registration are also less numerous than one would wish.

Nevertheless, I consider Correa's advice – although incomplete and limited in many respects – of remarkable importance, much of it being useful to the organists/keyboard players of our time, as well. For instance, Correa's explanations and pieces of advice concerning the ornaments, the fingerings, and the relative performance tempi are worthy

of study by any performer of his works. Similarly, Correa's descriptions of *ayrezillo* and his rare remarks on registration offer points of departure to the keyboard players wanting to tackle his compositions.

5 The Applicability of the Chosen Research Methods

The methods of research that I selected at the onset of my study on Correa and his *Facultad orgánica* have proven to be useful in the course of my research process and in my undertaking to extract the advice on performance practice given by Correa and to make conclusions on the basis of this information.

In regard to the theoretical and practical discussions in Correa's book, the study of the history of musical styles and theoretical developments (including evolvement of compositional types) and the history of keyboard instruments have been essential in the historical approach that I have applied. Resorting to making comparisons between Correa and his contemporaries – when called for by each of the practical (or theoretical) elements that I have considered – has been of importance, as well. As far as Correa's compositions are concerned, I have approached them analytically (though not employing any specific method of analysis of the musical texture) and "experimentally." By the latter I mean that I have aimed at a deeper understanding of Correa's texts and compositions and at the opportunity of weighing different interpretational alternatives in light of his advice by the continuous playing and performing of his works – as well as other Iberian keyboard repertoire of his time. This "experimenting" is not a method as such but rather a means of supporting the research process and the outcome of it on the issues of performance practice. Moreover, to my mind, any research project on performance practice inevitably ends up being meaningless if the research results cannot be applied in any way to producing further performances – the lifeline of musical works. Coming back once more to the words of Gadamer that hit the mark, "ultimately music must resound" (Gadamer 2004: 115). Additionally, in the case of music, performance actualizes the true being of the musical work (as a work of art) in the fact that it becomes an experience, which is capable of changing the person who experiences it (ibid.: 103).

In regard to situating Correa and the *Facultad orgánica* in a historical context, I have aimed principally at describing the time of *El Siglo de Oro* on a general level, including the account of the most important cultural developments. In addition, by the "occasional microhistorical touch" – mentioned earlier, in the assessment of my methods of research – I have endeavored to give the reader some points of contact between the general historical environment and maestro Correa's life in it. I have discovered the (limited) taking advantage of the microhistorical approach beneficial in the attempt to link Correa and the *Facultad* with the more general historical context.

Lastly, upon completing my dissertation, I have come to the conclusion that the hermeneutical framework was the "right" and also the most natural choice for my research

project. In regard to philosophical hermeneutics – in respect to its providing grounds for research – Hans-Georg Gadamer's writings have been particularly helpful. In doing research on Correa, I see myself as one individual "listener (in this case, scholar/performer) of the message of the tradition," aiming at applying the results of this listening to the current situation – that is, in search of the practical applications of Correa's advice on performance practice. Following Gadamer's hermeneutical thinking, in my endeavor to understand my object of research, the Facultad orgánica, I am inescapably in a particular situation myself, which has an impact on the whole process of research. Similarly, I am aware of myself as being able to actualize only a part of the possible meanings in relation to the research object which I am trying to understand. Having been in a long, captivating and complex dialogue with Francisco Correa's Facultad orgánica, I hope that the limited number of meanings that I have had the opportunity of actualizing as a result of this dialogue – and as a result of one particular process of interpretation – is, at least to some extent, useful to others engaging themselves in similar undertakings. In my research on Correa, I have neither aimed at any "objective interpretations" nor have I held them possible. According to the ideas of the hermeneutical tradition, all contingent knowledge is relative in regard to the interpreter, and the finding of actualizable meanings always calls for a process of interpretation. In this process, it is important to find the "right questions to ask," to which contributes the historically effected consciousness (wirkungsgeschichtliches Bewußtsein), an element in the act of understanding itself (Gadamer 2004: 301).

6 The Future Challenges of Research on Francisco Correa de Arauxo and His *Facultad orgánica*

Upon completing the present study, I see several needs and challenges for research on Correa and the *Facultad orgánica*. First of all, I hope that more information will be found on Correa's academic studies, about the organs that he had at his disposal during his professional career, and about the details of the printing of the *Facultad orgánica*. Tracking down possible information on these issues would require more archival study – in Alcalá de Henares, for instance. Another matter of interest would be any details about Correa's sojourns in Madrid and about the Royal Chaplaincy of the Royal Convent of Incarnation that Correa acquired there in 1630.

Second, as regards the issues of performance practice, the most urgent need for further research lies in the questions of tempo, time signatures, proportions, and the development and changes in the tempo notation in and around Correa's time – both in his works and in the works of his contemporaries. I have also discovered that the tentative interrelations of the Spanish and English keyboard schools would call for further research – in the form of a comparative study of the fingering systems of these countries in the sixteenth and seventeenth centuries, for instance. Additionally, Correa's famous, special playing style of

ayrezillo would deserve further analysis, both in his works and as a tradition of the Iberian keyboard school as a whole.

Third, a comparative study of the surviving twelve exemplars of the *Facultad orgánica* would be an important objective of further Correa study. Some exemplars have markings made by hand on them (e.g., the Madrid exemplar R.14069, the Spanish exemplar of Bueu, and the Portuguese exemplar housed at the Biblioteca da Ajuda). Furthermore, at least the Madrid R.14069 and the exemplar of Ajuda contain musical additions – in *cifra* – made by hand. Although it seems that all the extant exemplars of the *Facultad orgánica* are from the same printing of 1626 in Alcalá de Henares, this cannot be ascertained before a thorough comparative study of the different exemplars has, hopefully, been carried out.

Fourth, complete translations of the texts involved in the *Facultad orgánica* are still needed in several languages. This need has already been greatly met by Guy Bovet in his recently published edition of the *Facultad orgánica*, through his translations of the main portion of Correa's textual part into English, French, German, and Japanese plus the translation of Correa's prefaces into English. In addition, already prior to the new Correa edition, Bovet had published a complete French translation of the *Facultad* in the magazine *La Tribune de l'Orgue* in 1985–1992, and the American musicologist Jon Holland has included a complete English translation of the texts of the *Facultad* in his dissertation of 1985. Still another translation into English of Correa's textual part and the prefaces of his first twelve *tientos* is found in David D. Schrader's 1987 American dissertation, which lacks only the first few prelims of Correa's book.

Lastly, I want to encourage all those who will do research on Correa and his *Facultad orgánica*, or some other aspects of early Spanish keyboard music of the sixteenth and seventeenth centuries, to keep their eyes open in the search for documents perhaps yet to be discovered. In the *Facultad orgánica*, Correa mentions two books that he claims to have written, namely, the "promised *libro de versos*" and a treatise on the dissonance *punto intenso contra (punto) remisso*. With the passing of time, we might know if one or both of these volumes exist.

APPENDIX A

Correa's Errata

Following a short introductory text, Correa gives a list of printing errors and corrections to them, under the title *ERRATAS* [sic], which I present in this appendix in its entirety. I use square brackets for an analysis and commentary of Correa's corrections.

- **Folio § 2**, Table of the *tientos*, line 10: where it reads "*el segundo grado*" (the second grade, or degree), it should read "*el sexto grado*" (the sixth grade).
- **Folio 9** of the *Advertencias*, line 1: where it reads "*la misma*" (the same), it should read "*la música*" (the music).
- **Folio 9**, *cifra* part, staff 4, measure 2 (KFO I : 17, m. 105)¹: the tenor should have a "simple 1"² after the upbeat below the 3, and a 1 with a *puntillo* [a dot] in the soprano and alto.³ [That is, the tenor should have a quarter note f on the fourth beat, and the soprano should have a quarter note f1. The tenor has already been corrected in the Brussels exemplar, on which the facsimile edition of Minkoff is based. The soprano is not corrected in the original. In Kastner's edition, neither of the corrections has been made. As Bovet has pointed out (1985: No.1: 7; *TI*: 3), the a1 of the original and Kastner's edition is more satisfactory.]
- **Folio 15**, *cifra* part, s. 8, m. 2 (KFO I: 30, m. 45): above the 1 with a *coma* [a comma] of the soprano on the upbeat, there has to be an eighth note, which concerns the next four numbers [of *cifra*]. [This correction has been made to both the original and Kastner's edition.]
- **Folio 20**, s. 3, m. 2 (KFO I: 40, m. 33): in the tenor on the upbeat there has to be a seven with a *rasgo* [a trait, or a stroke of a pen.] [This correction appears neither in the original nor in Kastner's edition.]
- **Folio 20**, in the same place, s. 4, m. 2 (KFO I: 40, m. 36): in the soprano on the upbeat, a 3 with a *coma* has to be a 1 with a *coma*. [In other words, the first sixteenth note of the

¹ All the references to KFO, meaning Kastner's edition of the *Facultad orgánica*, refer hereafter to the edition of 1980–81, Madrid: Unión Musical Española – if not indicated otherwise. Roman numerals refer to the two volumes of this edition. The abbreviation **p.** means page, **m.** is used for measure, and **s.** for staff.

^{2 &}quot;Simple 1" means a plain figure of cifra which does not have any dots, commas, or strokes added to it.

³ *Puntillo* (a dot), *coma* (a comma), and *rasgo* (a stroke) are signs added to plain numbers of *cifra* to indicate the different octaves.

- soprano on the third beat should be an f2. Neither the original nor Kastner's edition bears this correction.]
- **Folio 20**, in the same place, s. 8, m. 2 (KFO I: 41, m. 44): the eighth note, which is on the upbeat, should be above the second number of the tenor. [This has been corrected in the original and in Kastner's edition.]
- **Folio 24**, s. 4, m. 1 (KFO I: 48, m. 65): the last 1 in the soprano has to be a 3 with a *puntillo*, and then, after it, there has to be a 1 with a *puntillo*, which is lacking, in order to reach the total of sixteen notes. [The last two sixteenth notes of the soprano should thus be a1 and f1. This correction appears neither in the original nor in Kastner's edition.]
- **Folio 50**, p. 2, s. 6, m. 3 (KFO I: 109, m. 91): in the soprano a 4 with a *puntillo* between the downbeat and the upbeat has to be added. [In other words, the first note (c2) of the soprano line should be a quarter note (instead of the half note written), followed by another quarter note, b1. This correction is lacking in the original and in Kastner's edition.]
- **Folio 52**, s. 1, m. 3 (KFO I: 112, m. 31): in the soprano, the 2 with a *puntillo* on the downbeat has to be a 7 with a *puntillo*. [That is, the first note in the soprano should be an e2 instead of g1. This correction has been made neither to the original nor to Kastner's edition.]
- **Folio 53 [54]**, p. 2, s. 6, m. 2 (KFO I: 119, m. 88): in the bass on the downbeat there is a 4 with a *bemol* [a flat sign], which has to be a 6 with a *rasgo*. [The first note of the bass should be d instead of B-flat. This correction has been made neither to the original nor to Kastner's edition. In my opinion, the uncorrected version is musically better.]
- **Folio 60**, p. 2, so 2, m. 3 (KFO I: 131, m. 80): the fourth note in the soprano is a 2 with a *puntillo*, which has to be a 6 without a *puntillo*. [The last quarter note of the soprano should be d1 (instead of g1), according to Correa. However, the repetition of the same motive shortly after (KFO I: 131, m. 82) is not mentioned by Correa. If one makes the correction suggested by Correa, one should perhaps also change the last quarter note of the tenor in measure 82. The correction does not appear in the original nor in Kastner's edition. Personally, I do not see why Correa has suggested this correction.]
- **Folio 65**, p. 2, 7 s. 5, m. 1 (KFO I: 141, m. 36): in the tenor on the upbeat, there is a 6 with a *rasgo*; remove it. [The d in the tenor should be "removed." It means that the half note f in the tenor on the downbeat is replaced by a whole note f. Neither the original nor Kastner's edition bears this correction.]
- **Folio 79**, s. 8, m. 2 (KFO I: 177, m. 104): put a 3 with a *puntillo* in the alto above the first 6 of the tenor. [The second-to-last eighth note in the alto should be a1 instead of d2. In

⁴ By "page 2" Correa refers to the verso of the folio. In the *Facultad orgánica*, the folios are printed recto verso and numbered recto.

⁵ The verso of folio 54. Note that the folio to which Correa is referring has been erroneously numbered 53 in the original.

⁶ The verso of folio 60.

⁷ The verso of folio 65.

- Kastner's edition, the eighth notes of the original have been notated as quarter notes. This correction has not been made in the original nor in Kastner's edition.]
- **Folio 80**, p. 2, s. 2, m. 1 (KFO I: 181, m. 171): in the tenor on the upbeat there has to be a 3 with a *puntillo*. [One must add a half note al to the tenor on the third beat. Consequently, the el of the tenor on the first beat will also become a half note. The correction is lacking in both the original and Kastner's edition.]
- **Folio 87**, p. 2, s. 6, m. 4 (KFO I: 200, m. 94): in the soprano on the upbeat there is a 4 without a *bemol* [a flat sign]; put it there. [The correction appears neither in the original nor in Kastner's edition.] 10
- **Folio 95**, p. 2, ¹¹ s. 2, m. 1 (KFO II: 7, m. 40): in the bass the fourth number is a 5; it has to be a 3 with a *rasgo*. [The fourth eighth note of the bass should be A instead of c. This correction has not been made in the original nor in Kastner's edition.]
- **Folio 106**, p. 2, ¹² s. 7, m. 4 (KFO II: 34, m. 114): in the tenor on the upbeat there is a 6 with a *razgo* [sic]. It has to be a simple 2. ¹³ [The second half note of the tenor should be g instead of d. This correction is lacking in the original and in Kastner's edition.]
- **Folio 116**, s. 1, m. 1 (KFO II: 54, m. 53): in the tenor on the downbeat¹⁴ there is a *coma* [a comma]; ¹⁵ it has to be a 6 with a *rasgo*. [The half note f, which is tied from the previous measure, should be replaced by a half note d. This has not been corrected in the original nor in Kastner's edition.]
- **Folio 118**, p. 2 [sic, probably staff 2], ¹⁶ m. 3 (KFO II: 59, m. 33): in the bass on the upbeat there is a 5 with a *rasgo*; it has to be a 7 with a *rasgo*. [The second half note of the tenor should be an e tied to another half note e of the tenor in the next measure. Thus Correa avoids a parallel fifth, but ends up producing another one. Holland supposes that Correa probably regarded the "new" parallel fifth as being acceptable "since one of the voices involved is involved in ornamentation" (Holland 1985: 129, footnote 22). This correction does not appear in the original nor in Kastner's edition.]
- **Folio 121**, s. 7, m. 1 (KFO II: 67, m. 87): in the alto on the upbeat there is a 3; remove it. [The half note a in the alto should be removed, and the first half note f of the alto should, consequently, become a whole note. The correction is lacking in both the original and in Kastner's edition. Bovet has pointed out that the suggested correction is for avoiding parallel octaves between the soprano and alto (Bovet 1998: No. 2: 15).]

⁸ The verso of folio 80.

⁹ The verso of folio 87.

¹⁰ The verso of folio § 1 of Correa's Errata begins here.

¹¹ The verso of folio 95.

¹² The verso of folio 106.

¹³ That is, a plain figure of *cifra*, without any additional signs.

¹⁴ In Holland (1985: 129) "on the upbeat" is written by mistake.

¹⁵ By coma in this particular context, Correa means a comma, which is used as a sign for a tie.

¹⁶ Since no staff number is indicated, Correa's abbreviation "pag." ["página," a page] of the original should probably read "pau." [abbreviation of "pauta," a staff], in which case the correction would concern the recto of folio 118.

- **Folio 126**, s. 1, m. 1 (KFO II: 78, m. 99): in the bass on the upbeat there is a 6 with a *rasgo*. It has to be a 3 with a *rasgo*. [The quarter note of the bass, on the upbeat, should be A, instead of d. The correction does not appear in the original nor in Kastner's edition.]
- **Folio 126**, in the same place, s. 7, m. 1 (KFO II: 79, m. 130): in the tenor on the upbeat there is a 1 with a *puntillo*; raise it to the line of the alto. [As the result of the suggested correction, the tenor becomes a whole note f1, and the alto line two half notes, a1 and f1. The correction has not been made in the original nor in Kastner's edition.]
- **Folio 126**, in the same place, p. 2, ¹⁷ s. 6, m. 3 (KFO II: 80, m. 160): in the tenor there is a 2 with a *puntillo*. It has to be a simple 7. ¹⁸ [In the tenor, the half note should be e1 instead of g1. ¹⁹ This correction is lacking in the original as well as in Kastner's edition.]
- **Folio 129**, s. 1, m. 6 (KFO II: 85, m. 99): in the alto, after the upbeat, there has to be a 3 with a *puntillo*, below the 5 *sustenido* [a c-sharp] of the soprano. [The half note b1-flat of the alto should be changed into a quarter note, which is followed by a half note a1. The correction does not appear in the original nor in Kastner's edition.]
- **Folio 138**, s. 4, m. 3 (KFO II: 103, m. 82): a 2 with a *rasgo* is missing from the upbeat in the bass; put it there. [One should add a half note G to the upbeat of the bass line; consequently, the F of the bass on the downbeat becomes a half note also. This correction has been made neither in the original nor in Kastner's edition.]
- **Folio 146**, s. 6, m. 4²⁰ (KFO II: 119, m. 152–153): in the alto on the downbeat of the measure there is a 6; replace it with a 1 with a *puntillo*. And on the downbeat of the next measure there is a *coma* in this same voice; replace it with a simple 6.²¹ [The alto note of the first of the said measures should be a whole note f1 instead of d1. The second of the said measures begins with a whole note d1. Neither of these corrections appears in the original, but the second one has been made in Kastner's edition.]
- **Folio 146**, in this same measure (KFO II: 119, m. 153): in the second soprano there is a 6, a quarter note out of place; place it above the last 4 and 2 of the two lower voices. [The second note (d1) of the second soprano ought to be above the 4 and 2 of the two lower voices, creating a half note. This correction has been made both in the original and in Kastner's edition.]
- **Folio 147**, p. 2, ²² s. 1, m. 2 (KFO II: 122, m. 52): from the first bass a 3 is missing on the upbeat of the measure. [The higher of the two basses should have a half note a on the upbeat; consequently, the g of the first bass, on the downbeat, is also a half note. The suggested correction does not appear in the original nor in Kastner's edition.]

¹⁷ The verso of folio 126.

¹⁸ By "7. *simple*" (a simple 7) Correa means a plain number of *cifra*, which does not have any dots, commas or strokes.

¹⁹ Bovet's French translation of the *Facultad orgánica* speaks of "*La noire du ténor*" (the quarter note of the tenor) by mistake, instead of "*La blanche*," the half note (Bovet 1985: No. 2: 5; *TI*: 5).

²⁰ In Holland's translation of the *Facultad orgánica*, the number of the measure is erroneously three instead of four of the original text (Holland 1985: 130).

²¹ A plain cifra number, without any additional signs.

²² The verso of folio 147.

- **Folio 147v**, in the same place, s. 6, m. 2 (KFO II: 123, m. 70): in the alto one places a 2 with a *puntillo* on the upbeat of the measure. [In the alto one must add g1 to the upbeat of the measure; it is a whole note. This also changes the double whole note f1 of the downbeat of the alto line into a whole note. This correction has not been made in the original nor in Kastner's edition.]²³
- **Folio 147v**, *item*, on the downbeat of the following measure (KFO II: 123, m. 71), exchange the two numbers of the alto and the tenor, making the 2 with a *puntillo* a 7, and the 7 a 2 with a *puntillo*. [According to Correa, the first notes of the alto and tenor (g1 and e1, respectively) of the said measure should be exchanged with each other. As the result, merely the place of crossing of the tenor and alto lines is changed, but this has no real effect on the modern edition. Neither the original nor Kastner's edition has been corrected.]
- **Folio 149**, s. 6, m. 5 (KFO II: 126, m. 145): a 5 with a *puntillo* is missing on the upbeat in the alto; place it there. [One should add a half note c2 in the alto, on the upbeat. Thus the alto has two half notes, a2 and c2. This correction has been made neither in the original nor in Kastner's edition.]
- **folio 159**, s. 7, m. 2 (KFO II: 149, m. 50): in the alto a 6 with a *razgo* [sic] is missing, below the second 4 with a *puntillo* of the soprano; put it there. [Correa asks one to place a d in the alto, below the second b1 of the soprano line. Consequently, the rhythm of the half note f of the alto has to be changed. Both Bovet (1985: No. 2: 6; *TI*: 6) and Holland (1985: 132) have suggested that Correa may have, nevertheless, intended the d to be placed below the first c2 of the soprano.²⁴ In this case, the d would fall at the beginning of a new *septupla* (a septole), which would be logical. Neither the original nor Kastner's edition bears this correction.]
- **Folio 160**, s. 3, m. 3 (KFO II: 150, m. 79): exchange the numbers of the alto and the tenor, making one the other. [According to Correa, the alto g and tenor d should be exchanged. This produces a change merely for the voice leading, not for the harmony. Neither the original nor Kastner's edition has been corrected.]
- **Folio 176[v]** [p. 2], s. 3, m. 2²⁵ (KFO II: 185, m. 76)²⁶: the 7 with a *rasgo* of the bass has to be below the 7 of the tenor. [The e of the bass should be below the e1 of the tenor. This correction has not been carried out in the original, but it has been made to Kastner's edition.]
- **Folio 176 [v]**, in the same place, s. 4, m. 1 (KFO II: 185, m. 78): the second 1 of the bass has to be below the second 3 [of the tenor]. [In other words, the third (and last) note of the bass, the f, should be below the second a of the tenor. The suggested correction has already been made to Kastner's edition but is missing in the original.]

²³ In Holland's translation of the *Facultad orgánica*, this correction has been left out by mistake (Holland 1985: 131).

²⁴ Both authors mistakenly give c1 for the c2 in question.

²⁵ The number of the measure is missing in Bovet 1985: No. 2: 6; TI: 6.

²⁶ Apparently Correa has forgotten to refer to the verso of the folio 176. On the recto, there is only one measure to be found in staff 3.

- **Folio 177**, s. 6, m. 2 (KFO II: 186, m. 99): in the tenor, one puts a 6 with a *rasgo* below the last 1 of the alto. [One should add a d to the tenor, below the last f of the alto. The dotted whole note e in Kastner's edition needs to be changed into a half note, followed by a whole note d. The original edition likewise lacks this correction.]
- **Folio 177**, in the same place, s. 7, m. 4 (KFO II: 187, m. 105–106)²⁷: in the alto one places a 5 in the first place, a 4 in the fourth place, and a 3 in the seventh place; and in the next measure, a 2 in the first place, and a 1 *sustenido* [an f-sharp] in the fourth place. [The corrected alto part is: c1 (a half note), d1 (a whole note), b (a half note), c1 (a whole note), a (a half note), b (a whole note), ²⁸ g (a half note), a (a whole note), f-sharp (a half note), g (a dotted whole note), and f-sharp (a whole note). Neither the original nor Kastner's edition bears Correa's suggested corrections.]
- **Folio 181**, s. 2, m. 1 (KFO II: 193, m. 53): in the soprano there is a 6 on the downbeat; it has to be a 1 with a *puntillo*. [The first note of the soprano should be an f1 instead of a d1. The correction does not appear in the original nor in Kastner's edition.]
- **Folio 181**, p. 2, ²⁹ s. 5, m. 1 (KFO II: 195, m. 75): in the alto one puts a 3 in the second place, which is above the first 7 and 5. ³⁰ [The first note of the alto, the dotted whole note b, should be changed into a half note, as a consequence of moving the a of the alto above the e and c of the tenor and bass voices. Both Bovet (1985: No. 2: 6; *TI*: 6) and Holland (1985: 133) write that in the said measure, the dotted whole note should be a half note followed by a whole note a. In actual practice, the dotted whole note b, (which changes into a half note) is followed by a dotted whole note a (rather than a whole note a), this dotted whole note being tied further to the second-to-last half note (a) of the alto. The correction is missing in both the facsimile and Kastner's edition.]
- **Folio 182**, p. 2,³¹ staff 5, m. 1 (KFO II: 198: m. 115): in the soprano, one makes the first 3 with a *puntillo* a 1 [with a *puntillo*]. [The fifth eighth note of the soprano should be an f1 instead of an a1. The suggested correction has not been made in the original nor in Kastner's edition. Bovet makes the observation that Correa has made the correction in order to avoid a parallel octave between the soprano and the tenor (Bovet 1998: No. 4: 20).]
- **Folio 184**, s. 2, m. 4 (KFO II: 201, m. 7): one must place a 3 with a *puntillo* in the alto, between the 2 and the 1 *sustenido* [an f-sharp]. [One should place a half note a1 in the alto between the g1 and f1-sharp. Thus the last note in the alto, the f1-sharp, becomes

²⁷ Bovet gives "vol. II, p. 186/87, mesures 101/2," as a reference to Kastner's edition and writes that except for the f-sharp of the fourth place of the alto of measure 102, these corrections have already been made both in the original and in the modern edition (Bovet 1985: No. 2: 6; *TI*: 6). The right reference and corrections are given in Bovet 1998: No. 4: 19. Holland also gives II: 186–187 as the page numbers (which is incorrect), but 105–106 for numbers of the measures (Holland 1985: 133), giving the same interpretation of Correa's corrections as does Bovet (1998: No. 4: 19), and as I present here.

²⁸ Measure 106 in Kastner's edition begins after this.

²⁹ The verso of folio 181.

³⁰ The numbers 7 and 5 refer to the tenor and bass voices, respectively.

³¹ The verso of folio 182.

- a half note instead of a whole note. It is not clear whether one should also change the tenor and bass lines. One possibility is to keep the tenor and bass parts as they are written; the other would be to change the alignment of voices by a half note (as in the alto). Correa's correction is missing in both the original and Kastner's edition.]
- **Folio 192**, ³² s. 6 (KFO II: 217, m. 54)³³: the first ³⁴ 7 with a *puntillo* of the soprano should be a 5 with a *puntillo*. [The ninth eighth note of the soprano, the e2, should be replaced by an eighth note c2. Correa's suggested correction is most probably an error (Bovet 1998: No. 4: 21). Neither the original nor Kastner's edition bears this correction.]
- **Folio 193**, s. 1, m. 2 (KFO II: 218, m. 67): in the tenor one places a simple 2 above the 4 of the bass. [In the tenor, one should place a half note g above the B of the bass. This correction appears neither in the original nor in Kastner's edition.]
- **Folio 193**, s. 2, m. 1 (KFO II: 218, m. 68): in the alto one puts a 7 with a *rasgo* below the 7 of the soprano. [The first note in the alto, the double whole note a, will be changed into a whole note when an e is added below the e1 of the soprano. The added note receives the note value of a double whole note. This correction has been made neither in the original nor in Kastner's edition.]
- **Folio 193**, p. 2, 35 s. 8 (KFO II: 220, m. 96): in the tenor one places a simple 3 in the 12th place [?]; which is above the 7 of the bass. [It is not clear whether Correa means to say "the 12th place." It does not seem right, because Correa asks one to place an a above the e of the bass, which is directly "under" the 13th note of the soprano. The correction does not appear in the original nor in Kastner's edition.]
- **Folio 196**, s. 8 (KFO II: 225, m. 14)³⁶: in the bass, on the upbeat, one has to place a rest. [If Correa's correction really refers to the measure 14 in Kastner's edition, the whole note G of the bass will be changed into a half note, as a consequence of placing a half note rest at the upbeat in the bass line. Neither the original nor Kastner's edition has been corrected.]

³² In the Brussels exemplar of the *Facultad orgánica* (or at least in the facsimile edition by Minkoff based on the said exemplar), folio 196 has been placed out of order, between folios 191 and 192. In the two Madrid exemplars (R.9279 and R.14069) which I have consulted, folio 196 has been bound in its proper place.

³³ Both Bovet (1985: No. 2: 7; *TI*: 7) and Holland (1985: 134) give the erroneous measure number 52 for Kastner's edition. The page number is corrected in Bovet (1998: No. 4: 21).

³⁴ The original reads "grimer" instead of "primer" (the first).

³⁵ The verso of folio 193.

³⁶ Holland (1985: 135) and Bovet (*TI*: 7) give this page and measure for Kastner's edition. Measure 14 in Kastner's edition refers to the third-to-last measure on folio 196 of the original. However, this is not staff'8 on the said folio, mentioned in Correa's correction. Rather, it is staff'6 of the original. The verso of folio 196 has eight systems. In theory, Correa's correction could refer to the second measure on staff 8 on the verso of folio 196, which is p. 226, m. 34 in Vol. II of Kastner's edition. In that case, the f of the bass line would be changed into a half note, with a half-note rest on the upbeat of the measure. This correction would not make much sense, however.

APPENDIX B

A Chronological Summary of the Musicological Literature Concerning the Extant Copies of the *Facultad orgánica*

In his *Crítica de la edición* to Correa's works, Santiago Kastner specifies three exemplars used in preparing his edition: one in the Biblioteca Nacional of Madrid (R.14069); another in the Biblioteca Nacional of Lisbon (Reservados, 377); and the third also in Lisbon, in the Real Biblioteca de Ajuda (R.B.A. 38-XII-27) (Kastner 1948: 69).

Twenty years later, Robert Stevenson wrote in his article "Francisco Correa de Arauxo – New Light on his career," published in *Revista musical chilena*, that "Kastner had had at his disposal in the Lisbon National Library and Biblioteca da Ajuda no less than three copies of the rare 1626 original imprint – the pair in the Biblioteca Nacional being catalogued as Reservados 877 V and 1508 V [R. 130319] the copy with manuscript appendix at the Biblioteca da Ajuda bearing B.B.A. 38/XII/27 for its call number" (Stevenson 1968: 10–11). If the information given by Stevenson is right, it implies that Kastner might actually have used four exemplars of the original edition for his transcription instead of the three that he himself mentioned. According to Kastner, he had used two Lisbon copies and one Spanish copy. Stevenson, on the contrary, wrote that all three copies used by Kastner were Lisbon exemplars, mentioning the Biblioteca Nacional and the Real Biblioteca de Ajuda of Lisbon, implying that one of those two libraries possessed two copies. If we take into account the exemplar of the Biblioteca Nacional of Madrid mentioned by Kastner (but not by Stevenson), the total number of copies that Kastner had used would have been four.

Stevenson's catalogue number for the copy in the Ajuda Library (ibid.: 11) is identical to Kastner's (1948: 69) with the exception of the first letter of the call number (B.B.A. in Stevenson, R.B.A. in Kastner). Stevenson's *B* is probably an error. In addition to the Ajuda exemplar, Stevenson listed two more Lisbon copies with the following catalogue numbers: Reservados 877 V and Reservados 1508 V [R.130319]. The former is one of the two Lisbon copies that Kastner used for his transcription. However, Stevenson gave the catalogue number 877 V (Stevenson 1968: 11) for this copy instead of 377 used by Kastner (1948: 69). The number given by Kastner is correct.

¹ This confusion with the catalogue number is very understandable, given that the card files of many big libraries still contain numerous cards written by hand. Especially in older handwriting, the number three can easily be taken as the number eight and vice versa.

² This was verified by Dra. Luísa Cardia from the Biblioteca Nacional of Lisbon, in a letter dated April 28, 1998.

In the *National Union Catalog Pre-1956 Imprints* (a cumulative author list representing Library of Congress printed cards and titles reported by other American libraries), there is a mention of two American exemplars of the *Facultad orgánica*. One of these exemplars is reported to be located in the Library of Congress in Washington and the other one in the collections of the Stanford University Libraries (*NUC* 1970, Vol. 123: 457).

In the Répertoire international des sources musicales, Écrits imprimés concernant la musique (1971), nine exemplars of the Facultad orgánica are mentioned, located in the following libraries: Bibliothèque Royale de Belgique (Belgium), Musikbibliothek of Leipzig (Germany), Biblioteca Nacional of Madrid (Spain), Bibliothèque national/fonds de Conservatoire (France), Library of St. Michael's College in Tenbury (Great Britain), Biblioteca do Palácio nacional da Ajuda (Portugal), Biblioteca Nacional of Lisbon (Portugal), Library of the Hispanic Society of America in New York (the United States), and Library of Congress (music division) in Washington, D.C. (the United States). No catalogue numbers are given for these exemplars. The Stanford exemplar listed in the NUC of 1970 is not mentioned.

Although as many as nine exemplars were reported in the *RISM* of 1971, according to the *Répertoire international des sources musicales* (*RISM*) printed in 1972, only six exemplars of the *Facultad orgánica* still exist, located in the following libraries: Bibliothèque Royale Albert 1er (Belgium), Biblioteca nacional (Spain), Bibliothèque G.Thibault (France), St.Michael's College Library in Tenbury, Worcestershire (Great Britain), Instituut voor Muziekwetenschap der Rijksuniversiteit in Utrecht³ (Netherlands) and Biblioteca Nacional de Lisboa (Portugal) (*RISM* 1972: 220). No catalogue numbers are given for any of the exemplars. The mentioned exemplars were also included in the list given in the *RISM* of 1971, with the exception of the Utrecht exemplar. On the contrary, the *RISM* of 1972 fails to mention four exemplars given in the list of the earlier *RISM*, namely, the Leipzig exemplar, the Portuguese exemplar of the Biblioteca da Ajuda, the New York exemplar, and the Washington exemplar.

Concerning Spain's exemplars of *Facultad orgánica*, new information was received in 1975 from Dionisio Preciado, who reported in his article "Un nuevo ejemplar de 'Facultad orgánica' de Francisco Correa de Araujo" seven known exemplars of the *Facultad orgánica*. According to Preciado, two of these exemplars are in Portugal (one in the Biblioteca Nacional of Lisbon and the other in the Biblioteca da Ajuda of Lisbon), one in Brussels (Bibliothèque Royale), one in Washington (the Library of Congress) and three in Spain (two in the Biblioteca Nacional of Madrid and one in the Museo Marinero de Bueu, Pontevedra) (Preciado 1975: 19). Preciado was thus the first to mention all three Spanish exemplars, but he omitted any reference to the third Lisbon copy.

In his list, Preciado gave catalogue numbers for two Portuguese copies: RBA, 38-XII-27 for the Ajuda copy and BN, R/9279 for a copy in the Biblioteca Nacional

³ According to my knowledge, RISM (1972) is the only source which mentions that there is a copy of the Facultad orgánica in Utrecht.

of Lisbon (ibid.). However, the latter call number belongs to an exemplar found in the Biblioteca Nacional of Madrid. Elsewhere in the same article, Preciado wrote about the Madrid exemplars and correctly gave R/9.279 and R/14.069 as their catalogue numbers (ibid.: 15).⁴

In 1985 in his dissertation "Francisco Correa de Arauxo's 'Facultad orgánica': A Translation and Study of its Theoretical and Pedagogical Aspects," Jon Holland presented a list of exemplars identical to Preciado's with one exception (Holland 1985: 27–28); an eighth copy is mentioned, the eighth being the third Lisbon copy that Preciado had omitted even though Robert Stevenson had already mentioned three Lisbon copies in 1968 (Stevenson 1968: 10–11).

Holland gave the already familiar catalogue numbers for the two Madrid copies and three Lisbon copies and also mentions the catalogue number of the Brussels copy (2004). In addition, he identifies three copies that Kastner had used to make his transcription⁵ and adds that the copy currently located in Brussels was found originally at the Convent of the Congregación del Oratorio de Estromoz in Portugal. (Holland 1985: 27–28.)

The most recent source to deal with the extant copies of the *Facultad orgánica* is *Francisco Correa de Arauxo, organista sevillano del siglo XVII* (1986) by José Enrique Ayarra Jarne, organist of the Seville Cathedral. Ayarra claims to have located eleven exemplars of the original edition of the *Facultad orgánica* in museums and libraries of Europe and America: three exemplars in Spain (two in the Biblioteca Nacional and one in the Museo Marinero de Bueu, Pontevedra; two in the United States (New York and Washington); two in Portugal (Lisbon); and one each in Germany (Leipzig), Belgium (Brussels), France (Paris) and Great Britain (Tenbury) (Ayarra 1986: 117).

Besides the *RISM* of 1971, Ayarra's book is the only one of the above-cited sources to state that exemplars also exist in Leipzig and in New York. Like Preciado and Kastner – contrary to Stevenson and Holland – Ayarra lists only two Lisbon copies.

⁴ These catalogue numbers are still valid today.

⁵ Namely, one exemplar in the Biblioteca Nacional in Madrid (R/14.069), one in the Biblioteca Nacional in Lisbon (Reservados 377 V) and one in the Biblioteca de Ajuda in Lisbon (R.B.A. 36-XII-27) (Holland 1985: 27–28). Note that the call number for the Ajuda exemplar given by Holland is erroneous and should be BA 38-XII-27, as was confirmed by the director of the Biblioteca da Ajuda, Francisco Cunha Leão, through e-mail on September 9, 1998.

APPENDIX C

Observations on the Original Edition of the *Facultad orgánica*

Because the main primary sources used for the present study are the two exemplars in Madrid (Biblioteca Nacional, catalogue numbers R.9279 and R.14069) and the facsimile edition of the copy in Brussels printed by Minkoff, a description of the Madrid exemplars and a short comparison of them will be given in the following pages.

1 Location and Physical Description of Madrid, R.9279

This particular exemplar can be studied at the Sala Cervantes of the Biblioteca Nacional where the collection of manuscripts, incunabula and rarities (*Manuscritos, Incunables y Raros*) is situated. The book consists of two empty folios at the beginning, an unnumbered folio bearing the title, three folios of text numbered § 2-§ 4, 2 26 folios of text + 204 folios of music (notated in *cifra*). The dimensions of R.9279 are $3\times20\times29$ centimeters. The width of the outer and inner margins varies, the outer margins being on the average 2.5 centimeters in the textual part of the *Facultad* and the inner margins 2-3 centimeters. In the *cifra* part, the outer margins are 2 centimeters on the average and inner margins, 1 centimeter. The dimensions of the printed area of a page are approximately 145×250 millimeters in the textual part and 152×255 millimeters in the *cifra* part. After the two empty folios and the unnumbered folio with the title, the signatures are § 2-§ $4+A-N^2$ in the textual part and $A-Z^4+Aa-Zz^4+Aa-Eee^4$ in the musical part.

The present state of the paper is rather thin and delicate and feels "soft" with the exception of a few pages that are a little thicker. The paper is yellowish and translucent. The marks of the vertical chain-lines (those which kept the horizontal laid-lines of the mould in place when the paper was manufactured) can clearly be seen against the natural light. The pattern of the laid-lines is generally dense. However, this pattern is slightly less dense on some pages (e.g., folios 1–4, *ADVERTENCIAS*), implying that paper from at least two

¹ The *R* in the given catalogue number stands for "rarities" (*Raros*).

² These numbers are found in the lower recto corners of the folios.

³ Both the textual part and the musical part have their own sets of numbers, beginning with number one. In both cases, the folio numbers are found in the upper recto corners.

⁴ The description of the printed area of a page includes the running titles.

different batches has been used. The quality of printing is uneven. Some pages have come out very sharply printed and black (like folios 79r, 118r and 177r), but on others, the text is faint and nearly illegible (e.g., folios 107v and 186v). Although it is possible that the text has faded over the centuries, time alone does not explain the dramatic contrasts in the quality of printing.

In the process of making the book, the upper edge of the running titles on some pages has been cut off by mistake (e.g., folio 19 of the *ADVERTENCIAS*). Many pages have obviously suffered from some damage done by water or humidity. On some of the pages, there are also minor tears (e.g., folios 88, 193 and 202–204).

The book is beautifully bound in leather of varying shades of brown and black, but it is hard to say if the covers are from the original year of printing. This particular copy has been made with its own blue ribbon bookmark sewn into the binding. The width of the bookmark, which is made of two pieces of ribbon sewn together, is 1.2 centimeters. The title of the book, "Correa tientos de organ," is printed in gilt capital letters on the back in a purple area approximately 3×3 centimeters in size. The title is printed about 5.5 centimeters down from the upper edge of the book. The stiff spine of the book is reinforced by a piece of wood that can be partially seen through a torn corner. In addition to the title, the back has also been decorated with beautiful gilt ornaments. The book has been further graced with red edges that have lost some of their color over the centuries.

2 Watermarks of Madrid, R.9279

The back of the front cover and the opening recto folio are marbled. The verso is a blank white page. On the blank folio that follows the first watermark appears. It consists of three circles, one on top of the other, a pair of hands (one hand on each side of the uppermost circle), a Greek cross on the top of the uppermost circle, a smaller Latin cross inside one of the circles and two majuscule *P*s, one on each side of the middle circle. This same sequence appears at the book's end, only in reverse: a blank folio with a watermark, followed by a blank page, and ending with two marbled pages, the last being the recto of the back cover.⁷

The dimensions of the watermark at the beginning of the book are 6.5×10.5 centimeters; the second is slightly larger, that is, nearly 8.5×10.5 centimeters. Otherwise

⁵ However, the most boldly printed text is not necessarily the sharpest in all cases. With some of the "very black" letters, the print has bled through the folio and renders it difficult to read the reverse side of the page.

⁶ The title is divided into three lines: 1. Correa, 2. tientos and 3. de organ.

⁷ The form of the described watermark resembles the group of watermarks under the name *Trois* cercles [Three Circles] and especially the watermarks numbered 3245 and 3246 in C. M. Briquet's classification titled *Les Filigranes I–IV* (Briquet 1923: Tome 1er: 217–218 and the unnumbered plates at the back of Briquet's volume. Deuxième edition, Tome premier. Leipzig: Verlag von Karl W. Hiersemann).

⁸ The difference in size and in details of the two watermarks show that they have been made by different

both watermarks are very similar except that the simpler (and smaller) cross which is inside a circle is inside the top circle in the first watermark and inside the middle circle in the second. In addition, the second watermark reverses the orientation of the first, as is shown in **Fig. 1**:

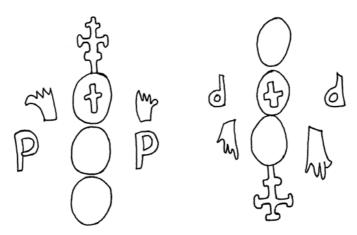


Fig. 1 Watermarks on the first and last blank folios of Madrid, R.9279

The folios between the two empty ones described above bear numerous other watermarks. The watermark on folio 19 of the chapter *EL ARTE DE PONER POR CIFRA* appears to be unique in the book. All the rest of the watermarks represent a third type, with some variation in size and shape.

The unique watermark has dimensions of 2×5 centimeters and consists of a hand and what appears to be a flower on the top of the "middle finger." Another interpretation could be that there are two hands: one open, with its fingers pointing upwards, and the other clenched, in front of the open hand:



Fig. 2 The watermark of folio 19 of the chapter *ELARTE DE PONER POR CIFRA* in Madrid R.9279

moulds.

⁹ See the group of watermarks numbered 10706–10723 under the category *Main* [A Hand] in Briquet 1923: *Les Filigranes*. Deuxième edition, Tome troisième. Leipzig: Verlag von Karl W. Hiersemann.

No other watermark of this type can be found in the second Madrid exemplar of the *Facultad orgánica*, R.14069. However, it is of interest that the last full *cifra* page of the only known exemplar (Anglés 1944: 143) of Venegas de Henestrosa's *Libro de cifra nueva para tecla, harpa, y vihuela* (1557, Alcalá) bears a watermark that resembles the unique watermark of R.9279. The dimensions of the similar watermark in Venegas's book are approximately 2×7 centimeters. The watermark consists of an open hand, its fingers pointing downward and a flower extending from the middle finger:



Fig. 3 The watermark of the last full cifra page in an exemplar of Venegas's *Libro de cifra nueva* (R.6497)

The majority of watermarks in R.9279 are of a third type, consisting of a Latin cross inside a drop-like figure: 11



Fig. 4 The most common watermark type in R.9279

¹⁰ Correa's Facultad orgánica was printed in 1626 by Antonio Arnao in the same university city, Alcalá de Henares, where Venegas's Libro de cifra nueva para tecla, harpa, y vihuela was printed in 1557 by Joan de Brocar. The exemplar of Venegas's Libro de cifra nueva referred to here is in the Biblioteca Nacional of Madrid; its catalogue number is presently R.6497.

¹¹ See the group of watermarks numbered 5677–5704 under the heading *Croix latine* [A Latin Cross] in C. M. Briquet's classification (Briquet 1923: *Les Filigranes*. Deuxième edition, Tome deuxième. Leipzig: Verlag von Karl W. Hiersemann).

The size and shape of these watermarks vary somewhat. Some "drops" are bigger and broader (e.g., fol. 46: 3.5×6 cm); others are thinner (e.g., fol. $101: 2\times4$ cm; fol. $201: 1.5\times4.5$ cm). There is also one quite symmetrical watermark on folio $182 (2.5\times2.5 \text{ cm})$.

It seems that some watermarks of the third type also have a letter under the sharp point of the "drop." For instance, at the point of a small-sized watermark (2×3 cm) of folio 8 of the *ADVERTENCIAS*, there might be a majuscule *P* that is not very clear. In one of the rare exemplars of Antonio de Cabezón's *Obras de mú[si]ca para tecla, arpa [y] vihuela* (1578, Madrid; printed in the house of Francisco Sanchez) watermarks very similar to these just described abound. Most of these watermarks have two (Cabezón 1578: e.g., fol. 50) or three (ibid.: e.g., fol. 58, 62) letters or a combination of letter(s) and ornamental figure(s) either inside a "drop" or at the sharp point of it. According to Briquet (1923: Tome 2ème: 332), a type of watermark that represents a Latin cross inside a circle or a [coat of] arms and is accompanied with letters of the alphabet signifying initials of paper makers was rather common.

Besides the two large watermarks and the watermark unique to Madrid R.9279, there are about 111 watermarks of the "drop and cross" type. The total number of the watermarks is thus 114, 14 of which appear in the textual part, 98 in the musical part and two at the beginning and end of the book, on empty folios.¹³

3 Problems with Folio Numbers in Madrid, R.9279

In the Madrid exemplar R.9279 of the *Facultad orgánica*, there are three kinds of problems connected with the folio numbers. First of all, quite a few folio numbers have been blurred, apparently in the printing process. Secondly, many pages have been erroneously numbered, although their order is correct. Third, in two instances the folio numbers are missing. Most of the problems with folio numbers are concentrated in the musical part of the exemplar. Detailed information about all three categories of problems associated with the folio numbers is found in *Appendix D*.

4 Corrections and Other Markings Made by Hand in Madrid, R.9279

There are handmade corrections and brief notes in several places in R.9279. These are made with ink, pencil or even with a ballpoint pen. The two latter kinds of markings have obviously been made in modern times. However, some of the corrections made with ink

¹² The particular exemplar of Antonio de Cabezón's *Obras de música* studied in the course of this work is currently in the collection of the British Library and has the catalogue number K.8.e.10.

¹³ Four watermarks of the given total number of 114 are barely visible and are thus questionable. These unclear cases are in folios 4 and 8 of the *ADVERTENCIAS* and in folios 144 and 200 of the *cifra* part. Naturally, there is also the possibility that some watermarks have gone unnoticed in such cases where the watermarks are not clear.

are interesting and possibly date from an earlier period, some of them even from the time of printing. *Appendix E* contains a complete list of the markings made with ink.

5 Location and Physical Description of Madrid, R.14069

Like the above-described exemplar (Madrid, R.9279), the second exemplar of the Biblioteca Nacional can also be studied at the Sala Cervantes. Its catalogue number is R.14069. The book consists of an empty folio at the beginning, an unnumbered folio bearing the title, three folios of text numbered § 2-§ 4, folios of text and finally 204 folios of music. The dimensions of R.14069 are $4.5\times20\times30$ centimeters. The width of the outer and inner margins varies. The outer margins are on the average from 3.5 to nearly 4.0 centimeters in the textual part, and the inner margins approximately 2.0 centimeters. In the *cifra* part, the outer margins are 2.2 centimeters and inner margins 2.2–2.5 centimeters. The dimensions of the printed area of a page are the same as in Madrid, R.9279, i.e., about 145×250 millimeters in the textual part and 152×255 in the musical part. After the unnumbered folio with the title, the signatures are § 2-§ $4+A-N^2$ in the textual part and $A-Z^4+Aa-Zz^4+Aaa+Eee^4$ in the musical part.

The quality of the paper is thin. However, the paper of this exemplar feels slightly stiffer and more like parchment than the paper of the other Madrid copy. This can be explained at least partly by the differences in binding and present condition of the two exemplars. The marks of the vertical chain-lines can be seen clearly in R.14069 and the pattern of the laid-lines is generally dense. From the varying distances of the chain-lines, it can be concluded that in this exemplar, too, the paper comes from at least two different batches. Usually the distance between every two chain-lines on a page is about 2.5 centimeters, but on some folios it is 3.0 centimeters. The paper is yellowish and translucent. In this exemplar, as in the previously described one, the quality of printing is very uneven. To give some examples, the print on folios 21r and 42v–46r of the *cifra* part is dark, but on folios 79r and 122v–123r the print is very light.

This exemplar is not in as good condition as R.9279. Several corners of folios have been torn off, some of the pages have turned yellowish, many folios are wrinkled and their edges have been rolled up, and numerous pages have blots and flecks. The lower edge of one of the folios with tears (fol. 142) has been neatly patched with a piece of paper.

The book has been bound more awkwardly than R.9279. The light brown cover is probably parchment and the surface of the book is uneven, perhaps the result of humidity.

¹⁴ For some reason, this exemplar was not found through the main card index of the Biblioteca Nacional, although all the entries should be recorded there.

¹⁵ These numbers are found in the lower recto corners of the folios.

¹⁶ Both the textual part and the musical part have their own sets of numbers, beginning with number one. In both cases, the folio numbers are found in the upper recto corners.

¹⁷ The description of the printed area of a page includes the running titles.

The covers have been fastened by being sewed to the folio gatherings with thin leather strings. The back is not reinforced with a piece of wood as in the other exemplar, and consequently, R.14069 feels lighter in weight than R.9279. The binding has been done more loosely than the binding of R.9279. As a result, the folios are somewhat difficult to turn. Some folios are not squared with the cover, with the peculiar result that they appear to slant toward the right. In most such cases, the text on a page is "leaning towards" the lower outer corner of a folio (e.g., in folios 3–5 of the *ADVERTENCIAS* and folios 5 and 21–22 of the *cifra* part).

The title of the book, "Facultad orgánica," appears to have been painted by hand on the back of the book in beautiful pseudo-gothic style dark brown letters. The initials of both words of the title are more decorative than other letters. The maximum height of the text is three centimeters and the width is 24 centimeters. Aside from the red edges, which have lost much of their color, there is no further decoration on the outside of the book.

6 Watermarks of Madrid, R.14069

R.14069 also contains watermarks in abundance. The first watermark is found on the title page and the last one on the last printed page, folio 204. Inner pages, too, bear numerous watermarks. All the watermarks of Madrid R.14069 can be said to represent the same basic type, consisting of a Latin cross inside a drop-like figure. (The majority of the watermarks in R.9279 are also of this type.) There is some variation in the size and shape of these watermarks. The two largest, for example, found on folios 24 and 194 of the *cifra* part, are 3×6 cm in size. Some watermarks are narrower and shorter (e.g., fol. 104: 2×5 cm; fol. 186: 2.2×4 cm). There are also differences in clarity between the watermarks.

The total number of watermarks in R.14069 is at least 109, twelve of which appear in the textual part (the title page included) and 97 in the musical part. Six of these watermarks, that on folio 9 of the textual part in particular, are barely visible. Three of the other obscure marks are in the textual part on folio § 4, as well as on folios 1 and 26, and two in the *cifra* part, on folios 157 and 163. In comparison with the other Madrid exemplar, the total number of watermarks is approximately the same. The main difference is that all the watermarks of R.14069 represent the same basic type (with variations), but in R.9279 three clearly different types can be discerned.

7 Problems with Folio Numbers in Madrid, R.14069

In the Madrid exemplar R.14069 of the *Facultad orgánica*, there are the same kinds of problems connected with folio numbers as are found in R.9279, namely blurred and

¹⁸ See the group of watermarks numbered 5677–5704 in Briquet 1923: *Les Filigranes*. Deuxième edition, Tome deuxième. Leipzig: Verlag von Karl W. Hiersemann.

nearly or completely illegible folio numbers together with erroneous and missing folio numbers. In addition, there is also one instance in which two folios have been misplaced; consequently the numbering of folios appears to be wrong. See *Appendix F* for detailed information concerning problems with folio numbers in R.14069.

8 Corrections and Additions Made by Hand in Madrid, R.14069

R.14069 abounds in handmade corrections and additions. These markings are made in ink and are of several kinds. Some of the markings – mainly corrections and short additions – are common to both Madrid exemplars. Most of the notations made in ink and by hand to the other Madrid exemplar, R.9279 (see *Appendix E*), also appear in R.14069, with the exception of the markings in R.9279 on folios 54 and 86 and at the very end of the book.

In comparing those markings that are practically the same in both exemplars, two aspects are noteworthy. First of all, the little numbers referring to different *PVNTOS* of the *ADVERTENCIAS* on the verso of folio 1 of the *ADVERTENCIAS* have been added to both Madrid exemplars by hand, although in clearly different hands. Secondly, an individual sign of B-flat has been added by hand to both exemplars in the third bar of the last system on folio 79v. It is very probable that the marginal numbers and the B-flat sign were added to the exemplars in the course of printing, apparently at the same time.

9 Additions Unique to Madrid, R.14069: Musical Additions

Besides the markings that are common to both exemplars, R.14069 has various kinds of additions not found in R.9279. Among them are individual marks, signs, letters, words and little drawings. Sometimes they are found on the printed text, sometimes in the margins, and sometimes between the staves in the musical part of the book. Nevertheless, perhaps the most interesting additions are various fragments of music that have been written on the empty staves available at the end of many *tientos* of the *Facultad*.

There are fifteen musical additions in R.14069 written in *cifra*, with two exceptions. On folio 107r, three staves have been combined by vertical lines added by hand, and a fragment of a bass line consisting of four bars has been written in modern notation. Only in the first bar are there also upper voices above the bass. The second musical addition that is not written in tablature is found on folio 122r, where a Gregorian melody has been written on one line in notes of equal time values (the brevis) with the text "*Et in terra pax hominibus bonae voluntatis laudamus te benedicimus te*" under the melody.

The thirteen fragments written in *cifra* vary in length from about two to little more than five lines, with the exception of one occasion where only one bar of *cifra* is added to the end of a *tiento* (fol. 124r). Three of the longer fragments do not have titles (fols. 131v, 189r, 198v) but the rest have been given the following names: *Pasacalle de 3*^o tono (fol.

6v), Sacris [solemniis] (fol. 11r), Gloria (fol. 14r), Xácara 1^a [Jácara] (fol. 22v), Canzón (fol. 39r [=33r]), Pasacalle (fol. 47v and fol. 56v), Canzón/Canzión [Canción] (fol. 101v) and Segunda Partida (fol. 149v).

There is the possibility that at least some of the little pieces and the fragments added to R.14069 in *cifra* were once used in church services. However, without a careful transcription and study of these fragments, only guesses can be made as to their function.²¹ But, from the sheer existence of such additions together with the worn-out appearance of the exemplar, it can be concluded that the copy was once in frequent use by its owner.

Yet R.14069 is not the only exemplar of the *Facultad orgánica* that has handmade additions, including fragments of *cifra*. In the most recently found of the three Spanish exemplars, that of the Museo Marinero of Bueu, *cifra* is written in the empty staves following many of the *tientos* (Preciado 1975: 17). Besides the already-mentioned additions to R.9279, one of the two exemplars of the Biblioteca Nacional of Lisbon²² also has handmade markings, as does the exemplar of the Real Biblioteca da Ajuda in Lisbon²³ (Kastner 1948: 30). The latter exemplar is unique in that it includes a manuscript appendix of eight pieces written in *cifra*. Judged by the style of language used and by the inclusion of pieces by Spanish composers, some of whom lived in Lisbon, the appendix probably was added by a Portuguese organist who was a contemporary of Correa and worked in Lisbon (ibid.: 12).

Among the pieces of the manuscript appendix of the exemplar of Ajuda, there are two pieces by [*Diego de*] *Alvarado* (fols. 206 and 212v–214v), a 28-bar fragment of Correa's *Tiento V* transposed by the anonymous author of the appendix (fols. 206v–207), one piece by *Estacio* [*de Lacerna*] (fols. 207v–208v), two by *Anónimo* [anonymous composer] (fols. 209v–211 and 216v–217v), and one by [Jerónimo] Peraza (fols. 215v–216v) (Kastner 1952: 242–276).

¹⁹ On folio 56v, the title *Pasacalle* has been crossed out.

²⁰ In Dionisio Preciado's otherwise thorough list of musical fragments added to R.14069 in his article "Un nuevo ejemplar de 'Facultad orgánica' de Francisco Correa de Araujo," the *cifra* addition on folio 198v is not mentioned. The folio number 182r given by Preciado to one particular addition of three lines of *cifra* should be 189r (Preciado 1975: 17).

²¹ Because a transcription of the said pieces and fragments in cifra goes beyond the scope of this study, it has to be left to a later date.

²² Biblioteca Nacional, Lisbon, Reservados 377 (Kastner 1952: 25).

²³ Real Biblioteca da Ajuda, Lisbon, R.B.A. 38-XII-27 (ibid.).

²⁴ According to Kastner, it is possible that the last piece of the appendix by an anonymous composer could be attributed to Jerónimo Peraza (ibid.: 18). Jerónimo Peraza Sotomayor was the older of the two Peraza brothers and was born a few years before 1564. He worked as organist at the Cathedral of Seville from 1573 to 1579 before moving to the Cathedral of Toledo, where he was organist until the year of his death, 1617. (Ibid.: 15.) Jerónimo's younger brother, Francisco, was born in Salamanca in 1564 and died in 1598. Francisco Peraza was organist at the Cathedral of Seville from 1586 to 1598. (Ibid.: 16.)

²⁵ A reference is made here to the manuscript appendix of the Ajuda exemplar that Kastner included in his first edition of the *Facultad orgánica*, published in the series Monumentos de la Música Española by Instituto Español de Musicología, Barcelona: 1948 (Vol. VI), 1952 (Vol. XII), transcribed into modern notation. The manuscript appendix is found in Vol. XII: 242–276. Unfortunately, the said appendix was

10 Other Additions Unique to Madrid, R.14069

Besides the *cifra* fragments added by hand to R.14069, the exemplar contains numerous other additions. Among the most frequent are the remarks in the musical part of the *Facultad* specifying that a piece (or a part of it) has been *trasladado* [transcribed, copied; perhaps also transposed]. Sometimes these indications are written in the outer margins before the beginning of a piece (e.g., fols. 102, 127v), more often at the end of a piece (e.g., fols. 84, 96v, 111v) and sometimes also in the course of a piece (e.g., fols. 111, 137). Many times the word *trasladado* is preceded with the word *esta* [this] (e.g., fols. 110v, 129v). There are also numerous instances of the single word *esta* being written at the beginning of a piece.

It is impossible to know with certainty what the numerous *trasladado* indications mean. Perhaps the user of the particular exemplar studied the music of Correa by copying it by hand or perhaps he copied pieces into another book or on separate sheets of paper for practical purposes or to give them to someone else. Santiago Kastner also suggests the possibility that somebody had transcribed *tientos* of the *Facultad* into another type of notation from the *cifra* tablature (Kastner 1948: 14).

Many times little decorative flourishes have been added to the ends of staves in R.14069 (e.g., *cifra* part, fol. 2). There are also little crosses, signs resembling sharp signs and tiny sets of squares scattered over the *cifra* part between the staves. Often these seem to have been used to mark off certain sections of a *tiento* – perhaps for playing, copying or transcribing pieces. For the same purpose, simple hook-like flourishes or symbols have also been used and drawn in such a way that they extend straight from the printed bar lines.

On some folios of R.14069, letters, individual words and even phrases can also be found. The significance of the shorter and often unclear scribblings mostly remains unclear. However, one of the few longer phrases is of particular importance because it gives us a proper noun. The difficult if beautiful calligraphy has been transcribed by Dionisio Preciado. All along the outer margin of folio 103v one finds the following words (Preciado 1975: 16):

Esto lo asentó fray José Madaria, organista mayor de esta real casa.²⁶

Fray José Madaria was the organist of the Real Monasterio de San Martín in Madrid and was the owner of the particular exemplar of the *Facultad orgánica*, at least for some time (ibid.).

The most amusing of the additions made by hand to Madrid, R.14069 are the three drawings on folios 121v, 170r and 181v. The first one of these is a little human figure drawn in the outer margin of folio 121v. The figure could represent a monk. The drawings

omitted from the later editions by Kastner.

²⁶ It seems to me that in the original text it reads "*organista mayor en esta real cassa*" [*in* this royal house]. The double *s* belongs to the old orthography.

on folios 170 and 181v resemble each other. The second is a key to understanding the first. In the second drawing an organist is playing at the keyboard. Upside down, divided by the drawing, is written $un\ \delta r//gano$ [the organ]. The organist is pictured as if he were being seen from above his instrument. The drawing on folio 170 presumably also represents an organ, this time without an organist.

APPENDIX D

Problems with Folio Numbers in Madrid, R.9279

Blurred and Illegible Folio Numbers

All the folio numbers that are unclear or illegible are found in the musical part of R.9279.

Nearly or completely illegible folio numbers:

8, 43, 56, 90, 143, 164, 175 and 196

Unclear folio numbers:

31, 42, 92, 154, 168, 183, 192, 195 and 197–198

Erroneous Folio Numbers

Incorrect folio numbers are all in the musical part of R.9279.

Folios 33–36 have been erroneously numbered folios 39–42.

Folio 53 is followed by another folio bearing the same number. The second folio 53 is an error which has been corrected by hand in ink in Madrid, R.9279.

Folio 63 has the erroneous number 85.

Folio 68 also has the erroneous number 85.

Folio 70 has been incorrectly numbered 69.

Folio 193 has the erroneous number 192.

Missing Folio Numbers

Both instances of missing folio numbers are in the textual part¹ of R.9279:

Folio 3 of the *ADVERTENCIAS* has no number.

Folio 25 of the chapter EL ARTE DE PONER POR CIFRA is unnumbered.

¹ In the course of this dissertation, the term textual part refers to the chapters that precede the musical part – not to the brief prefaces to the *tientos*.

APPENDIX E

Markings Made in Ink and by Hand in Madrid, R.9279

- **Folio 1** and **1v**, *ADVERTENCIAS*. In this introduction to the *ADVERTENCIAS* proper, numbers referring to the different *PVNTOS* that follow have been added in the right-hand margin. The numbers on recto are possibly printed, but those on verso are clearly written by hand.
- **Folio 3** (mistakenly unnumbered), *ADVERTENCIAS*. The first two letters of a word "*Tonos*" seem to be written in ink and by hand in both of the titles for a table which contains modes used in plainchant.
- **Folio 6v**, *PVNTO DVODECIMO*, line 4. An ink line has been drawn through the word "ascendentes," which, consequently, has remained barely legible. The original sentence reads: "Falsa de numero es, la que se comete entre dos numeros, o signos contiguos, [ascendentes], y contrarios."
- **Folio 9**, *PVNTO QVINZE*, line 9. A line is drawn through the word "*parcial*" which nevertheless has remained legible.
- **Folio 26**, *EL ARTE DE PONER POR CIFRA*. On line 15, a *cifra* number of *fefaut agudo* has been inserted in the text by hand. All the other tablature numbers that appear within the text on this folio have been printed.
- On line 24, a printing error has been corrected by hand. In the wrongly spelled word "guarpando," the letter p has been replaced by the letter d.
- **Folio 54**, musical part. Folio 54 has erroneously been numbered 53. The wrong number has been corrected with an ink pen.
- **Folio 79v**, musical part. In the 3rd bar of the last system, a sign of B-flat has been added below the 5th bass note, which is logical, looking at the bass line in the two previous measures.
- Folio 86, musical part. In bar 2 of the 3rd system, someone has removed an accidental from the tenor part (g1) and written a sharp by hand below the second bass note (f). Changing of the place of the sharp sign would not have been necessary since the accidental obviously belongs to the f of the bass line. Whoever has changed the place of the accidental has evidently tried to make the notation more graphic, writing the accidental sign below the note to be chromatically changed. In the original notation, the sharp sign has been written above the note to which the sharp sign belongs.

A word "ojo" has been written under the beginning of bar 2 of the 4th system and similarly under the beginning of the last bar in the 5th system.

In between systems 4 and 5, in the right-hand margin of the folio, a word, probably "antes," has been written by hand and later crossed out.

The end of the book (following the empty folio that bears a watermark). On the recto side can be found a small, handwritten marking in the upper right-hand corner of the folio. The marking seems to consist of the number 75 followed by two letter-like figures that have been written one underneath the other. The upper figure has the appearance of the letter a and the lower, of the letter m or n.

^{1 &}quot;Ojo" is an imperative meaning "note", "observe" or "attention."

^{2 &}quot;Antes" means "before" or "preceding."

APPENDIX F

Problems with Folio Numbers in Madrid, R.14069

Blurred and Illegible Folio Numbers

Most of the unclear or illegible folio numbers in R.14069 are found in the musical part.

Nearly or completely illegible folio numbers:

ADVERTENCIAS: 9; cifra part: 16, 56, 86, 143, 151, 164, 196

Unclear folio numbers:

ADVERTENCIAS: 5, 8; *cifra* part: 8, 32, 50, (the first) 53, 79, 85, 89, 136, 153–154, 157, 159, 168, 172, 175–176, 178, 180, 183, 189, 190–191, 195, 197–198, 202

Erroneous Folio Numbers

Incorrect folio numbers are all in the musical part of R.14069. The errors in numbering are identical with those found in the other Madrid exemplar, R.9279.

Folios 33–36 have been erroneously numbered folios 39–42. In addition, the number 42 is unclear.

Folio 53 is followed by another folio bearing the same number. The second folio 53 is an error.

Folio 63 has the erroneous number 85.

Folio 68 also has the erroneous number 85.

Folio 70 has been incorrectly numbered 69.

Folio 193 has the erroneous number 192.

Missing Folio Numbers

Two of the three instances of missing folio numbers are in the textual part and one is in the musical part of R.14069.

Folio 3 of the *ADVERTENCIAS* has no number.

Folio 25 of the chapter *EL ARTE DE PONER POR CIFRA* is unnumbered.

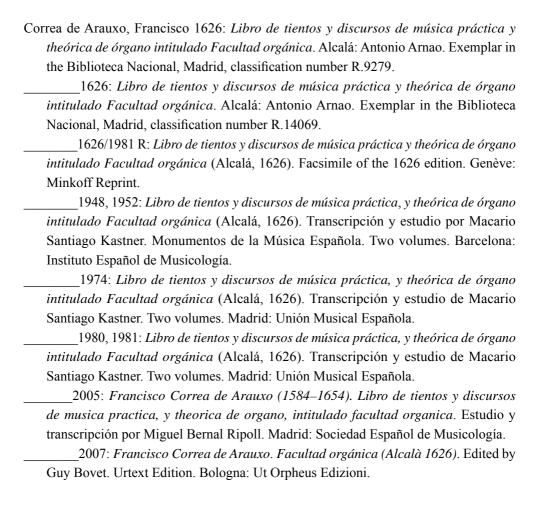
Folio 12 of the *cifra* part has no number. (There is a small hole in place of a folio number.)

Misplaced Folios

In R.14069, folio 113 is followed by folios 115 and 114, respectively. (Folio 116 comes after folio 114.) In this case, all the mentioned folios have correct numbers but 114 and 115 have been misplaced.

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