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Towards an understanding of creativity in independent music production

Daniel Walzer 🆔

Music and Arts Technology, Indiana University-Purdue University, Indianapolis, IN

ABSTRACT

For years, creativity has been a topic of interest for scholars in psychology, human development, and the arts. Research on creativity has produced a growing body of literature in the art and science of music production. Correspondingly, the entertainment sector has undergone what business and entrepreneurship scholars refer to as disintermediation or a reduction of skilled labor affecting the roles and responsibilities of those working in music production. Research on creativity with independent music production (IMP) is less common. Little is known about creativity by those without access to particular domains. As the music and recording industries remain untethered, an increase in autodidactic and incremental learning processes seems likely along with the growth of new models of independent music production. Using a Bourdieusian theoretical framework, the article analyzes two skill areas in IMP, experimentation, and critical listening, and calls for a more equitable and imaginative analysis of creativity.

Introduction

The past two decades have brought extensive upheaval to the music and entertainment industries; the disruption includes a shift from physical products to the web (Wikström 2020). The Internet and affordable technologies have decentralized long-standing power structures and decentralized geographical constraints on producing albums (Cummins-Russell and Rantisi 2012). I described this change using the phrase 'creative class', a new crop of independent music producers and consumers (Walzer 2017). In my work in higher education, I remain fascinated by how we can better understand and analyze creativity through a Do-It-Yourself (DIY) ethos of recording and producing music.

Analyzing creative practice in independent music production requires a different theoretical approach to the traditional models used in the entertainment industry. The music business functioned using a vertical hierarchy, where a few major labels controlled how albums were released and promoted (Wikström 2020). The difference

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CONTACT Daniel Walzer ✉ dawalzer@iu.edu

exists because independent artists create new material without significant support from labels, booking agents, and management. Wikström (2020, 9) explains:

> [The] new music industry dynamics is characterized by high connectivity and little control; music provided as a service; and increased amateur creativity. The driver of all these changes is primarily the development of digital information and communication technologies.

Hracs (2012a) traced the evolution of the music industry from its height in the late 1990s to significant restructuring and consolidation of the labels in part because of file sharing, advances in digital technology, peer-to-peer file-sharing networks, and the rise of the Internet. He (2012a, 446) writes:

> During this period of transition…the Internet facilitated the development of a series of 'gift economies' occupied by enthusiasts who changed digital commodities, including image,movie, and sound files, across Internet relay chat networks.

Like the major labels, recording studios also felt the brunt of digitalization. Record labels and commercial recording studios enjoyed a symbiotic relationship for decades. When digital technology became more affordable, independent musicians could record without needing to be in a major city like Los Angeles, London, New York, or Nashville. Watson (2014, 3) notes that 'the recording studio sector is now one in which the threat of closure for many large studios goes hand-in-hand with increased opportunities for individual producers'. Faced with lost revenues, recording studios closed, engineers were furloughed or fired, and the vertical hierarchy of the music industry broke apart— resulting in what Leyshon (2009) refers to as institutional thickness. Leyshon (2009, 1327) explains:

> The process of vertical disintegration can also be observed within the studios themselves. In order to cope with the dilemma of selling studio space time in a falling market, and to respond to the ability to use smaller studio spaces to record and mix tracks, several studios have created what are known as 'project rooms'. These are small, self-contained rooms which studios rent on an annual basis to producers.

Even more so, technology allows independent artists to record at home, reduces the barrier for entry, and is the most common method for album production today (Hracs 2012a; Walzer 2017). There are downsides to the shift from the majors to the independents, however. As musicians transition from artists to entrepreneurs, Hracs (2012a, 456) argues that: 'the structure of contemporary independent music production is poorly understood'. Balancing the creative and the business aspect requires that independent artists understand how to multi-task and take on multiple responsibilities (Tarassi 2018).

Another development concerns the changing landscape of independent music communities. Kruse (2010, 625) refers to these communities as *scenes*, which 'describes both the geographical sites of local music practice and the economic and social networks in which participants are involved' (625). Technology and the Internet altered indie scenes too. She (2010, 625) observes:

> Indie music can now be disseminated online, and people can connect easily across localities, regions, countries, and continents. As internet options for the discussion and

sharing of indie music increase, the local spaces devoted to interaction around music are changing, andsometimes disappearing.

Kruse (2010, 626) cautions, however, that the Internet has not completely removed the DIY aesthetic completely.

Inexpensive forms of music production and dissemination, both within and across local-ities, were defining features of pre-internet scenes, as were the perceived interchange-ability of musicians and fans and the ability of scene participants to connect across geographical boundaries.

Instead, the independent music scene is less binary and more fluid, eliciting a sense of structural ambiguity (Hracs 2012a; Kruse 2010).

Bourdieu, disintermediation, and the IMP typology

Bürkner and Lange (2017) suggest that experimentation and trial and error form the basis for describing independent music production. They argue that 'a sociologically informed view is required to cope with the "social processing" of the technological shifts in music production' (Bürkner and Lange 2017, 36). Music production is often collaborative, and the advances in digital technology must be understood in the embedded social structures of particular communities (Bürkner and Lange 2017). Disintermediation is not confined to the influence of recording technology. An inde-pendent music industry provides a model of opportunity and competitiveness to a once top-heavy system once controlled by a few record labels. Bourdieu (1977, 184) explains:

Economic power lies not in wealth but in the relationship between wealth and a field of economic relations, the constitution of which is inseparable from the development of a *body of specialized agents*, with specific interests; (original emphasis).

Bourdieu (1977) argues that there are modes of domination that affect cultural production. The dominant agents are objectified, accumulating symbolic and cultural capital. The more an agent is objectified, the more the symbolic capital and hierarchies are reinforced. Recording studios enjoyed clientele (major labels with big budgets) using specialized agents (audio engineers, producers, and session musicians). As the record companies' profit margins shrunk, so too did the budgets used to produce albums. Shrinking budgets put some skilled agents out of business and opened the door for independents to enter the marketplace. Tensions exist between those who were products of the old music business model and the independent music producers who never took part in that part of the industry in the first place (Hracs 2012b). After the decline of the traditional record deal because of lost revenues, many musicians were dropped from their label deals, now finding themselves competing for the same audiences as their DIY counterparts. (Hracs 2012b).

The tensions here bring to mind Bourdieu's (1993, 75) concept of symbolic capital, defined 'as economic or political capital that is disavowed, misrecognized and thereby recognized, hence legitimate, a "credit" with, under certain conditions, and always in the long run, guarantees "economic" profits'. The independent musician may never

have sought commercial gain for their work, but relished approval from their peers. The once-successful commercial artist now seeks refuge 'by appealing to the values whereby the dominant figures accumulated their symbolic capital' (Bourdieu 1993, 75). The issue at play is whether those who profited from the old music business industry are still considered specialized agents and whether their expertise has value when viewed from the lens of a community of independent artists and producers.

Bourdieu (1993) explains that the apparent producer is the author of creative work; the work has value and represents cultural production.

Since the late 1990s, technology has played at least some role in disturbing the traditional pipeline of album production and release. Using a Marxist framework, Arditi (2014) argues that increased digital technology devalues skilled labor (audio engineers, music producers, session musicians, etc.). Digital technology replaces skilled workers, the production cycle becomes disintermediated, or a 'removal of intermediaries from the supply chain' (Arditi 2014, 503). Arditi (2014) contends that the influence of digital technology is so pronounced, it affects music production in the studio (ex: tuning vocals, sampling, and fixing timing issues) and the relationship between capital and labor. The effects of disintermediation can also be felt in the relationships forged by entrepreneurs and independent musicians alike (Bernardo and Martins 2014).

Changing sites and creative foci in independent music production

Analyzing disintermediation in independent music production requires a sensitivity to the changing sites and spaces where creative production happens. In music production research, scholars focus on the 'bedroom producer', ostensibly, someone making music with digital technologies at home in the confines of a bedroom or personal space (See Bell 2015; Hein 2017; Howlett 2012; Walzer 2017; Zagorski-Thomas 2010). Recording at home, in the confines of one's private space, conjures up an image of autonomy, where the artist has total freedom to explore whatever ideas come to mind.

Auvinen (2016, 26) presents a hybrid model of *tracker/producer* as someone 'formed through a combination of composing, arranging, programming, vocal coaching and engineering. The idea of being a tracker clarifies the agency of the producer's role'. The home studio serves as a site of cultural production, and the producer engages in every aspect of music creation from the beginning to the end (Auvinen 2016). Auvienen's (2016) hybrid model of the tracker/producer reinforces two essential points. First, the person creating music takes on multiple roles in the album production process. Second, the artist's role is equal parts collaborative and independent. The site of cultural production might be in a bedroom, and it might be online. In Auvienen's (2016) case study, the producer is viewed as having more control and agency over the creative process because of their multifaceted use of technology.

A cursory glance at the home recording studio reveals strong user preferences for particular kinds of technology—precisely the visual layout of the digital audio workstation (DAW) for producers and audio engineers (D'Errico 2016; Marrington 2017; Marrington 2010). As an intermediary, DAWs facilitate a quicker experimentation process, and students with little formal music training find success in composing with

presets and loops (Kardos 2012). The DAW and related technologies (ex: samplers, MIDI keyboards, portable recorders) promote a hybrid 'hyphenated' form of music-making, as songwriting seamlessly integrates with beat-making, recording, mixing, and performing (Tobias 2012).

The DAW, however, is not without some varying perspectives on workflow and creativity.

In his research on songwriting and music technology, Bennett (2018) concludes that the layout and graphical user interface (GUI) of particular software platforms cause songwriters to work vertically. The software display only shows a few bars at a time, lending itself to more loop-based writing and sonic layering. Born and Wilkie (2015) explain that for the past twenty years, DAWs have sought to replicate analogue processes in the digital realm—most commonly through horizontal time sequences moving from left to right.

It seems then that the technology commonly used in independent music production influences an artist's sonic and musical aesthetics, their relationship with analogue and digital workflows, and one's sense of time (Born and Wilkie 2015). Additional friction is exacerbated by the fact that the software-based plug-ins, or audio effects, used to manipulate sound, closely resemble their analogue counterparts, thus contributing to a sense of nostalgia concerning the recording process (Williams 2015).

Disintermediation and creativity

Disintermediation affects both the music industry's economic and labor structures; it also reveals a deeper connection between technology and creativity for independent artists. IMP happens both in and outside a proper recording studio. Watson (2014, 41) contends that the plethora of recording and hardware options 'has enabled studio engineers to learn and experiment with recording and editing sounds outside of the studio environment…and not subject to the time constraints of a formal studio environment' (41). This means that professionals and amateurs have the time and space to experiment and explore creativity at a pace that suits them.

Self-paced experimentation allows a creative process to unfold. Rather than confining artistic practice to those with genius inspiration, explaining creativity is sometimes more straightforward. Sternberg (2003, 90) argues that 'the study of creativity has always been tinged – some might say tainted – with associations to mythical beliefs. Perhaps the earliest accounts of creativity were based on divine intervention' (90). In his view, creativity is 'the ability to produce novel, high-quality, task-appropriate products' (Sternberg 2003, 105). Therefore, the psychological study of creativity must consider a range of perspectives, both conscious and unconscious, and the social and personal motivations of those engaged in creative practice (Sternberg 2003).

Czikszentmihalyi (1996, 6) explains:

> Creativity results from the interaction of a system composed of three elements: a culture that contains symbolic rules, a person who brings novelty into the symbolic domain, and a field of experts who recognize and validate the innovation. All three are necessary for a creative idea, product, or discovery to take place.

The systems model of creativity includes three parts: 'Domain: a set of symbolic rules and procedure; field: Individuals acting as gatekeepers of the domain, and the person' (Czikszentmihalyi 1996, 27 and 28). Using these taxonomies, Cizkszentmihalyi (1996, 28) concludes:

> [Creativity] is any act, idea, or product that changes an existing domain, or that transforms an existing domain into a new one. And the definition of a creative person is: someone whose thoughts or actions change a domain, or establish a new domain.

Thompson (2019, 86) applies a similar analysis of creativity and domain in the recording studio. He surmises that 'the domain of commercial record production… does not exist as a separate entity; it is intricately connected with the other parts of the creative system' (86). He outlines the commercial record production domains across three areas—the musical, the technical, and the sociocultural. Skills gained in these areas happen formally and informally and include the persons engaged in the activity both in and outside the studio (Thompson 2019). Pras and Guastavino (2011, 77) further classify the role of the producer and audio engineer across three domains: 'mission, skills, and interaction'.

over the past fifteen years, scholarly writings on studio recording practice have focused on the systems model of creativity (McIntyre 2008, 2012;), sites of cultural production (Bates 2012; Bennett and Bates 2018; Watson 2014), decision-making and roles (Lefford and Thompson 2018), and interdisciplinary theories of creativity (Slater and Martin 2012; Thompson 2019; Zagorski-Thomas 2014). other scholars move away from the idealized notion of the recording studio as a specialized place where hits are made. The music and entertainment industries' economic realities make running a full-service commercial facility a daunting proposition—even less common among for those that generate significant profits. As expressed, the result of cheaper and faster digital technologies and economic downturns is that recording studios close, staff lose their jobs, and people stop spending money on physical products.

Bell (2018) notes that the skills customarily associated with audio engineering now coexist with the broader set of competencies in modern music production. The DAW, a commonly used tool in "studios", functions the same way as an instrument. Bell's (2018, 65) criticism of 'so-called engineering skills such as operating a DAW like Pro-Tools' are no longer considered specialized. Put a different way; the minimum entry point for creative practice for independent producers is that they know how to use a DAW to play it like an instrument. The requisite skills needed for artistic production are different now. Draper (2013, n.p.) acknowledges this. He writes:

> The idea of a 'record producer' is a slippery one… While there may be a role for divisions of labour under certain circumstances, post computer revolution there is a lop-sided working continuum for producers of music: from laptop music making, to home studios and social networks, through to increasingly rarer opportunities to engage directly with the promise of panoramic control rooms, refined acoustic spaces, concept funding, and professional distribution and promotion.

Creativity and problem solving

Researchers believe that creativity reveals itself through incremental steps, many of which occur after a bout of problem-solving (Sawyer 2006; Weisberg 1992). Weisberg

(1992, xiii) writes that 'creative works begin with what has been done in the past, and they go beyond the past in logical and understandable ways' (xiii). For independent music producers, the problem-solving mechanism is experienced in learning new software. Bell (2018, 91) describes one example of problem-solving in music production in what he refers to as the 'click and consequence method'. In the case study presented, the subject spent hours learning to use a new digital audio workstation. Using the mouse, the person gradually learned more about the program and the creative choices available. Jumping right into the learning, Bell (2018, 91) explains that 'he uses his mouse to explore an option in the program, evaluates the consequences of his mouse click, and then proceeds accordingly'. A DAW-facilitated process slows down the urgency to decide, lowers the pressure of making the 'right' decision, and allows for a more relaxed flow of ideas. In the old model of record production, the producer made an artistic decision. The audio engineer fulfilled another crucial role, and the session musicians created arrangements and performed under stressful conditions.

One advantage of digital technology is the undo command. For example, if the mouse clicks produce unwanted results, a person can select the undo command (either by mouse click or keyboard shortcut), which allows them to return to a previous state. This process removes the pressure to get something right the first time. The trial-and-error method works well when the stakes are low. The person builds their skills through an iterative trial-and-error approach. In Bell's (2018) case study, the artist used the click and consequence method to apply effects, create arrangements, and compose music. Here, problem-solving is a low-risk, high-reward process. Creativity is measured by the connection between the person's knowledge and the problem itself. Weisberg (1992, 122) explains:

> Problem solving begins with continuity, a match between the problem and the individual's knowledge, which can result in the retrieval of a possible solution. Effective problem solving requires detailed knowledge of the domain in question, and there is little evidence for spontaneous transfer based on remote analogies.

Bell's analysis of the click and consequence approach suggests that much of independent music production is autodidactic; the same can be found in computer music and music technology research (Born and Devine 2015; Collins 2010; Kardos 2018). Knowledge and skill acquisition encompass more than merely clicking a mouse; creativity manifests itself through a few steps, each requiring evaluation, and a committed decision. It is also important to remember that formal apprenticeships in recording studios are less common—the trend these days is to mimic such patterns in audio engineering programs in colleges and universities (see Bielmeier 2014; Bourbon 2020).

An open concept of critical audio listening

We can conceptualize creativity as a series of modest steps leading to greater insight, and eventually, a finished product. The problem with incremental progress is that it does not account for the expense of recording time and hiring skilled laborers. Watson (2014, 42) states:

one of the major constraints on the ability of musicians, recording artists, producers and engineers to be creative and experiment in the studio are the time constraints associated with limited budgets and the high cost of time in the studio

Imagine a scenario where an artist books time in a professional studio. If recording sessions happen in larger studios, with freelance audio engineers, artists can likely expect to incur personal costs to produce the record. The issue is that slow, methodical experimentation helps independent artists use their ears and decide how their project ought to sound. Critical listening is not possible when time is of the essence, and the cost and stakes are high. Likewise, the artist relies heavily on the producer or engineer's expertise to use the DAW and recording equipment accurately, which reduces the artist into a more passive role. Critical listening occurs by those more active in physical production. There are scenarios where artists record their parts at home and then collaborate with more experienced engineers to mix and master a record. There is no substitute for someone taking the hours needed to experiment in a low-pressure setting. An 'indie' producer can train their ears to understand signal flow better, mixing concepts, and basic audio theory. The training actively happens over time, by emphasizing creativity rather than following prescriptive methods found in textbooks.

Elsewhere (Walzer 2015), I analyzed the lack of coherent metrics to assess the essential skills needed for critical audio listening in higher education. While many audio engineering programs in HE include technical ear training (musical and non-musical) as part of a degree, there remains little consensus on how best to test whether someone has the requisite skills needed to track and mix. Though a standardized set of critical listening rubrics is not possible, one has to wonder how novices discern frequencies, musical arrangements, audio effects, specific genres, and the physical properties of sound. Elmosnino's (2019) survey of critical listening materials reveals that some institutions encourage the use of mental representations in mixing with modest success. Similarly, Kardos (2015) promotes critical listening through the lens of timbral gestures, a deeper connection to the historical and contemporary characteristics of sound in mixing.

outside of formal education, many audio engineers develop critical listening competencies through experience and years of practice. A cursory online search for critical listening materials shows there to be a market replete with courses and tutorials, supplementary resources, and YouTube videos on the subject. Academic and audio-related publishers continue to publish helpful resources that address critical listening in sundry ways (see Corey 2017; Everest 2006; Gordon 2015; Moylan 2014; Sound Gym 2020). A complete review of these materials is beyond what this article can address. A provocative question to ask, though, is: What about the independent producer? How do they learn these skills if they lack access to higher education? Yes, an abundance of third-party resources exists. An autodidact may do well to purchase books, watch videos online, and practice by downloading multi-track mix stems and ask questions from experts in online forums.

Independent music producers now occupy at least two roles—that of the audio engineer, and most times, the artist. How does the nascent producer-engineer learn how to treat a room, and make the most out of their recording space? If the model

of critical listening draws its inspiration from the antiquated model of pristine acoustic spaces, large-format analogue consoles, and skilled labor, then how does the next generation gain such expertise in a domain that is nearly extinct? Put another way, if the domain (the recording studio, agents of creativity, rules and responsibilities of skilled laborers) is evasive, what options does the independent artist-producer-engineer hybrid have to further their skills? It is not enough to suggest that without access, nothing can be done to help those with a desire to learn. In a 2007 article for *Mix*, Petersen interviewed engineers from Gateway Mastering, Avatar Studios (now closed), and other high-end mastering facilities. Predictably, the piece takes on a technocratic stance, using industry jargon and digressing into discussions about gear found in those same high-end facilities. one has to wonder what critical listening means without access to the sites where such activities occur. Landr and eMastered offer cloud-based mastering services where clients upload finished mixes, choose a few parameters and receive a finished master recording in a few minutes. Though cloud-based mastering is a relatively new phenomenon, it remains to be seen how it will change the creative pipeline for independent producers.

What's next for creative IMP?

Analysis of independent music production remains fluid and disruptive. As expressed throughout the article, many levels of the music and entertainment industries no longer promote a traditional model of creative practice based on lucrative recording contracts, large budgets, and a public invested in buying physical products. The Internet and advances in recording technology have simultaneously change our definition of skilled labor and provided new opportunities to grow creative networks. Disintermediation means that the longstanding vertical and horizontal structures of the creative industries no longer exist. Also, because of an economic downturn caused by a significant global health crisis, the future remains precarious for the music and entertainment industries. Recent economic reports from the UK and Australia predict it will take several years for the live music sector to recover from the effects of CovID-19 (Brandle 2020).

Creativity is a stepwise process based on small, incremental successes and insights. The technical and practical application of knowledge reflects an intricate relationship between the past and present, the stakeholders engaged in an activity, the idea, and the evaluation of the concept by interested parties. Likewise, in the recording studio, music and technical expertise remain embedded in the relationships between skilled laborers, namely producers and audio engineers. That model of creativity cannot exist in a vacuum. Such an enterprise exists as part of a more massive structure. Yet, tensions still exist between what is creative and what is not. The Bourdieusian theory of artistic practice reveals a fraught relationship between art and commerce, authorship, and the expertise gained from undertaking a creative endeavor. Authorship is one type of cultural production. What remains unclear, as it pertains to independent music production, is what kind of relationship exists among the different parts of the endeavor—independence, music, and production—each as separate entities. More research is needed to understand how the aspects of this triangular structure define creativity independently.

The hierarchies of cultural production and capital become less apparent when skilled laborers become redundant in an industry whose business models either collapse or become replaced by artificial intelligence. When using a phrase like 'creative practice' to describe how an independent music producer functions, one must consider whether the person identifies as independent by choice (rejection of capitalist ideologies) or because of their irrelevance. Either way, how human beings gauge expertise and creativity hinges on undertaking more research into the breadth and scope of independent music production. Rather than viewing it as a byproduct of an industry gone by the wayside, it is now more commonplace for musicians and producers to occupy a space dictated by their own aims rather than those of a major label or commercial recording studio.

We understand more about how independent music producers work through their trial-and-error processes. Many of these experiments can be found in a DAW. Such technologies offer immediate results and a way to correct mistakes through the undo command. Equally prescient is the concept of low-risk/high-reward goals. With a mouse click, an artist that embodies multiple identities (tracker, mix engineer, producer, musician, promoter) makes decisions that influence the production. Interestingly, the skills needed to be an independent music producer, especially in popular music, are more integrated. Fluency in digital technology is the most crucial element required for music production. other skills, though, seem less defined and are, sometimes, opaque. The audio education community has not done a sufficient job of addressing the concept of critical listening. What might have once been learned on the job, or through formal internships and apprenticeships, is less likely to happen formally. Critical listening skills o require multiple levels of awareness. In rare instances, young producers can learn these skills in high-end recording studios; the majority, though, are out of luck.

Not content to give up; the next step demands that practitioners need to reimagine what critical listening is and what it *could* be. In particular, educators tasked with mentoring students cannot expect that their cohort will have the same level of access to high-end recording equipment in professionally designed rooms. Unfortunately, an easy answer to the critical listening dilemma remains elusive. Independent music producers can use their imagination, procure many online resources to build their listening chops, and continue to experiment in ways suitable for their projects and personal interests.

Conclusion

There are two sides of disruption, one positive and one negative. Technology changed the way records were made. Shrinking profit margins, interconnected web networks, and a merging of the major labels altered the way the music business functions. The downside of this disintermediation is that skilled laborers and professional sites of production were made redundant or forced to close altogether. The upside of disintermediation is that the *possibilities* of creative practice now extend to a larger group of interested stakeholders. Amateurs and professionals, producers and musicians, those with label support and those without, all have a chance to express their ideas using

robust and less-expensive technology. The way scholars analyze and explore creative models in record production is not shrouded in secrecy. The barriers of participation are removed as people all over the world can log onto dedicated websites to collaborate on tracks and release their material.

The insights revealed by creative practice are also nurtured in the next generation of artists and producers, many who seek training in music production and audio engineering at the university level. If there is a clarion call to be found here for audio and music technology educators, we must look for ways to expand accessibility in independent music production. We must look for ways to humanize and demystify how creative practice works. We must fight for a fair and just model that encourages creativity in every form—fully realized or messy. one way this happens is by understanding how the forces of technology, social and artistic capital, and *access* breed innovation rather than the destruction of the arts sector. Future research must recognize that independent music production is robust and fluid; the skills and work are honed through autodidactic means including experimentation, collaboration, and socially embedded practice. The line between amateur and professional is thin—perhaps intentionally so. Honing a deeper understanding of IMP must acknowledge that creativity is less about spontaneous bursts of novelty by those with access to the elite networks of cultural production, and more about a stepwise, egalitarian, and open-ended process of discovery and artistry.

Disclosure statement

Notes on contributor

Daniel Walzer is an Assistant Professor of Music and Arts Technology at Indiana University-Purdue University Indianapolis (IUPUI). originally trained as a percussionist, Walzer maintains an active career as a composer, performer, and audio production specialist. Walzer's research and writings on music technology appear in *Leonardo Music Journal, Journal of Music, Technology & Education*, *Music Educators Journal*, and in numerous edited collections. He is the co-editor of *Audio Education: Theory, Culture, and Practice* (w/Dr. Mariana Lopez) on Focal Press.

ORCID

Daniel Walzer http://orcid.org/0000-0003-3826-1356

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