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## **Transient soundscape production**

Creative and pedagogical significance for educators and practitioners

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## Abstract

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*Over the past decade, there has been a steady increase of scholarly output examining the multidisciplinary, creative, and theoretical aspects of sound and music production in the recording studio and beyond (Zagorski-Thomas & Bourbon, 2020; Bennett & Bates, 2019; Hepworth-Sawyer, Hodgson, & Marrington, 2019; Thompson, 2019; Zagorski-Thomas, 2014; Frith & Zagorski-Thomas, 2012). Accordingly, a broad range of literature examines sound as a widespread cultural phenomenon (Papenburg & Schulze, 2016) and an essential source for pedagogical and ethnographic modeling in music technology education (Bell, 2018).*

*Advances in technology make the “studio,” long viewed as a site of artistic and commercial production, available to a broader group of composers, musicians, and artists. Similarly, portable digital recorders afford sound artists and field recordists an expansive range of choices to conduct soundscape research and creative practice. What emerges is a hybrid “composer-producer” identity and a studio’s function in the artistic process. This growth is the rise of an independent and transient practice in soundscape production among multidisciplinary composers and musicians.*

*This article advocates for an updated notion of soundscape composition that integrates field recordings, studio production, and collaboration from musicians representing a broad range of stylistic influences. Positioning the studio as a site of cultural production and creativity has implications for how soundscape production is taught to young composers. The author argues for a more inclusive, process-oriented view on both creativity and the places where musicians, composers, and producers work. The article includes a case study from the author’s recent album project, narrative analysis, concluding with a discussion on the pedagogical implications of independent soundscape production in education.*

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## Evolving sites of soundscape production

Recording the outdoor sonic landscape is not a new phenomenon. Alan Lomax (2003) and R. Murray Schafer (1994 [1977]) each contributed a more in-depth investigation into what field recordings tell us. Transitioning from outdoor recordings to the soundscape of the recording studio is an entirely different process. Yet, composers use field recordings to build new creations using production and editing techniques commonly found in studio environments. Just as the tools to capture high-resolution audio become smaller and more efficient, so do the resources available for composers to manipulate sound and explore creative ideas. Equipment needed to record on location *and* in the studio is affordable and powerful; often, the technology is used for multiple purposes. For example, a recordist can capture digital audio with a cell phone and a condenser microphone attachment. This tool is useful for captur-

ing ideas or collecting ambient and environmental sounds in the field. Technology's portability breaks down the barriers to labeling the audio as a field recording or studio recording.

Historically, recording studios have been considered cultural production sites, set apart from live performance venues (Sterne, 2003). On their significance, Sterne writes: "Location was everything. Studio work was widely understood as a practice entirely different from live performance" (2003: 237). Sterne likewise mentions: "From the very beginning, recorded sound was a studio art. From before the technology was commercially available, users were aware of the special conditions of sound production accompanying reproduction" (2003: 236).

Less prescient in music technology pedagogy is the scholarship of teaching and learning with the networked recording studio. Traditionally, recording studios were viewed as what Allan Watson refers to as "privileged [in the] networks of recording" (2017: 152). Digital technology further obscures the line between field recordings and studio production. Equally important is that the studio can live just about anywhere. Though professional studios exist, the Internet and modern technology facilitate global music collaboration. Educators working with young composers must acknowledge that technology enables a broader conception of how and where soundscape recording occurs. Likewise, connecting field recordings and studio practice emphasize that the creative *process* of making art, rather than the specific medium or genre, is both iterative and non-binary.

## Convergence and iterative decision-making

Mapping sonic terrain outdoors differs from recording in a controlled studio environment. Field recording is unpredictable; one cannot always predict what kind of weather and outside noise is found on location. The tools needed for recording also differ. Traditionally, the gear used to compile field recordings has changed from studio equipment. Field recorders are ruggedly designed; their primary function is to survive the elements while capturing a clean signal. Studio equipment, including consoles, microphones, and preamplifiers, live indoors in climate-controlled surroundings. Studio equipment stays put. In particular, boutique and vintage gear are not meant to be transported from one site to the next. Doing so risks damaging the tools themselves.

Moorefield (2010) describes the producer as an *auteur*, or one whose influence (musical, technical, personal, and otherwise) is so prominent that they occupy a distinct role in the conception and creation of an album. Decades of recordings in popular music make Moorefield's claim both accurate and perfectly acceptable. How does a soundscape concept evolve when a hip hop producer uses field recordings for sampling, mash-ups, and interactive performance? Now, the tapes might

reside as short snippets in an Ableton Live set rather than as delicate edits spliced together with analogue tape. The lines between soundscape and studio recording intersect, and so do the identities of those involved in the recording. The aesthetics, philosophies, and identities underpinning recording practice have also changed. Moorefield writes:

[The] philosophy and technique of music production have undergone a major transformation. [...] The concept of a sound in the sense of a stylistic choice, and the ability to capture and mold it, have grown in importance as recording technology has become increasingly complex. (2010: xii, original emphasis)

Research shows that the recording studio informs particular modes of creative practice, but such bursts of inspiration are not immediate. Instead, finished recordings frequently come about through a fluid process (Thompson, 2019). Using the Beatles' studio explorations as an example, Thompson calls this phenomenon an *alternative take*, which “[describes] a creative process that is often more complex and iterative than is typically presented” (2019: 3). Deciding what tracks to include in a finished recording requires stakeholders to “[balance] numerous musical, technical, socio-cultural and economic factors in their decision-making” (Thompson, 2019: 3).

Sawyer summarizes popular music composition in the recording studio as “songs [not] composed by solitary artists, and they're not written down. Instead, they're created as a work in progress by the entire band, working collaboratively in the studio” (2006: 226). Indeed, this is not always so but does provide a glimpse into the songwriting process. Sawyer uses electronica as an example, making the case that many artists in the genre compose by:

digitally recording, or 'sampling' segments of already recorded music, building up a personal library of interesting samples on their computers' hard drives, and then using computer software to repeat the sample in loops, overlaying multiple tracks to create a polyphonic blend of sounds. (2006: 228).

Today, using pre-recorded slices, field recordings, loops, and virtual instruments is commonplace. Programs like Ableton Live facilitate such production techniques in the studio and for interactive performances.

How do recording studios and field recording-based soundscapes intersect, then? Their commonalities are not that far-fetched. To answer this question, one must consider how field recordings and studio environments function. What is their primary purpose? How do they support and engage each other? First, field recordings and studios document specific events – both musical and non-musical, individually and over time. Second, the technologies used to record events change. In particular, digital technology is smaller and equally robust. It is now possible to capture uncompressed audio with portable technologies. This is critically impor-

tant as it means that the studio and soundscape are both transient entities. Third, documenting field recordings and recorded events involves specific people – each tasked with capturing audio for aesthetic, creative, and research purposes.

Western questions the binary between recording studios and field recordings. He writes that “studio recordings are understood as artificial constructs of sonic manipulation, while field recordings are heard as the transparent capturing of external reality” (2019: 24). While the prevailing thought has been to separate both entities, Western (2019) argues that field recordings reveal much about sociocultural communities. The space and place of cultural production are not limited to the recording studio. Data need not be gleaned in acoustically treated spaces with musicians, engineers, and producers. Recording studios and field recordings need not be binary constructs.

If one accepts that field recordings occupy multiple roles in “traditional” soundscape composition (if such a term exists) and popular music production, then it is in the realm of possibility to wonder how educators might encourage multiple modalities of soundscape composition with the next generation of practitioners. In sum, genres and specific kinds of technology need not be binary – an open-ended conception of where and how soundscapes are created results in new ideas.

## Studios, soundscapes, and composer intention

Out in the field, on the stage, and in the studio, composers and producers have similar objectives, which is to create something engaging for the listener. As Powell writes:

A skillful composer’s job is to create expectations and then either to satisfy or frustrate them. But the composer cannot and must not try for continuous excitement. As in any storytelling, or even a fireworks display, you deliberately add some calmer passages, so that the important moments make a greater impact. (2010: 242).

Once the recordist transfers soundscape files into a digital audio workstation, for instance, the question becomes: What purpose will these recordings serve in the final production? Answering that question depends on what the composer’s intent is and what the project requires. In music production, engineers use panorama to place individual tracks in specific places across the stereo spectrum (180 degrees). Likewise, when dealing with surround sound projects, the engineer has even more options on where to place specific sounds. And with multi-channel installations, composers arrange sonic elements such that speaker diffusion serves as the “performance” with dozens of speakers arranged in an environment designed for such playback. Stefani and Lauke describe this as a “theatre of spatialisation [...] where

the space becomes embedded within the compositional philosophy and the development of techniques” (2010: 252).

Creative decision-making regarding soundscape intent must consider what kind of “sonic world” the composer desires to produce. For example, the composer might apply minimal processing to field recordings, directly edit them for length and balance, and use the location audio as the focal point of the production. This kind of approach emphasizes the realism of the field recordings themselves; the composer draws attention to the field recordings and uses other musical and non-musical elements to support the location audio. The field recordings suffice; they are “enough” to engage listener interest and keep one’s attention throughout the composition.

A more significant issue is how to assess the complexity of environmental sound and its relationship to digital or synthesized sounds (Truax, 1996). First, as Truax writes, “synthesized sound in particular has been plagued by an artificial sound quality that has none of the corporeality of environmental sound” (1996: 51-52). Likewise, “the syntactic organization of environmental sound bears little relation to that found in speech and music” (Truax, 1996: 52). Though sound processing technology has improved over the past 25 years, Truax’s point resonates: “Environmental sound is decoded by the listener, whose own soundmaking operates with a different repertoire of materials, let alone conceptual intent” (1996: 52). Composers must examine their relationship with environmental sound and make critical decisions on its inclusion in other media types. In this scenario, the composer treats ecological sound in a conservative, transparent fashion. Rather than repurposing field recordings, the composer focuses on transparency and capturing a sense of realism.

The opposite model is to consider the field recordings as a template for “hyper-orchestration,” a term Casanelles uses to describe the hyperorchestra, a “virtual music ensemble that inhibits hyperreality, a product of the combination of virtual instruments (sampled and synthetic), real live recording sessions and sound processing” (2016: 58). Much like orchestration and arranging game music, the field recordings drastically change through digital signal processing, applying effects (e.g. pitch shift, filters, synthesis), and layering. The composer aims to present an artificial world where sonic elements are “larger than life” and perhaps entirely made up. Here, the score might include acoustic recordings, virtual instruments, or a combination of both to produce a compelling sound to enhance visual media. The virtual world created through hyperorchestration is intentionally artificial – much like the augmented reality expressed in new media and game design.

Adding music and other sonic items produces a thicker, denser texture that aims to use the field recordings as source material to create a wholly new kind of world for the listener. Such an approach is common when scoring for visual media. The hyperorchestration model is exciting and pushes the envelope on what field recordings can

do for a new composition. Both approaches are viable; composers and engineers often look for a balance between the conservative and aggressive models of production.

## The transient and networked studio

Two decades ago, Paul Théberge (1997) predicted that digital technology would spawn a new generation of practitioners using samplers, home-based recording setups, and the growth of networked technologies. The same composers and producers would become avid consumers of the technology itself. His theory proved correct. He noted:

Popular musicians who use new technologies are not simply the producers of prerecorded patterns of sounds (music) consumed by particular audiences; they, too, are consumers – consumers of technology, consumers of prerecorded sounds and patterns of sounds that they rework, transform, and arrange into new patterns. (1997: 3)

Today, the Internet connects musicians, producers, and composers such that sessions need not take place in the same room. With websites like Soundtrap and Bandlab, e-sessions allow participants to upload their high-resolution tracks for others to play and download for further editing and mixing. What emerges is a transient concept of the soundscape and the studio. Théberge describes the networked studio “as the result of an overall progression in the historical development of the tools, architectures and practices of the contemporary recording studio” (2004: 760). The virtual studio, in his view, is “placeless” and “[where] just about anyone with a computer, anywhere in the world, can participate in the recording of music” (2004: 760).

A placeless studio describes a creative practice that is not limited to acoustically treated spaces with audio engineers and studio musicians. Assuming the composer has a computer, an Internet connection, and digital technology, they are free to create and collaborate with peers in any location. They need not be confined to a particular site. If the composer moves from one place to another, they bring the studio with them. The studio is transient, just like the composer. Accordingly, most young composers have grown up in this culture and come to university programs using the Internet and digital technology to create music and sound. The concept of a networked studio is both literal and figurative. Networked is the broadband connection that provides artists with Internet connectivity. Recording sessions happen both synchronously and asynchronously. While there may be some latency issues, the telekinetic possibilities afford much exploration and experimentation by musicians in different time zones.

Analyzing and recording a specific location generates a particular sensory experience of the soundscape. As Schafer (1994 [1977]) explains, the soundscape itself is a combination of all the musical and non-musical aspects of a place. We are encouraged to listen deeply and engage with the environment. Recording audio considers

the acoustics of a space. The final mix aims to take all the musical and non-musical elements and blend them into a coherent form. With broadband access, the network now expands to include each room where a musician records, the coloration of the sound as it is played over the Internet, and the temporal effects of listening and interacting with the network.

This means that a digitally mediated 21st-century conception of the soundscape recording brings different sites into the same cloud-based setting. The soundscape becomes an amalgamation of each person's room and the composite of each set of tracks once they are combined. The same is true for musicians that aim to use field recordings as the basis for studio-based compositional practice. Using field recordings as the basis for a new conception of listening, composing, and creative practice – in the transient studio – requires a new mode of analyzing the purpose of the soundscape.

The global studio takes on broader significance when considering the growing practice of networked performance and recording practice. Traditionally, creativity in the recording studio was viewed as both an iterative process and with musicians in the same space. While the musicians need not record synchronously, the first studio recordings were entirely “live.” As technology has evolved, the need for all the musicians to be in the same room has diminished. With networked technologies rapidly improving, musicians increasingly look for ways to use networked technologies to stream and record performances in real-time. Smith, Moir, Ferguson, and Davies (2020) remind us that planned obsolescence is the primary barrier in naming any technology “cutting edge.” On the contrary, by accepting that technology cannot keep up with the virtual race for innovation, Smith et al. (2020) argue that networked performance and composition can now focus on a more inclusive space.

Reaching a point of satisfaction after minimizing latency invites renewed emphasis on creativity, collaboration, and mentoring – ideas we can mirror in educational practice (Smith et al., 2020). Educators working in music production and technology can expand inclusivity by introducing “studio creativity” as an open-ended process; the studio meets the student where they are and need not be defined by traditional standards set forth by the music industry. A placeless studio meets the composer where they are and expands creative possibilities. Understanding creativity as a process rather than a fixed outcome promotes inclusive teaching and learning of young composers.

## **Creativity as an iterative process**

In describing creativity, Storr (1972) uses a child's development as an example. Taking two seemingly disparate ideas and blending them into something new is one kind of creativity. Based on a teacher's feedback, the child is surprised to find out that their idea is not as novel as initially believed. Yet, “[the child] has been crea-



tive in that [they have] produced for [themselves] something which is new to [*them*] (Storr, 1972: 11). Moreover, “[how] creation comes about has been found so enthralling that many millions of words have been written about it” (Storr, 1972: 11).

Sawyer argues that creativity is less about spontaneous moments of inspiration and brilliance and more about an iterative daily routine of experimentation, adjustment, and reflection. Creative work is action-based, and he explains the domain across four areas (2006: 58-60):

- **Preparation:** Research, listening, data-collection, the earliest phase of the process;
- **Incubation:** Time between the preparation and the insight, material is organized and explained, development of ideas;
- **Insight:** When the idea appears, the moment of revelation;
- **Verification:** Testing the validity of the idea/insight, and then finalizing the idea into completion.

The gestation period for a creative idea is noteworthy. After the Preparation phase, plans go through a series of experiments, many of which materialize in the mind. Storr reiterates this: “What has been mulled over for years may appear as a finished product within the brief interval of a few weeks or months” (1972: 62). Sawyer concurs by stating: “Rather than coming in a single moment of insight, creativity involves a lot of hard work over an extended period of time. While doing the work, the creator experiences frequent but small mini-insights” (2006: 71). This description is familiar to many composers.

Sometimes a piece (whether recorded or written) generates just a few bars of new material. After living with the idea for a while, it is not uncommon for the piece to materialize into a complete form. Not every composition goes through this path, but Sawyer’s (2006) and Storr’s (1972) research offers necessary insight into how creativity evolves. Therefore, it is feasible to assume that what appears novel and exciting to *the composer* helps move the piece to the Insight and Verification phases (Sawyer, 2006; Storr, 1972).

The theories here are not meant to try to explain all modes of creativity research. Instead, they provide a basic overview suitable to analyze the varied and hybrid models of soundscape composition with a fluid conception of what and how to integrate the recording studio into artistic practice.

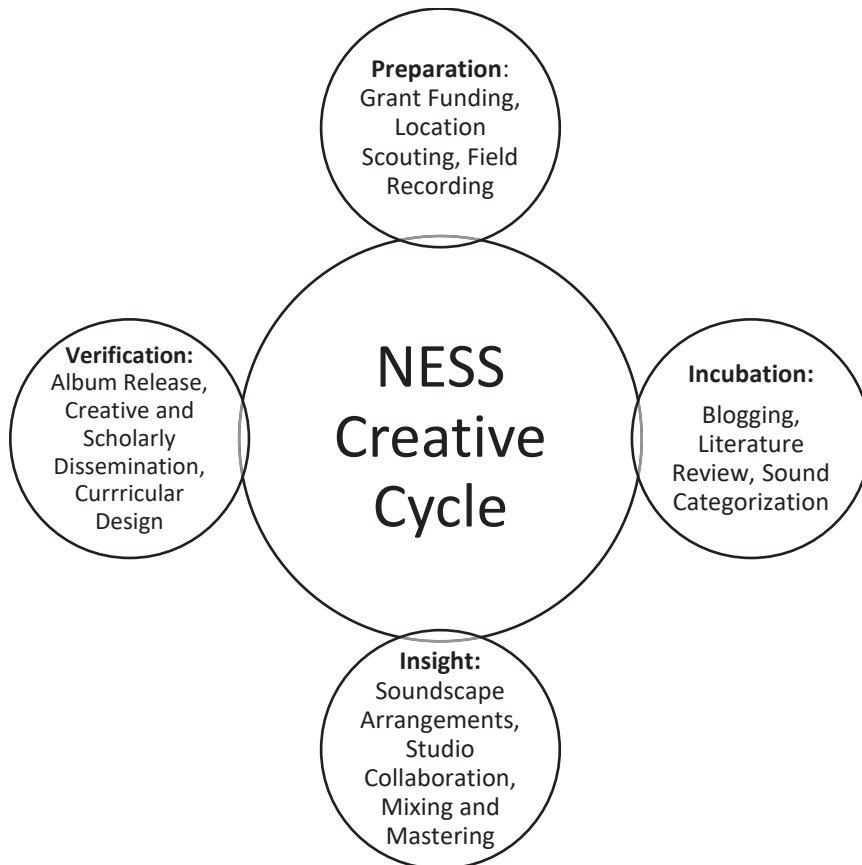
## Case study: The New England Soundscape Project<sup>1</sup>

My work as a composer interweaves field recordings with the recording studio. Connecting field recording-based soundscapes with the studio-as-instrument

ethos evolved over time. After receiving some institutional funding, I spent two years (2015–2017) capturing location audio across the New England region, naming it the New England Soundscape Project (NESS). During the two years, I traveled to more than a dozen rural and urban locations across the six states. I recorded sound indoors and outdoors, near oceans, on busy streets, and on top of mountains.

To accomplish such a goal, I emphasized the transient nature of space and place. I recognized that no two sites would produce the same recordings. Each site had its own set of timbral characteristics. Some locations required permission before commencing recording; others were straightforward and simple. I categorized the field recordings into broad sonic themes and looked for ways to draw a cohesive path. Connecting space and place is fluid, creative, and iterative; this matched my evolving mindset and artistic philosophy during the research process. Also, my research and creative mindsets blurred together. I wanted to make music and share it across multiple outputs. Space and place moved beyond individual sites and recording studios to consider an interrelated set of outputs – creative, research-based, and pedagogical.

Using Sawyer’s (2006) four-part model, the image below describes each of the NESS phases:



## A fluid space and place concept

As the image shows, the first two phases of the project involved scouting appropriate locations, buying equipment, receiving funds through a competitive internal seed grant, traveling to each site, recording and cataloging the sound libraries, and organizing the sounds across a range of themes (Walzer, 2019). During an early phase of the project, I shared some perspectives on the reflective nature of field recording, how my concept of composition evolved, and how deep listening requires patience and reflection (Walzer, 2016). Both processes align with Sawyer's (2006) creativity matrix. There were several periods where I struggled with the project's aims. Perhaps these were manifestations of the Incubation phase that Sawyer notes:

Instead of a single glorious moment, creators experience small insights throughout a day's work, with each small insight followed by a period of conscious elaboration; these mini-insights only gradually accumulate to result in a finished work, as a result of a process of hard work and intellectual labor of the creator. (2006: 72)

After compiling dozens of field recordings and high-resolution audio files, I revisited bringing the soundscape into the studio. This happened after discussions with a longtime collaborator. We explored using the recording studio as a platform to create new parts to the compositional sketches I arranged. A year's worth of contemplation resulted in the Insight phase. At once, the final stages of the project became clear. We were to assemble a group of collaborative studio musicians, "write" to the soundscapes in the studio, create an album, and verify the results both creatively (album release) and via scholarly channels (festivals, peer-reviewed outlets).

Verification came via the album release, premieres of works at juried festivals, and publishing peer-reviewed articles in scholarly journals. Each of these outputs allowed the project to reach different audiences. The album, *March to Muddy Water (The New England Soundscape Project)*, produced a hybrid of field recordings, studio accompaniment, virtual instruments, and live performance (via festival programming). Over time, the Sawyer (2006) model of creativity in the NESS produced a hybrid result. The creative and scholarly dissemination intersected, just as the soundscape and recording studio blurred into a new composite of nine fixed media pieces.

## Narrative analysis and pedagogical implications

The verification phase did not end after the album and articles were shared with the public. The project's completion informed much of my curricular design for a course called Sound Narrative.<sup>2</sup> As an educator, my educational philosophy is informed by the mantra: "You can't keep it if you don't give it away." In my teaching

praxis, narrative analysis, guides much of my pedagogical decision-making. Drawing on personal experience working as a soundscape composer and research proved successful in delivering a new undergraduate course for nascent recordists. In that course, I drew openly and honestly on my emerging concept of what soundscape composition is and promises to be. My students, many of whom were new to field recording and music production, are good examples of transient music-makers. They use digital technology fluently, collaborate with others online, and are quick to use open-source music technologies. Equally, we co-created a safe and welcoming environment where ideas and experimentation were favored (Walzer, 2020).

On narrative analysis, Cortazzi writes: “The study of teachers’ narratives – teachers’ stories of their own experiences – is increasingly being seen as central to the study of teachers’ thinking, culture, and behaviour” (1993: 5). He elaborates:

To improve educational systems, curriculum reforms and classroom practice, therefore, we need to know more about teachers’ perspectives. We need to know how teachers themselves see their situation, what their experience is like, what they believe and how they think. (Cortazzi, 1993: 5).

Perhaps the most critical aspect of the NESS creative path came about in the honest assessment of the project’s aims with my Sound Narrative class. Five years earlier, I knew little about soundscape composition and the power of audio storytelling. Post-project, I understood more about the creative process, not only as a composer but also as a practice-based researcher.

Analyzing the project’s creative cycle, rather than its *output*, proved more useful in the pedagogical decision-making than merely analyzing the recordings alone.

Candy and Edmonds define practice-based research as “an original investigation undertaken in order to gain new knowledge and the outcomes of that practice” (2018: 63). They explain:

[In] the creative arts, including new media arts, the emphasis is on creative process and the works that are generated: Here, the artifact plays a vital part in the new understandings about practice that arise. (Candy & Edmonds, 2018: 63)

Creating new media compositions, producing original peer-reviewed scholarship, and sharing those outputs with the musical community defined one aspect of the New England Soundscape Project. Analyzing mixing and production techniques, investigating arranging and studio collaboration methods, and examining field notes provided crucial data. In the Sound Narrative course I taught, we listened to some of the album’s recordings and read articles I gathered during the Preparation stage of the creative cycle (Sawyer, 2006). Yet, the data revealed little about how to analyze the creative process, and how best to model that approach for my teaching. Drawing more on personal narrative proved more beneficial in the day-to-day

classroom teaching and lecturing. One possible explanation for this is that the students perceived my assessment of the project as a source of openness – one they could relate to in undertaking a new artistic challenge (Walzer, 2020).

## **Evolving pedagogy and practice**

Throughout this article, I have described the continuous and fluid convergence of field recording and studio production. The crisscrossing of field recordings and studio production means that the authentic world (unprocessed environmental sounds) and the artificial world (using the studio as an instrument to alter existing recordings) move to a liminal space – one that is blurred and sometimes nebulous. The boundaries between artificial and authentic sounds underscore the recording studio's ideology as both networked and transient.

In my work with the New England Soundscape Project, the field recordings challenged my collaborators and me to re-envision how we compose with and through environmental sounds. Though multifaceted in its scope, the overall result was a more integrated conception of the relationship between environmental sounds and their connection to the recording studio's artificial environment. Assessing creativity is mainly subjective. It made more sense to focus on the process rather than the specific outcome. Later, I sought to bridge this same understanding in my work as an educator with young composers.

Modeling creative practice for young composers is equally daunting. Rather than present field recording and studio recording as separate entities, I sought to present both as similarly relevant and supportive artistic pathways. To do this, I focused less on describing field recording as a traditional model of composition to encourage the students to develop an awareness of their everyday environments and use that to guide their artistic decisions. Moreover, I also chose to present the “studio” as a laboratory rather than a place of privilege, removed from everyday lived experience and reserved for skilled labor.

In considering these ideas, the studio occupies a hybrid and liminal space; it comprises the tools that young composers use to document sound. The studio is transient and moves with the young composer as they use whatever technologies are available to them to tell a story. The narrative component of the composition is personalized here. Students focus less on a particular musical style and more on reflecting on their stories. They look for ways to produce sonic and musical content reflective of their interests. They collaborate with others online, and the educator must be sensitive to this nuanced and open-ended way of discovering how to create studio soundscapes via field recordings. In the classroom, moving away from the product in favor of the process ensures room for Sawyer's (2006) four-part creativity model. Students scout locations where they wish to record (Preparation), research produc-

tion techniques, journal, and listen to contemporary sound artists (Incubation), collect sounds and produce ideas (Verification), and reflect on their learning (through group and teacher feedback) during and after the process concludes (Insight).

## Conclusion

At present, higher education finds itself in a precarious situation amid extensive social distancing and quarantines. It is difficult for musicians to record in studios and exist near each other. Educators working with composers on connecting field recording with studio production must account for changes in the proximity of people in studios and sites dedicated to recording sound. While the world slowly resumes daily public activities, more stringent distancing guidelines make outdoor fieldwork more precarious. Not that budding recordists cannot go outdoors. Recording nature is more feasible, with minimal interference in crowded locations. Both for the educator and students, using an abundance of caution and planning field recording activities is essential. Whatever the case, a global health crisis makes any long-term planning difficult and fluid. Our educational communities continue to grieve and struggle to serve student needs while protecting health and wellness for all.

The transient nature of studios also reinforces the concept of working from a distance. Whereas recording studios once functioned as specialized locations with proper acoustic treatment and boutique equipment, their future solvency remains uncertain. Therefore, the networked studio's concept becomes even more prescient in a time of isolation and seclusion. Instead of trying to reinvent what a "proper" studio looks like in the wake of a global economic health crisis, educators should shift the pedagogical focus to creating a new space and place. The networked studio tree brings together people from all walks of life, across cultures, and a more inclusive collaborative music-making model.

Janet Wolff (1984) reminds us that creating art is a fundamentally social construct. There is a multitude of complexities that influence creative decision-making. Wolff contends that artistic practice reveals a more profound human capacity; a specific choice or decision leads to conclusions. She argues that art is situated in a particular setting and that artistic practice is underscored by the embeddedness of the artist's choices and the audience's subjective view of the output itself. As I have maintained, the recording site – environmentally-focused or inside the studio's confines – is transient. The tools used to create soundscapes – analogue or software-based – evolve to meet a particular project's needs. The New England Soundscape Project offers one example of this. Field recordings intersect with software-based instruments, live studio musicians, and a fluid concept of soundscape composition.

If unprecedented changes teach us one thing, it is that as educators we have a brief respite to interrogate what has worked and what must change. The solitude of working in isolation comes at a price. If one believes that music-making is about working with people, then a sense of grief overtakes the soul. I cannot imagine what a pandemic pedagogy might be, other than being present and building connections in whatever ways possible. It does make sense to re-evaluate the role of technology in soundscape and music production.

Similarly, it is incumbent upon educators to look for ways to expand collaborative and likely virtual structures when social gathering remains limited. The tools and technologies used in creating new sounds should engage student interest, avoid prescriptive hierarchies, and be readily available. This is not a criticism of high-end recording technology; instead, reimagining a socially-embedded curriculum, process-driven, and respectful of students from varied backgrounds is ideal.

The economic model for most recording studios has imploded along with the old model of the music business. For educators to guide students to a deeper connection between their compositional and production identities, the networked studio facilitates a more democratic and inclusive manner toward cooperation. Course content that emphasizes music-making where one is is the place to begin. Second, embracing the notion that field recording and studios are now transient, as are the needs and interests of those using field recordings to learn and grow as artists, is crucial.

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## Notes

- 1 For detailed explanations into the technical aspects and early phases of the project, please see Walzer (2019) and Walzer (2016).
- 2 A description of Sound Narrative and its pedagogical aims can be found in Walzer (2020).