

Ava Imogen Grayson *Notational Actants*



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Notational Actants

New Musical Approaches Through Material Scores

NOTATION The musical score is seldomly discussed as a material entity that has the ability to influence the interpretation of a work through temporal degradation or alteration. Researcher and musicologist Giovanni Cestino—whose work has functioned as the main point of departure for this research—is explicit in pointing out this deficiency in music studies:

“Scores are artifacts *in* performance, even if performance studies often overlooked their materiality in the discourses on performers. Deprived of their *status as thing*, scores are like dusty relics of an old ideology of music—if not of an “old musicology”—where the risk of summoning such textualist bias always has the potential to creep in.” (81)

Cestino comes to a similar conclusion as I have when looking to Jane Bennett’s work on vital materialism or Tim Ingold’s commentaries on material culture: namely, that humans and matter (and humans *as* matter) are entangled in a constant flow of action and engagement. Through this lens, it is natural to include the score within this material ecology.

Through the development of what I refer to as ‘notational actants’, I wish to better understand the performance practices that emerge when the material (and subsequently temporal) specificity of a score is brought into focus: working with substances that encourage handling but also materially evolve in noticeable ways over weeks or months, these notational actants also have the potential to change or obscure what information they may perceptually convey in a very different way than 2-dimensional paper scores. I use the word ‘actant’ to move beyond the limitations of the artifact, and I look to authors such as Bennett and Ingold to support this viewpoint. Ingold, for instance, refers to the shortcomings of material culture as the study of artifacts and rather supports philosopher Gilbert Simondon’s concept of *individuation*—a process of ontogenetic growth of sorts, which applies to seemingly inanimate things as much as animate (qtd. in “Ecology” 61). I also use the term ‘actant’ rather than ‘agent’: whereas these materially-based scores affect and influence other entities, they do not do so with conscious and deliberate intent (“Actor-Network Theory” 373). Similarly, Cestino clarifies that this mutual participation is not synonymous with equal agency: the score is a participatory actant, engaged in an action-based flow with the performer (87).



FIGURE 1 A video entry from saxophonist Heli Hartikainen's ongoing diaries, dated February 9, 2024. Hartikainen adds the written notes: "It started as a wide circular movement that speeds up to the smaller 'curves'. Eventually, I start every once in a while 'falling through' the score and starting the circles on the other side. Rougher surface calls for growling sound."

SEMIOTICS At this point in my research, a main challenge is how to approach the topic of representation and semiotics: in this and my previous work, I have been attempting to find a baseline, so to speak—a shared understanding that is broader than traditional notational methods. This approach in finding a so-called baseline necessitates a distancing from methods of communication that rely heavily on notational literacy. This also ties in closely with a shift from my initial training as a chamber music composer to that of a sound artist. To paraphrase Alan Licht, music addresses us on a human level—as in, a member of a culture—whereas sound art has the potential to speak to us as a denizen of the planet (14).

Though my aim is to seek a broader shared understanding, I strongly wish to avoid perpetuating ideas of musical universality, such ideologies that are still widely pervasive and highly problematic within Western pedagogy. My approach draws upon what I have gathered from previous work with both communication and translation in the creation and interpretation of graphic scores, as well as gestural mapping in the case of the sound yoga series I worked with as my master’s thesis (Grayson 30–36). I am not under the presumption that even concepts such as directionality are understood in ways that are universal or even necessarily experientially translatable,* but at least across many different demographics within Western culture there may be certain mappable concepts that can be readily grasped without concerning themselves so much with issues of exclusion, ableism, or educational and linguistic indoctrination.

I have wondered how to reimagine and expand upon the notion of a musical score through the lens of vital materialism and design whilst avoiding simply creating another kind of exclusionary musical language. I believe, however, that any set of ideas repeated enough within the context of music making can bring about some kind of musical language—I agree with sound artist and composer Annea Lockwood

* For example, the Northern Wintu people who live in what is now known as Northern California have spatial concepts of self that I presume to be very different from that of the readers of this work. The anthropologist Dorothy D. Lee accounts that in their language “the terms left and right refer to inextricable aspects of his body and are very rarely used. I think that only once the term left occurs in my texts, referring to a left-handed mythical hero; I cannot remember any occurrence of the term for right. When the Wintu goes up the river, the hills are to the west, the river to the east; and a mosquito bites him on the west arm. When he returns, the hills are still to the west, but, when he scratches his mosquito bite, he scratches his east arm. The geography has remained unchanged, and the self has had to be reoriented in relation to it” (53).

that “all styles of performance music become languages, even Cage’s anti-linguistic works, as people become more and more familiar with his intentions” (Aldrich 15).

There could be a way to accept this propensity toward the linguistic while nevertheless keeping a distance from it: by reframing the conveyed content of a notational actant through the lens of affordance theory. Looking to extend the ideas of James Gibson, Don Norman, and Bruno Latour concerning material properties by way of vital materialism, a specific matter acts by expressing potential ways to be intructed* with, and the perceived and/or intended signifier is the result of the interaction of human agents and non-human actant.

Gibson’s original usage of the concept of affordance refers to what kind of provisions an environment contains that are then used by its animal inhabitants, but this term has since been used in many fields, the most relevant to this exposition being interaction design (285). In the late 1980s, Don Norman redefined the term within a narrower context, dealing more specifically with the perception of what can be done to something:

Consider a pair of scissors: even if you have never seen or used them before, you can see that the number of possible actions is limited. The holes are clearly there to put something into, and the only logical things that will fit are fingers. The holes are affordances: they allow the fingers to be inserted. The sizes of the holes provide *constraints* to limit the possible fingers: the big hole suggests several fingers, the small hole only one. The mapping between holes and fingers—the set of possible operations—is suggested and constrained by the holes. (Norman 12)

While working with these notational actants, it has become obvious that all materials also have affordances. It is this reevaluating of what Ingold calls the ‘textility of making’ over a forcefully-imposed formal conception that echoes in my concept of all materials also possessing affordances (“Textility” 92–93). This is something that everyone experienced with some kind of hands-on making practice tacitly knows, whether it be baking bread, woodworking, or sculpting. Ingold explains this silent knowledge (*hiljainen tieto*) of the craftsperson:

What you are doing is finding the grain; and then the axe or the wedge will follow it. The line it follows is one that has already grown into the wood when

it was part of a living tree, as part of its process of growth. Thus the material you are working with is not formless, nor is it homogeneous. It already *has* lines of growth, it has a *grain*, and the maker is not someone who is posing form on material but is rather one who finds the grain and then bends it to an evolving purpose. This, I think, is what making is all about: it's not imposing form on material but finding the grain of the way the world is becoming and then turning it this way or that in order to make it match what your own evolving purpose, as a designer or maker, might be... [T]he artisan, the maker, the crafts-person is a person who has to *follow the material*, to follow the way it goes. And in following it, they are guided by an intuition in action. ("Ecology" 62)

It is the combination of Latour's constructivist stance of an intra-active* flux between actants with Ingold's ideas of silent knowledge and the meshwork of recursive makings that provides a strong framework for developing my research methodologies.

* I use the Baradian term 'intra-action' to further highlight the constant interplay and dynamism of various acting bodies (141).

MATERIALITY

*Oh irrevocable
river
of things:
people will not
say that I only
loved
fish
or plants of the rainforest or meadow,
that I only
loved
things that leap, rise, sigh, and survive.
It is not true:
many things gave me completeness.
They did not only touch me.
My hand did not merely touch them,
but rather,
they befriended
my existence
in such a way
that with me, they indeed existed,
and they were for me so full of life,
that they lived with me half-alive,
and they will die with me half-dead.*

(Neruda 501)

[W]hen we talk about the properties of materials, they are really stories of what happens to them. In a sense, we could say that materials don't really exist; rather they carry on, or perdure, through time. ("Ecology" 63)

As a musician, I look at the paper scores I have been working with throughout the years and see very clearly what Cestino discusses: the physical score changes and is changed in subtle—albeit noticeable—ways. This of course impacts its role in performance. Certain memories and sensations arise when noticing the edges of a page worn down, the finger markings erased or redone as new ways of approaching a piece are found, or a section having loosened from its binding

FIGURE II A three-dimensional finger labyrinth (and precursor to the current work in this article). *Photo: Ava Imogen Grayson*



FIGURE III Various notational actants and finger labyrinths on display at Mustarinda's open house, 20.5.2023. *Photo: Jacob Bertilsson*



FIGURE IV Two-handed notation made from discarded beeswax. *Photo: Jacob Bertilsson*





FIGURE V A one-handed notational actant made from various types of air-dry clays. *Photo: Ava Imogen Grayson*



FIGURE VI Detail of two-handed notation. *Photo: Ava Imogen Grayson*

due to the pages being turned and turned again. On a level entangled with the musical content they can transmit, these objects also have their own lifespan external from that of their human intra-actors.

Many of my choices concerning specific materials come from thinking about what it means to manipulate and be manipulated by materials. I have found myself predominantly working with materials not traditionally used for creating a 'finished product' in fine arts. The appeal is their constant presence in everyday life and how easily they are overlooked: to be able to cook up something in an apartment kitchen seems to me a rather neglected sort of impressiveness. An industrially-produced actant with newly-developed materials is a possibility, but there is something to be said for mundane substances approached as remarkable technologies in and of themselves: ones often used as a placeholder before a finished object (such as wax used for various metal casting processes) or for the creation of things typically associated with children's crafts, handicraft, folk art, or women's handiwork.

By working with these materials and exploring the possible performance practices that emerge throughout this research, I also wish to ask questions concerning where the boundaries of a score's functionality reside as they change through time. I have already encountered this thought when these scores are repeatedly transported, loaned, or handled: throughout an actant's existence, what would actually constitute 'damage' or 'brokenness'? What are they when they are no longer a score?

In practice, my experience has been that making a score of this nature is very much like the artisanal work that Ingold refers to: it is predominantly a material negotiation. A push toward this way of working has brought thinking alongside recycled waxes, clay, wood, and homemade bioplastics, thus creating a vastly different outcome and relationship between composer and composition. In the act of negotiation, I am surprised at the need to unlearn and relearn my previous education within Western music tradition. I aim to expound further on the topics in this section in subsequent publications.

ATTUNEMENT

[Leroy Little Bear] tells me to think of the human brain as a station on the radio dial; parked in one spot, it is deaf to all the other stations, he says; the animals, rocks, trees, simultaneously broadcasting across the whole spectrum of sentience... That's why I call on the eagle. I call on the rocks, the plants and so on to tell us knowledge that we would not otherwise pick up—the knowledge that is beyond our frequency range. (Hill)

There are events. I never act; I am always slightly surprised by what I do. That which acts through me is also surprised by what I do, by the chance to mutate, to change, and to bifurcate. (Pandora 297)

A sense of mutual embodiment, of the shared space, time, and bodily presence of performers and observers, would seem to open the door to specific kinds of empathy. (Iyer 80)

As a sound artist, pedagogue, artistic researcher, Deep Listening advocate, and queer/genderqueer person, the values that shape my methodology are encapsulated in the above quotes. A large portion of my aims are to develop and share a praxis of attunement in the pedagogical and institutional roles I already inhabit: both the scores and the music that a performer can produce with them are a by-product of an ontologically-entangled engagement between all actants and parallel, simultaneous ways of knowing.

It has stuck with me for many years that the etymology of the verb 'listen' in Slavonic languages is also the same root as the word 'obey'. The act of obeying does not necessitate force: by attuning ourselves in the present to an interaction through listening (in the case of this work, sculpting hands-on with materials or performing and idea-building with others), we obey the terms of the context, the requests of the other, the unfolding and newly discovered choices and sensations of knowing from moment to moment.

The focus of my research methods is to find plural access points in order to build up a body of understanding: each direct encounter between any two or more actants within this framework is imbued with possible unknowability, and to force that knowability is both violent and futile. I work with concepts of narrative inquiry, diffractive research approaches, iterative cycles of workshopping, and atelic material processes in order to create what I feel is an appropriate methodology.

One approach to addressing the musical score as a manifestation of Europatriarchal, colonialist ideologies is to disrupt the form. I have been working with graphic scoring and sound poetry practices for many years, and though some approaches in these genres push toward doing away with normative aspects in the Western tradition—such as linearity, staff-based notation, and striated pitch, for example—I still find that the predominant visuality of the score connotes issues of what sound studies and media theorist Jonathan Sterne calls ‘the audiovisual litany’ (15). In essence, what Sterne refers to is the historical tendency for sound and sight (but oddly not sound and light) to be juxtaposed in an either/or comparison: aurality as internal, visuality as external; sound as immersive, vision as directional; experiential versus informative, etc. This litany is something I find particularly insidious: even within some of the most respected musical institutions, these ideas are imparted to students not as ideological bent but as physical fact. Says Sterne:

In addition to its specious zero-sum reasoning, the audiovisual litany carries with it a good deal of ideological baggage. Even if that were not so, it would still not be a very good empirical account of sensation or perception. The audiovisual litany is ideological in the oldest sense of the word: it is derived from religious dogma. It is essentially a restatement of the long-standing spirit/letter distinction in Christian spiritualism. (15)

These notational actants are a means for those engaging with a score to do so non-dualistically: although tactility is a decidedly dominant feature, other senses are not excluded as valid methods of observation and interpretation.

There are many parallels between Western mapping practices and the creation of more conventional musical scores: namely, the diminution or heavy abstraction of corporeal engagement with the information represented. I have been working with concepts such as deep mapping that move beyond standard topographical approaches—as well as looking to cultures where narrative and geography are bound together—to better understand how narrative aspects and ‘extra-audiovisual’ knowledge can be transmitted and shared between those who engage musically with these actants.*

* The most relevant examples in the context of my own work are the Ammassalik wooden maps of what is now known as Tasiilaq, Greenland. In more recent times, these artifacts have been posited not

FIGURE VII A three-dimensional scan of one of the Ammassalik artifacts (including village names and landmarks). Uploaded to SketchFab by a Greenlandic user by the name ersersaaneq.



It should be noted that I do not intend to appropriate any of the Indigenous practices and concepts referenced. Rather, I look to their existence as proof of the various approaches that move beyond the boundaries of 2-dimensional paper cartography or score.

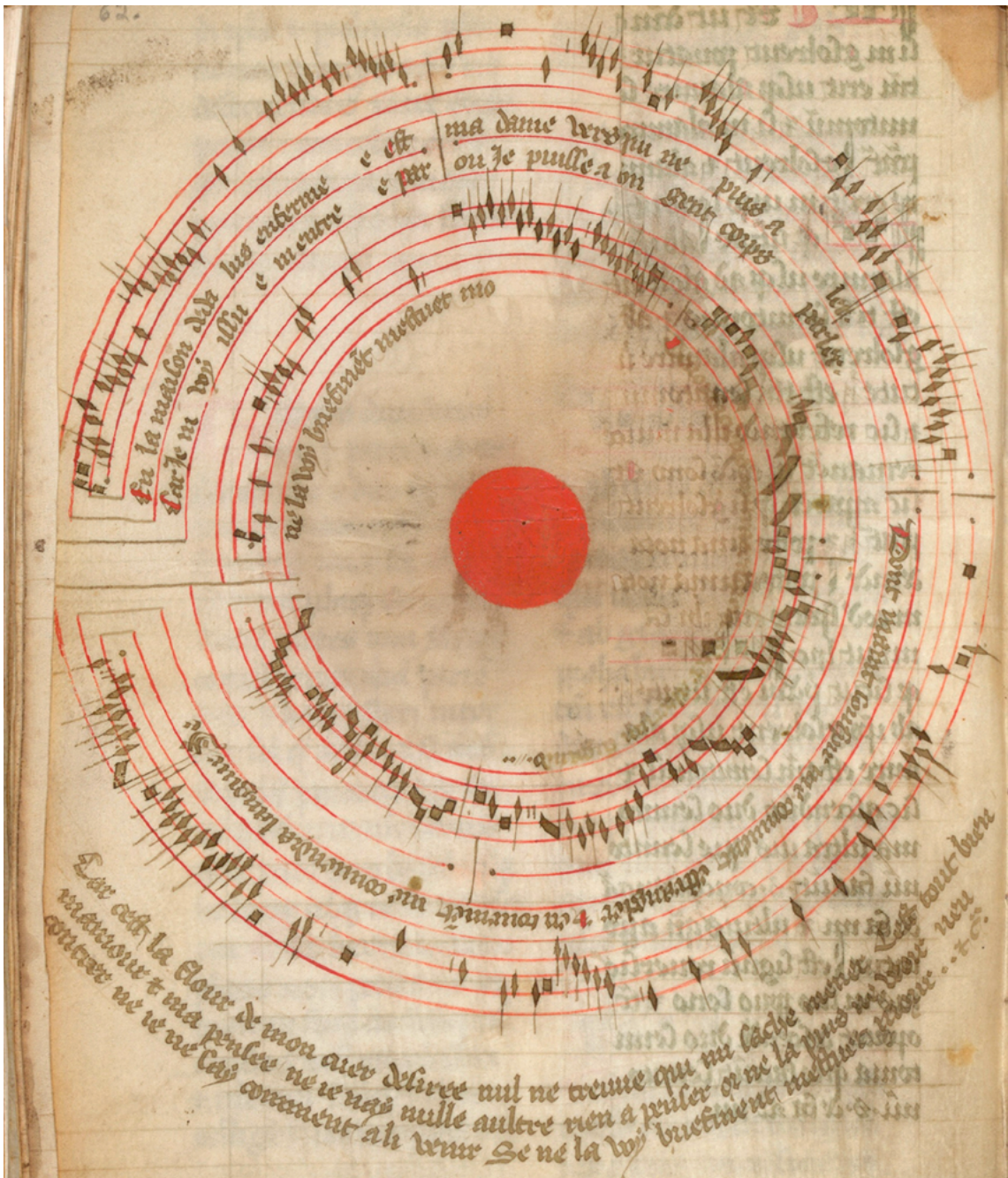
be maps in the sense of permanent reference objects, but rather as aids used to practice a mental map in conjunction with storytelling (Harmsen). Other cultures intermingle the act of map-making with narration, as well as inextricably including music-making and cosmology (as is the case with the song-lines of the Australian Indigenous peoples, and potentially the singing traditions of the Nenet people of Arctic Russia (Vallikivi 24).

MIND-WALKING My interest in mapping and notational practices that move beyond 2-dimensionality is based not only in Indigenous practices and contemporary deep mapping methods, but also in the *mappae mundi* of medieval Europe. Through studying these maps and investigating the concept of European walking labyrinths, I have come to realise that Western traditions in mapping and scoring have changed dramatically over the centuries. These *mappae mundi* were not merely a descriptive, measured representation of distance or location (“Mind-walking” 18). Rather, they were a template prescribing a way in which places and their aspects were ordered, and it is in this way that they come closer in nature to the Greenlandic practice-based maps or recent deep maps than their later European counterparts.

Similar to the *mappae mundi*, this prescriptive approach can also be found in certain examples of early music scores (particularly those from the *ars nova* era in medieval France). I use the work *En la maison Dedalus* (see Figure VIII) as a particularly strong example of the embedding of narrative, place, and bodily action within the confines of a paper score. “The maze created by music and words locks up the main character of the song, the mythological figure Ariadne, who is a prisoner in the house of Daedalus—she is represented by the red dot” (Ellsworth 13).

In thinking about how worlding comes to play in the form of maps and how this translates into notating musical thought, I wonder about possible approaches to the act of implanting musical thought through a material negotiation. These notational actants, having an affordance of terrain, do the inverse of a tactile map: rather than demonstrating topographies and ordered aspects of ‘placeness’, they provide a terrain of materiality, from which the composer and performer can build an imaginal place expressed in the form of music.

FIGURE VIII Canonic Ballade on a Labyrinth, *En la maison Dedalus*. Anon. ca. 1375. Boston (US-BEm 744, fol. 31v).



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