

**Producing a meaningful difference: The significance of small creative acts in composing within online participatory remix practices**

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Recently emerging media environments offer extensive opportunities for artistic expression, social participation, and musical learning. Music audiences and musicians from different backgrounds can participate in music making and learning practices online, both by creating new works from scratch and by playing along with commercially produced content (e.g. Väkevä 2010; Miller 2012; Partti and Westerlund 2012). In online remix contests, in particular, participants have the possibility to edit, rearrange and extend professionally recorded songs, and to share and discuss the results with their peers in online communities (Jansen 2011; Michielse 2013). Established artists, ranging from such artists as Alicia Keys to bands such as Linkin Park, offer their songs for download in the form of separate instrument files. Participants are invited to rework these materials and upload the resulting derivative works on the contest website, where they can discuss the results with their peers. With the help of digital audio software programs, participating remixers strive to transform the existing songs by rearranging the tracks, adding

new sounds and melodies, or experimenting with the timbre or ‘feel’ of particular instrument tracks. Due to their focus on community interaction, as well as creative production and sharing, online remix competitions can be seen as manifestations of an emergent musical ‘participatory culture’ (Jenkins et al. 2006) within which participants collectively generate and rework cultural content. These participatory musical practices are often enabled by new media technologies, which allow amateur musicians to collectively interact with commercially produced musical content and communicate and collaborate with their peers in synchronous or asynchronous ways (e.g. Waldron & Veblen 2008; Partti and Westerlund 2012).

Because of their participatory nature, and the ways in which remixers collectively exchange and discuss different versions of songs, online remix contests are in this article understood to be essentially about the collective production, evaluation, and exchange of ‘*small creative acts*’ (Toynbee 2000; 2001). Following Toynbee’s (2001: 8) definition of the concept, the small creative act is here understood to result in ‘slight change to an existing text structure or performance code.’ Instead of regarding artistic production as a highly personal process based on an individual’s unique and creative inspiration, Toynbee views it as a an inherently *social* process within which musicians produce symbolic differences (see also Bourdieu 1993). These differences ‘matter in a particular taste community’ (Toynbee 2001: 8) regardless of how modest they may seem to an outsider to that community. Music makers add slight changes or extensions to an already existing field of works, for instance by purposely transgressing existing musical tropes and aesthetic conventions, or by placing them into new contexts. Over time, such musical interventions ‘accumulate and interact’ (Toynbee 2001: 8), thus giving rise to larger forms of creative change and innovation and eventually culminating in new oeuvres, techniques, idioms and genres. The understanding of creative music making, or composing, as an inherently

derivative and cumulative practice is not a novel idea in itself – having already been widely acknowledged and theorized especially in relation to folk music (Bohlman 1988; Lord 2000; McLucas 2010) and Afrodiasporic genres, such as jazz, blues, and reggae (Small 1987; Middleton 2000; Hebdige 2005 [1987]). New media technologies have, however, made it possible to *instantaneously* copy, manipulate and redistribute sounds on a large scale. With the help of digital audio software programs, participants in online music platforms are able to easily discuss, exchange, and meticulously compare any sonic, melodic, harmonic, or rhythmic differences between related works. These opportunities for creative music making can be viewed as having changed the ways in which small creative acts function and interact with each other. Furthermore, they have also enabled important new possibilities for, and understanding of, musical participation, learning and composing. Despite vivid debates pertaining to the implications that remixing might have, for instance, on copyright law or conceptions of the (legal) ownership of musical works (e.g. Dillon 2006; Demers 2006; Lessig 2008), research on the meanings of new online forms of collective production, exchange and evaluation of small creative acts is practically non-existent.

This article engages in a theoretical exploration of the role and significance of small creative acts (Toynbee 2000; 2001) in composing within online participatory remix practices. The concept of the small creative act offers a heuristic lens through which to investigate the significance of the processes of copying, transformation and manipulation in remixing. Understanding these processes, including the specific methods and techniques remixers use, in a deeper way is here viewed as providing us with insight into the values related to remixing as a participatory musical practice, as well as into the novel ways in which online music communities enable new kinds of (informal) learning practices. To illustrate these processes, as well as our theoretical viewpoints,

we will provide examples taken from an ethnographic case study of the international *IndabaMusic.com* online remix platform. The following section offers an introduction to the community, along with an account of the implementation of the study.

### **The case of the *IndabaMusic.com* online remix community**

The online community *IndabaMusic.com*<sup>i</sup> (hereafter abbreviated as *Indaba*) hosts several remix contests per month<sup>ii</sup>. In each of these contests, participants are provided with separate audio files of the instruments (such as drums, bass, piano, or guitar) from an original track. The participants are free to reuse these so-called ‘stems’ in their own mixes. They may manipulate the existing musical material by changing the actual sounds of the original stems, or re-perform and add new musical elements by using their own digital or (electro)acoustic instruments. The participants in *Indaba* contests often represent different age groups, nationalities, and levels of expertise in terms of formal training and musical instrument skills. During the competition, the participants upload their works-in-progress onto a discussion board, where they comment on each others’ work, compare different takes on the original song, and utilize the received feedback in further cultivating their own remixes. A typical remix contest on *Indaba* brings together some 200-300 remixers, and lasts approximately four to five weeks. The winner is chosen by the hosting artist, after which the participants move on to a new contest, hosted by another artist.

The ethnographic study of the *Indaba* community is a part of a larger research project on online music appropriation practices (Michielse forthcoming). Data for this qualitative case study

(Stake 1995) was collected from several remix competitions held on the *Indaba* online community during a period of 18 months in 2011 and 2012, by utilizing a (virtual) ethnographic approach (e.g. Hine 2000). The research data consists of online observations of the activities of the community – including online discussions, uploads, entries, submissions, comments and other forms of interaction – as well as semi-structured interviews with 21 remixers participating in *Indaba* remix contests. At the time of the data collection, the interviewees were between 18 and 46 years old and represented several different nationalities. The interviews were conducted via telephone and/or Skype, and lasted from 50 minutes up to 3,5 hours per interviewee, sometimes spread over several sessions. As the aim of the interviews was to focus on the participants' experiences, choices, and creative methods when working with their remixes, the use of a VoIP technology (e.g. Skype) proved helpful. VoIP made it possible for the researcher and participants to not only discuss topics verbally, but also to exchange visual information during the data collection. For example, the participants would at times utilize their cameras or the 'share screen' mode in order to share their works-in-progress, showcase their equipment, or point at specific elements of the digital audio software interfaces to the researcher. The data was analyzed using a bottom-up approach; first via more *in vivo* and descriptive forms of coding (Saldaña 2009), and by keeping as close as possible to the participants' own phrasings, and then gradually proceeding further by creating connections to larger concepts and theories. A continuous interaction with the participants, including the sharing and discussions of the initial findings with them, was considered to be an important part of triangulation procedures (e.g. Yin 1994; Stake 2006) in conducting conclusion drawing.

A previous article reporting on the case study of *Indaba* (Michielse 2013) explored the different competences and skills which remixers deploy and develop in online remix contests. In the

current article, we will focus particularly on the ways in which the *Indaba* remixers collectively discuss and exchange different takes on a single song, and the ways in which they appraise small similarities and differences in these derivative works. We will argue that small creative acts are being shared and exchanged in various ways within the *Indaba* online remix contests. Firstly, the contests offer novel forms of access to already existing musical works, creating opportunities to study and experiment with the effect of minor changes to specific elements of the original version of a song. Secondly, the online remix contests enable a collective and participatory form of appropriation, providing opportunities for in-depth comparisons and discussions on works-in-progress among the participants. Finally, the *Indaba* contests bring together a large amount of remixers within a rather small spatial and temporal frame, thus demanding a constant and precise positioning and repositioning of the participants in relation to each other. These arguments are further elaborated in the following sections. Finally, we will also discuss some implications that practices based on the idea of the small creative act have for learning to compose in online remix communities.

### **Developing aural discernment through novel forms of access to musical works**

Online participatory remix communities, such as *Indaba*, offer new forms of access to what Toynebee (2000), following Bourdieu (1993), calls the musical ‘field of works’: the common stock of songs, genres, and aesthetic conventions from which musicians can borrow and draw inspiration. In addition to fully developed tracks (i.e. recorded songs that have already been mixed and mastered), it is not uncommon for remix communities to also share and exchange

samples, remixes, and vocal tracks, which remixers can then further experiment and tinker with (see, e.g. Jansen 2011 on the *ccMixer* community). In the case of *Indaba*, even full multi-track files are available, giving remixers the opportunity to deconstruct and reconstruct the song by working with separate audio files, such as drums, bass, guitar and voice. Until recently, the possibility to delve into the musical ‘DNA’ of a song and work with the musical instruments separately has been a privilege of producers and sound engineers working in professional studios. With the rise of new media technologies, however, this opportunity has increasingly become available to general music audiences and amateur musicians. As a participatory opportunity, this largely resembles what Goldstein (2003 [1994]) refers to as a ‘celestial jukebox’: a virtual archive consisting of musical works in the form of separate building blocks rather than completely finished songs, imparting music audiences and consumers with the ability to obtain cultural objects to be dismantled and rearranged.

Multi-track files have made it possible to investigate specific elements of a recorded track. Remixers are able to focus on details related to the drummer’s choices in any given break; the bass line of the chorus; the background vocals during the verse; the BPM [beats per minute] of the drum track, and so on. During the research on *Indaba*, it became clear that remixers make use of this particular form of access by spending a considerable amount of time listening to and experimenting with separate audio stems, and striving to obtain an understanding of and feeling for particular instrumental parts and their qualities (see also Michielse 2013). These processes of exploration and manipulation are further enabled by digital audio software programs, sometimes in tandem with the remixers’ own (electro) acoustic instruments, and include various manoeuvres such as adding reverb to an instrument and/or editing out particular frequencies. Another popular activity among the *Indaba* remixers is to experiment with different

arrangements and chord progressions. Some would, for example, change major (minor) chords into minor (major) chords to see how the change affects the ‘feel’ of the song. Others would add instruments which were not included in the original version of a song, such as strings, piano, or horns, for example. Alternative arrangements like these can be achieved relatively quickly with current software programs and digital keyboards, even when the participant does not have access to real (electro) acoustic musical instruments.

Even though somewhat similar forms of musical interaction and experimentation with recorded music have been available for quite a while (consider mix-taping practices, music-minus-one recordings, or turntablism, among others), the availability of separate multi-track files and the ability to freely add and remove elements by using digital audio software entail opportunities for large groups of people to experiment with small productional interaction in ways previously unseen. The possibility to examine the effect of small creative acts on a song as a whole can be viewed as enabling the development of what Bennett (1980) calls ‘the recording consciousness’ (128). According to Bennett, the recording consciousness is the ability to predict and understand the potentialities of layering and recombining sounds, and working with recording techniques such as reverberation, delay, and equalisation. For Bennett, such consciousness can be developed by being exposed extensively to various types of recorded music and their conventions.

Naturally, as he was writing about the recording consciousness prior to the rise of new media technologies, Bennett’s theory did not include a reflection on the opportunities that increasing amounts of audiences now have to tactilely experiment with recording techniques. These opportunities to unpack and reconstruct commercially produced musical works can be viewed as furthering the building of such consciousness. In the context of a new media age, a more accurate concept explaining the development of a sound-related discernment could, perhaps, be that of



‘aural awareness’ as used by Hugill (2008; 2012, see also Michielse 2013; Partti 2014). The development of aural awareness, defined as ‘an ability to hear and listen both widely and accurately’ and to understand ‘how sound behaves in space and time’ (Hugill 2008: 4), is both a requirement for the remixer and a result of working in partnership with various technologies.

### **Growing into expertise through in-depth discussion and collective appropriation**

In addition to providing a specific form of access to the field of works, participatory remix communities also offer their members the opportunity to collectively appropriate a song. While collective appropriation has always been part of musical practices, particularly in folk and jazz, the way in which remix contests bring together such a large amount of related derivative works in a recorded, archived and easily accessible form, has produced a historically unique situation. In the remix contests on *Indaba*, it is not uncommon to see a couple hundred remixers working with the same exact source materials within a single online environment. These derivative works are then conveniently stored and presented, side by side, on the contest page. This makes it easy for the participants to navigate through each other's contributions in order to listen and re-listen to the works-in-progress, as well as to consult with each other at different phases of the remixing. Consequently, the *Indaba* remix contests are marked by lively and in-depth discussions and comparisons between the participants. This interaction between the participants on *Indaba* is further encouraged by the deployment of a specific commenting system. As soon as a participant listens to a track, a visualisation of the audio file in the form of a wave pattern appears. The wave pattern enables the participant to insert a comment at the exact place (and time) where the

particular sound occurs. Instead of commenting only at a general level (e.g. *'I like your entry as a whole'*), this process enables the participants to express their appreciation towards a *particular* beat, bass note, or instrument, as illustrated by participants' comments to each other during one of the contests. The comments<sup>iii</sup> address the inclusion of specific instruments; (*'Like that piano back there'*; *'this bass kicks ass'*); the use of specific sounds, including their timbral qualities and placement; (*'Really like the tone of the synth'*; *'that horn note is cool'*; *'That's a nice sounding kick [drum]'*; *'I'm loving the position of the claps'*); the inclusion of alternative chord progressions and keys; (*'Whoa!! [You] turned the chorus into a major chord'*; *'That minor chord works fine'*; *'Chord substitution is perfect'*); and the deployment of specific formal and structural aspects (*'Nice old style breakdown'*; *'nice intro'*; *'wild section here'*).

From a critical standpoint, some of the practices described above could, perhaps, be understood as forms of 'atomistic listening' (Adorno 2002 [1941]). However, while Adorno attributed this mode of listening to an inability of the masses to understand musical structure and comprehend musical works as a whole, in *Indaba* the focus on details can hardly be taken as a manifestation of musical inability, but rather as a deliberate choice to emphasize the *sound* rather than structure. Furthermore, the peer-evaluations not only showcase the participants' abilities to perceive small sonic nuances, but also to acknowledge the effort that other contestants have put into their tracks. We therefore argue that although most of the comments that the *Indaba* members post to each other are 'very short, and a few are little more than positive endorsements of the artist', as also pointed out by Pinch and Athanasiades (2011: 492) in their analysis of another similar online community, the comments on *Indaba* do have an important function in terms of the development of collective and individual musical expertise among the participants. Indeed, as stated by Jenkins and colleagues (2006), following Lévy (1997), the importance of the

ability to pool knowledge within a collective intelligence is emphasized in communities of participatory culture where ‘everyone knows something, nobody knows everything, and what any one person knows can be tapped by the group as a whole’ (Jenkins et al. 2006: 39). Rating and commenting on each other’s musical contributions can therefore be viewed as an important way for the *Indaba* remixers to establish and grow into a peer-review system that both benefits individual remixers in their efforts to develop their skills and also contributes to the collective expertise of the community.

### **Producing a meaningful difference through repositioning oneself relative to others**

As shown above, the collective and participatory appropriation practices of *Indaba* have consequences for the ways in which participants of remix contests can distinguish and discuss sound related similarities and differences. Moreover, they also influence the way participants position and reposition themselves towards the original work and each other. In order to be noticed by their peers, and to be able to produce a meaningful difference in an already existing body of derivative works, the remixers of *Indaba* strive to find a particular approach, a *musical niche* of a sort, which has not yet been occupied by other remixers. A comment by one of the *Indaba* remixers illustrates this:

I will most definitely look at the other remixers and check out what people have done and in what direction they have tried to lead that song and then maybe I will not do exactly the same (Mikko Renfors 29 January 2012 interview).

While seeking to find a specific place of one's own is a common goal for musicians in any genre (Toynbee 2000; 2001), in online remix communities, where large groups of people work within the same spatial and temporal context, such processes are very much emphasized. For example, the positioning and repositioning of the *Indaba* participants in relation to each other is illustrated in the way in which the remixers make use of, and distinguish between, a large body of genres and subgenres. Those unfamiliar with remix communities often associate remixes merely with dance music. As for the participants of the *Indaba* remix contests, it is clear that in order to stand out in a community of hundreds of remixers working with a single song, one is required to experiment with multiple genres and subgenres. As one of the remixers on *Indaba* describes:

You got guys who will rock and roll the track, they'll hip hop the track, they'll trip hop the track, they...., you got so many people doing different interpretations and then even in the dance genre itself you got someone who will disco it, or house it, or...., you know, they do it in so many different ways (Dub Johnson 6 November 2011 interview).

By employing their highly developed aural awareness, the *Indaba* remixers are able to make distinctions between multiple genres, which to them represent a variety of different meanings and conventions. For example, as one of the *Indaba* members explained in an interview, although there were a number of house remixes submitted in one of the contests, his version was distinguishable from the others due to his choice of using 'deep house style' – which, according to him, includes relatively few higher frequency sounds and has a somewhat low tempo – rather than opting for the style that was mainly used by the other entrants, namely the 'progressive house' style with its more up-tempo feel and higher notes. Indeed, not unlike professional producers, the *Indaba* remixers have extensive vocabularies in order to make distinctions

between different nuances in timbres and tempi, and are often able to assign them to particular genres and subgenres with which they work. The participants' comments concerning comparisons between different mixes during a contest exemplifies this, with the comments including such descriptions as 'clean' ('*Very dynamic and clean sounding mix*'), 'dirty' ('*dirty bassline*'), 'heavy' ('*heavy sounds*'), and 'deep' ('*absolute deep*') (for more on such terminology, see Théberge 1997)<sup>iv</sup>. During the interviews, it further became clear how important the concept of BPM is in the process of making assessments. The musical genre of dubstep, for instance, is generally considered by remixers to be around 140 BPM, while a genre such as drum and bass should ideally run between 160 and 180 BPM. For participants on *Indaba*, such differences matter, and with the help of digital audio software programs they are able to scrutinize the tempo of a track, analyze the original BPM, and manipulate it in a swift and precise manner. Specific websites (e.g. *Beatport.com*) allocated to archive and classify remixes under detailed headings, such as 'chill out', 'dubstep', 'electronica' and 'glitch hop', along with a wide range of example tracks, further assist remixers in getting acquainted with the characteristics of the plethora of musical genres and subgenres.

The development of aural awareness is thus necessary for the *Indaba* remixers in terms of finding one's own musical niche. The ability to make the most of different genres provide opportunities for the remixers to produce a meaningful difference in their works that will further help them to be noticed in the midst of a multitude of other remixes. As remixers on *Indaba* are constantly involved in new contests with new contestants, finding one's musical niche is not simply a matter of sticking to one particular genre or subgenre, but requires them to renegotiate their own position amongst their fellow contestants during every subsequent contest. These renegotiation practices have, in turn, a potential to further benefit the remixers in improving their

understanding of an ever increasing range of musical genres.

### **The small creative act within composing practices of participatory culture**

As the case of *Indaba* illustrates, the ideal of the small creative act results in practices that have significant implications in the participants' opportunities for artistic expression, but also, importantly, for their music-related learning. Access to the field of works, and to the digital technology enabled processes of deconstruction and reconstruction of musical content, can be considered to contribute to the remixers' learning in at least in three ways.

Firstly, practices based on the production of small creative acts, typical for online remix communities such as *Indaba*, entail a fairly low threshold for musical participation. Participants in online remix contests can take part in these creative processes with as small or as large a contribution as they wish, and which their musical know-how at any given moment allows them to. Instead of having to reach a certain level of knowledge and skills in, for instance, music theory or playing an instrument before being able to compose, even a beginning remixer can produce musical ideas and make them available for others by utilizing the options afforded by digital technology. The options to dismantle, explore and rearrange cultural objects can be viewed as contributing to learning by enabling the novice to be integrated into an expert culture of musicians, and to interact with its artefacts. The acquisition of musical and technological knowledge and skills takes place *simultaneously* with actively participating in remixing practices, resulting in a gradual advancement towards increasing expertise while already

exercising one's musicianship. On the other hand, the near-infinite prospects for sound manipulation also provide remixers with opportunities for continual development in making increasingly fine distinctions and in the advanced use of technology. Due to the participatory nature of remix communities, the individual remixer's growing know-how benefits a stock of collective expertise from which individual remixers may draw upon in their music making, thus further contributing to the stock of shared expertise in an additive manner (see also Wenger 1998; Partti 2013).

Secondly, embracing the ethos and practices of the small creative act can also be understood to have created opportunities for becoming a critical participant in new media culture. As pointed out by Jenkins and colleagues (2006), participation or creativity for its own sake alone should not be the final goal. What is required in order for participation and creativity to be truly emancipatory is the development of what they refer to as 'new literacies', including not only creative skills but also critical analysis skills. The mutual peer-to-peer assessments of *Indaba* function as a form of 'collective intelligence' (Lévy 1997) and can work as a significant means of enhancing musicians' ability to engage in the valid and reliable evaluation of their own work and the works of others. Indeed, the ability to provide well-presented and multi-criterion feedback has recently been judged to be one of primary learning objectives of both formal and informal learning environments (e.g. Lebler 2008; Jenkins et al. 2006; Partti, Westerlund and Lebler in press). In his writing on media education in the age of participatory culture, Buckingham (2010) emphasizes the importance of growing into a deeper understanding of different dimensions of media. Following arguments already made in relation to literacy (e.g. Luke 2000), Buckingham (2010) claims that the *experience* of creative production does not automatically result in critical literacy. Instead, critical analysis skills are developed through

stepping back from one's immediate experience in order to engage in reflection on and analysis of that experience. From this perspective, the *Indaba* remixers' tinkering with musical material, including the activities of disassembling and restructuring musical elements and discussing the choices made with peers, can be viewed as making an important contribution to the learning of both creative skills and critical analysis skills.

Finally, the continuous exchange of, and comparison between, small creative acts within the remix contests on *Indaba* also results in a collective pool of sounds, methods, and genres from which the participants can draw inspiration and which they can utilize in their own learning processes. Rather than emphasizing the importance of becoming an individual and self-reliant genius, the musical practices on *Indaba* are intertwined with the ideal of communal musical exchange, influence, and borrowing. By being in the presence of and observing other participants, who approach the same source material differently, remixers are able to extend and improve their own musical repertoires. This, too, can be understood as a form of collective intelligence, although in a somewhat different way. As stated by Lévy (1997), collective intelligence does not imply only explicit and verbal communication, but broader processes of people 'joining together' (10). In other words, collective intelligence refers to processes of 'uniting not only ideas but people' (10) with different backgrounds, visions and skills. Musical learning on *Indaba* could be viewed as 'social participation' between people who are willing to use each other's skills, techniques and approaches as a learning resource (Wenger 1998; 2006; Wenger, Trayner and De Laat 2011). Consequently, learning is largely reliant on the participants' abilities to work together in problem-solving and in supporting each other in the construction of knowledge (Paavola and Hakkarainen 2005; Davidson and Goldberg 2010).



## Concluding remarks

It has been claimed that the advent of digital media has created a participatory revolution, which democratizes the culture of music making and musical learning by providing people – at least in developed countries, but increasingly in developing countries as well – with wider opportunities ‘to use their intelligence more freely for musical growth and expression’ (Partti and Westerlund 2012: 302). The case of the *Indaba* remix community exemplifies the ideals of musical versatility, flexibility, and participation based on the opportunities to incorporate, sample, blend, manipulate, play with and share musical content from different sources, and to participate as a *creator* – rather than a consumer only – in musical cultures. Consequently, composing within the participatory practices of the *Indaba* remix contests can be understood as an inherently social process during which remixers create their works by building on the works of other artists, either by explicitly transforming and recombining existing cultural elements or, in a more indirect manner, by positioning and repositioning themselves constantly in relation to other participants. As discussed above, on *Indaba* these processes are essentially centred on the production and exchange of small creative acts, in a very literal sense of the term. The ability to produce sonic experiences through small creative acts has a crucial role in the remixers’ efforts to produce meaningful differences in their musical works, as well as to deploy and further develop their aural awareness. Aural awareness should therefore not be considered merely as a practical skill, but as an inherent part of the remixers’ musicianship – the ability to not only generate and analyze musical content, but also to *enjoy* them in a deep and meaningful way. As pointed out by Brown (2012: 2), musicianship ‘contributes to a person’s capacity for effective musical

interaction, collaboration, leadership and dissemination’ – as well as, we should add, for appreciation and enjoyment. The powerful way in which the development of aural awareness is interlinked with musicianship and, in turn, the musical enjoyment and discovery of new sonic sceneries, is illustrated by a comment from the remixer Dub Johnson regarding the *Indaba* participants' way of working with a plethora of musical genres:

And that’s when you start to really appreciate and understand the beauty of music and it’s different aspects, and that’s where it is very helpful, because if that can’t broaden your horizons, I don’t know what it’s gonna take (Dub Johnson 6 November 2011 interview).

It is in this sense that we understand the power, novelty, and potential for educational meaning in emergent musical participatory culture to lie not only in opportunities for learning about music, but also in opening up new avenues for musical imagination. Gaining an understanding of these opportunities is perhaps one of the most urgent needs for classroom music teachers striving to provide a music education that is meaningful in students’ lives and connects with their musical goals.

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## Works cited

- Adorno, T.W. (2002 [1941]), 'The Radio Symphony. An Experiment in Theory', in T.W. Adorno *Essays on Music* (ed. R. Leppert), Berkeley, Los Angeles and London: University of California Press, pp. 251-270.
- Bennett, H.S. (1980), *On Becoming a Rock Musician*, Amherst: University of Massachusetts Press.
- Bohlman, P.V. (1988), *The Study of Folk Music in the Modern World*, Bloomington and Indianapolis: Indiana University Press.
- Bourdieu, P. (1993), *The Field of Cultural Production. Essays on Art and Literature* (ed. R. Johnson), Cambridge and Oxford: Polity Press.
- Brown, A.R. (2012), 'Musicianship in a Globalised World', in A.R. Brown (ed.), *Sound Musicianship: Understanding the Crafts of Music*, Newcastle upon Tyne: Cambridge Scholars Publishing, pp. 1-11.
- Buckingham, D. (2010), 'Do We Really Need Media Education 2.0? Teaching Media in the Age of Participatory Culture', in K. Drotner and K.C. Schröder (eds.), *Digital Content Creation: Perceptions, Practices and Perspectives*, New York: Peter Lang, pp. 287-304.
- Davidson, C.N. and Goldberg, D.T. (2010), *The Future of Thinking. Learning Institutions in a Digital Age*, Cambridge and London: The MIT Press.
- Demers, J. (2006), *Steal This Music. How Intellectual Property Law Affects Musical Creativity*, Athens, USA and London, England: The University of Georgia Press.
- Dillon, T. (2006), 'Hail to the Thief. Appropriation of Music in the Digital Age', in K. O'Hara and B. Brown (eds.), *Consuming Music Together. Social and Collaborative Aspects of Music Consumption Technologies*, Dordrecht: Springer, pp. 289-306.

- Goldstein, P. (2003 [1994]), *Copyright's Highway. From Gutenberg to the Celestial Jukebox*, Stanford: Stanford University Press.
- Hebdige, D. (2005 [1987]), *Cut 'n' Mix. Culture, Identity and Caribbean Music*, London: Comedia.
- Hine, C. (2000), *Virtual Ethnography*, London: Sage.
- Hugill, A. (2008), *The Digital Musician*, New York and London: Routledge.
- Hugill, A. (2012), 'Musicianship in the Digital Age', in A.R. Brown (ed.), *Sound Musicianship: Understanding the Crafts of Music*, Newcastle Upon Tyne: Cambridge Scholars Publishing, pp. 52-61.
- Jansen, B. (2011), '*Where Credit is Due. Cultural Practices of Recorded Music*', Ph.D. thesis, Amsterdam: Amsterdam University.
- Jenkins, H., Clinton, K., Purushotma, R., Robison, A.J., and Weigel, M. (2006), 'Confronting the Challenges of Participatory Culture: Media Education for the 21st Century'.  
[http://www.digitalllearning.macfound.org/atf/cf/%7B7E45C7E0-A3E0-4B89-AC9C-E807E1B0AE4E%7D/JENKINS\\_WHITE\\_PAPER.PDF](http://www.digitalllearning.macfound.org/atf/cf/%7B7E45C7E0-A3E0-4B89-AC9C-E807E1B0AE4E%7D/JENKINS_WHITE_PAPER.PDF). Accessed 21 January 2014.
- Lebler, D. (2008), 'Popular Music Pedagogy: Peer-Learning in Practice', *Music Education Research*, 10: 2, pp. 193-213.
- Lessig, L. (2008), *Remix. Making Art and Commerce Thrive in the Hybrid Economy*, London: Bloomsbury.
- Lévy, P. (1997), *Collective Intelligence. Mankind's Emerging World in Cyberspace* (transl. R. Bononno), Cambridge, USA: Perseus Books.
- Lord, A.B. (2000), *The Singer of Tales. Second Edition* (eds. S. Mitchell and G.N. Nagy), Cambridge, USA and London, England: Harvard University Press.

- Luke, C. (2000), 'Cyber-Schooling and Technological Change: Multiliteracies for New Times', in B. Cope and M. Kalantzis (eds.), *Multiliteracies: Literacy Learning and the Design of Social Futures*, London: Routledge, pp. 69-91.
- McLucas, A.D. (2010), *The Musical Ear: Oral Tradition in the USA*, Farnham and Burlington: Ashgate.
- Michielse, M. (2013), 'Musical Chameleons: Fluency and Flexibility in Online Remix Contests', *M/C Journal* 16:4. <http://journal.media-culture.org.au/index.php/mcjournal/article/view/676>. Accessed: 14 February 2014.
- Michielse, M. (forthcoming), *Rearticulating Sounds. Appropriating Popular Music Online*. (working title). Ph.D. thesis, Maastricht: Maastricht University.
- Middleton, R. (2000), 'Worki-in(g)-Practice: Configurations of the Popular Music Intertext', in M. Talbot (ed.), *The Musical Work: Reality or Invention*, Liverpool: Liverpool University Press, pp. 59-88.
- Miller, K. (2012), *Playing Along: Digital games, YouTube, and Virtual Performance*, Oxford: Oxford University Press.
- Paavola, S. and Hakkarainen, K. (2005), 'The Knowledge Creation Metaphor – an Emergent Epistemological Approach to Learning', *Science & Education*, 14, pp. 535-57.
- Partti, H. (2013), 'Oopperasäveltäjäksi oppimassa: Opera by You – verkkoyhteisö musiikillisen asiantuntijuuden kasvualustana [Learning to be an Opera Composer: The Opera by You Online Community as a Platform for the Growth of Music-Related Expertise]', *Musiikki*, 1, pp. 33-50.
- Partti, H. (2014), 'Cosmopolitan Musicianship under Construction. Digital Musicians Illuminating Emerging Values in Music Education', *International Journal of Music Education*, 32:1, pp. 3-18.

- Partti, H., and Westerlund, H. (2012), 'Democratic Musical Learning: How the Participatory Revolution in New Media Challenges the Culture of Music Education', in A. R. Brown (ed.), *Sound Musicianship: Understanding the Crafts of Music*, Newcastle Upon Tyne: Cambridge Scholars Publishing, pp. 300–12.
- Partti, H., Westerlund, H. and Lebler, D. (in print), 'Participatory Assessment and the Construction of Professional Identity in Folk and Popular Music Programs in Finnish and Australian Music Universities'. *International Journal of Music Education*.
- Pinch, T. and Athanasiades, K. (2011), 'Online Music Sites as Sonic Sociotechnical Communities: Identity, Reputation, and Technology at ACIDplanet.com', in T. Pinch and K. Bijsterveld (eds.) *The Oxford Handbook of Sound Studies*. New York: Oxford University Press, pp. 480-502.
- Saldaña, J. (2009), *The Coding Manual For Qualitative Researchers*, Los Angeles: Sage.
- Small, C. (1987), *Music of the Common Tongue: Survival and Celebration in African American Music*, London: Wesleyan University Press.
- Stake, R. (1995), *The Art of Case Study Research*, Thousand Oaks: Sage.
- Stake, R. (2006), *Multiple Case Study Analysis*. New York: The Guilford Press.
- Toynbee, J. (2000), *Making Popular Music. Musicians, Creativity and Institutions*. London: Arnold.
- Toynbee, J. (2001), 'Creating Problems: Social Authorship, Copyright and the Production of Culture', *Pavis Papers* 3. Milton Keynes: Pavis Centre for Social and Cultural Research, Open University, pp. 2-32.
- Väkevää, L. (2010), 'Garage Band or GarageBand®? Remixing Musical Futures', *British Journal of Music Education*, 27:1, pp. 59–70.

Waldron, J.L., and Veblen, K.K. (2008), ‘The Medium is the Message: Cyberspace, Community, and Music Learning in the Irish Traditional Music Virtual Community’, *Journal of Music, Technology and Education*, 1:2–3, pp. 99–111.

Wenger, E. (1998), *Communities of Practice. Learning, Meaning, and Identity*. Cambridge: Cambridge University Press.

Wenger, E. (2006), *Learning for a Small Planet – a Research Agenda*. <http://www.ewenger.com>. Accessed 25 March 2009.

Wenger, E., Trayner, B. and De Laat, M.(2011), ‘Promoting and Assessing Value Creation in Communities and Networks: A Conceptual Framework’. [http://bevtrayner.com/base/docs/Wenger\\_Trainer\\_DeLaat\\_Value\\_creation.pdf](http://bevtrayner.com/base/docs/Wenger_Trainer_DeLaat_Value_creation.pdf). Accessed 21 November 2012.

Yin, R.K. (1994), *Case Study Research: Design and Methods*. Thousand Oaks: Sage.

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<http://www.indabamusic.com>

ii

Other online communities hosting remix competitions include, for example, Beatport.com and ACIDplanet.com.

iii

The comments presented here are drawn from participant discussions as appeared on the contribution page related to the “Soul Rebels 504” contest on *Indaba*, organized in September–October 2011.

iv

The comments presented here are drawn from participant discussions as appeared on the contribution page related to the “Nenna Yvonne We Came To Rock” contest on *Indaba*, organized between December 2011 and March 2012.

