Critical Approaches to the Production of Music and Sound

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CHAPTER ONE

The Production of Music and Sound: A Multidisciplinary Critique

Eliot Bates and Samantha Bennett

Since the 1970s, the production of music and sound has been analyzed in several distinct fields and with divergent theoretical frameworks and methodologies. Phonomusicology is an umbrella term that encompasses an assortment of approaches toward studying recorded music where the focus is on recordings rather than on other forms of media (or on live performance). While not all phonomusicological works analyze production, there has been an increasing attention on the techniques of the recording studio and therefore by extension on production as a practice. The production of culture perspective, since the 1970s, has been a mode of American organizational sociology for analyzing cultural industries. As one of the few broader sociological perspectives to originate in the study of music (and to be later applied to other industries), works in this field have emphasized the structural features that enabled new musical genres to emerge. The literature on the occupation of producer has resulted in a body of scholarship that regards the producer as an auteur, composer, or overseer of the production process. Finally, an outgrowth of phonomusicology is a new academic subfield called the art of record production, which has placed considerable attention on the techniques and technologies found at the heart of recorded music.

Phonomusicology

In recent years, discourses on sound and music production have broadened in scope as more scholars engage in the space(s) existing between performance and reception. Many of these new ideas have emerged via what Stephen Cottrell called *phonomusicology* (2010), which is the study of recorded music. This discourse posits the recording-as opposed to the score-as the text, and notes important facets of music and sound production to include recordist agency, the recording workplace and/or space, as well as nonnotatable sonic aesthetics present in recordings. This has led to key edited collections analyzing recorded sound, including Greene and Porcello's Wired for Sound (2005), Cook et al.'s Cambridge Companion to Recorded Music (2009), Amanda Bayley's Recorded Music (2010), Simon Frith and Simon Zagorski-Thomas's methodology-focused The Art of Record Production: An Introductory Reader for a New Academic Field (2012), and Paul Théberge, Kyle Devine, and Tom Everrett's Living Stereo: Histories and Cultures of Multichannel Sound (2015). These works move the study of music away from the previous focus on composition and performance and toward the recorded document, whether artifact or digital file. They also suggest the fruitfulness of analyzing the labor of production, even though such considerations surface only within a few chapters.

Phonomusicology has certainly broadened the scope of analytical priorities within popular musicology to include the sonically discernible extramusical aspects of recordings in addition to traditional, commonly foregrounded aspects of melody, harmony, meter, structure, and form. In popular music analysis, the effects of sound recording and production technology on what we eventually hear have until very recently been a secondary concern, if acknowledged at all. This is surprising, since the intervention of sound recordists and the technologies used in music production are commonly foregrounded in recorded music. For example, how different would "Strawberry Fields Forever" have sounded without the use of analog tape techniques and manipulation or, indeed, the influence of George Martin? Many sound production tropes, including techniques such as side-chain compression, band pass filtering, and auto-tuning, are now well assimilated into the pantheon of electronic music production to the point where electronic music produced without such features is the exception rather than the rule. In his 1982 article "Analysing Popular Music: Theory, Method, Practice," Tagg's hermeneutic semiological method included a "checklist of parameters of musical expression" (1982: 47) including "acoustical" and "electromusical and mechanical" as two of seven categories. This early recognition that production techniques were not extra-musical factors as they strongly impacted what is eventually heard was an important milestone in scholarly understandings of the music production process as well as popular music analysis generally.

Works including David Gibson's Art of Mixing (1997) and William Moylan's Understanding and Crafting the Mix (2007) detail the construction of mixes from a technical perspective and feature visual representations of several basic parameters of recorded sound. These texts are designed to assist those interested in improving their mixing technique, and to that end are aimed at practicing recordists as well as scholars. Ruth Dockwray and Allan Moore's "Configuring the Sound Box 1965–72" (2010) prioritizes the spatial, frequency, and dynamic attributes of a recording and draws meanings from the relative positions of instruments within commercial popular music mixes at the turn of the 1970s. Doyle (2005) recognized the impact of echo and reverb on pre-1960s recordings, in particular the fabrication of space in recorded music. Doyle's comprehensive and insightful book foregrounds the use of space, ambience, and environment as extramusical, yet essential facets of recorded music as he highlights applications of echo and reverb via multiple examples. Brøvig-Hanssen and Danielsen (2016) in contrast focus on "digital signatures," or traces of digital signal processing tools and their use that remain or are foregrounded in popular recordings. Works by Samantha Bennett (2015a,b) analyze recordings using a "tech-processual" analytical method. This includes a focus on contextual issues, such as the intentions of the recordist, workplace circumstances, and access to technologies before detailing the sonically discernible impact of dynamic, spatial, frequency, effects processor, and mix characteristics on what the listener eventually hears. New studies in phonomusicology certainly benefit popular musicology, but their scope and impact are far broader than that.

The production of sound and music from historical perspectives is beginning to be documented, with key works including David L. Morton's Sound Recording: A Life Story of Technology (2004) and Susan Schmidt-Horning's Chasing Sound: Technology, Culture, and the Art of Studio Recording from Edison to the LP (2013) focusing on the historical trajectories of sound recording technologies and workplaces, respectively. The historical nature of recording technologies and workplaces as "concealed" facets of the recording process has led to an insatiable, general interest appetite for "behind the scenes" texts and documentary films that "reveal" such processes and the oft-overlooked contributions to well-known recordings made by recordists. The Classic Albums documentary series and books including Milner's Perfecting Sound Forever (2009) are good examples of largely interview-based works revealing the tools, techniques, and personnel behind canonized rock and pop recordings. This well-established and popular format has continued with films including Sound City (2013), which focuses on the Los Angeles recording studio of the same name, as well as the Neve 8078 console, which recorded many of the commercially successful records made in the studio. Documentary films including Moog (2004), Mellodrama (2008), I Dream of Wires (2014), and 808 (2014) and books including Tompkins's How To Wreck a Nice Beach: The Vocoder from WWI to Hip Hop (2010) center on specific electronic music technologies

and their impact on niche genres of recorded popular music. Bloomsbury Academic's own 33 1/3 series of books features plenty of titles that take such revelatory approaches. Two in particular are D.X. Ferris's *Reign in Blood* (2008), which features detailed discussion surrounding the impact of Rick Rubin's production and Andy Wallace's mix techniques on the 1988 Slayer record. Joe Bonomo's *Highway to Hell* (2010) takes a similar line, in that it foregrounds the contribution made to the AC/DC record by recordists Mutt Lange and Tony Platt.

Historical studies of music production do, however, tend to privilege Anglophone commercial, pop and rock musics; studies on the production of indigenous musics, as well as classical and jazz musics, feature far less in both general interest and scholarly phonomusicological studies. This is possibly due to the techniques involved in the recording of commercial musics as opposed to noncommercial and/or Western art musics. Technological and processual intervention has arguably been foregrounded in popular music recording since the 1950s, with recordists such as Sam Phillips and his pioneering "slap-echo" effect heard across most releases from his Sun Records label (Zak 2010). In the 1960s recordings of The Beatles, we hear prominent tape manipulation effects, as well as the consolidation of musician and recordist vision via the impact of George Martin as producer (Kehew and Ryan 2006). Using these historical examples does, however, reinforce a recordist canon of sorts that in recent years has grown from the concentration of both scholarly and general interest works focused on the so-called "golden age" of Anglophone commercial recording between the 1950s and 1970s. Mine Doğantan-Dack's Recorded Music (2008) diverts from this well-trodden path by focusing on the aesthetics of phonography, and the recording of jazz and classical musics from both philosophical and critical angles. Recordings of classical and jazz musics have historically tended to be more "transparent" in that a "performance capture" approach is preferred. In saving that, recent studies by Klein (2015) suggest increasing technological intervention in the recording and production of classical music today. While there has begun to be some consideration of production-related issues in the milieu of indigenous music (e.g., Gibson 1998; Kral 2010; Scales 2012), to this date outside of Anglophone music in the Northern Hemisphere, there has been only limited work. Clearly, there is plenty of work to be done.

One fascinating area in sound and music production studies is that of the recorded music artifact/document and the impact of digitization on production, dissemination, and consumption of recorded sound. As one of the foremost scholars in sound studies, Jonathan Sterne has argued that simultaneous to the audio industry's historical quest for high fidelity is a parallel history of audio compression. In *MP3: The Meaning of a Format* (2012), Sterne posits a historical and philosophical perspective on perceptual encoding, data reduction, and the governance of format technologies. This is a key work among many in music, media, and sound studies in that it situates the MP3 as emerging from century-old techniques in audio compression and not simply a symbol of musical devaluation. Sterne's work is particularly valuable to sound studies since the focus is on the format and technology itself and not the ramifications of MP3 on music industry business models, which make up the majority of studies on music file formats. In his 1969 essay "Opera and the Long Playing Record," Theodore Adorno stated, "In the history of technology, it is not all that rare for technological inventions to gain significance long after their inception" (2002[1969]: 283). This is certainly the case for the vinyl record format, boosted not only by a recent, albeit unexpected, growth in global sales but also by scholarly attention. Richard Osborne's Vinyl: A History of the Analogue Record (2012) considers the format's historical trajectory and ongoing appeal in the digital age, with focus on technology, consumer demographic, and aesthetics. Bartmanski and Woodward's Vinvl: The Analogue Record in the Digital Age (2015) posits a challenge to format obsolescence by arguing the place of the tangible object in today's almost entirely digital music world. Bartmanski and Woodward recognize the importance of listener subjectivity, mediation, and other reception matters, suggesting the vinyl record is "an icon of recording that thanks to its remarkable affordances came to sit at the core of great cultural transformations of the twentieth century" (2015: 5). Both texts consider vinyl as transformative, not simply in terms of a music carrier, but also the centrality of the format to social and cultural practices throughout the twentieth century.

Consideration of these analog/digital, tangible/intangible binaries appears throughout existing studies on the production of music and sound. Another recent, emergent area concerns the production of sound and music in the virtual world. Whiteley and Rambarran's Oxford Handbook of Music and Virtuality (2016) includes multiple chapters on the production of music online. The role of participatory, fan-funded platforms is considered in Mark Thorley's chapter "Virtual Music, Virtual Money," which raises questions surrounding authorship and creative direction when multiple audience members invest in a production process. Benjamin O'Brien focuses on the production process as a collaborative one in his chapter "Sample Sharing: Virtual Laptop Ensemble Communities." Both these chapters consider the production of music as a collaborative process, but also one that bridges real and virtual economies, creative practices, and communities. These are just two examples of production-focused chapters in a wider publication that addresses new modes of music practice online.

Production of Culture

The production of culture perspective emerged in 1974 as a "self-conscious perspective [that] challenged the then-dominant idea that culture and social structure mirror each other" (Peterson and Anand 2004: 311–12). Originally, it was one of several approaches within a movement in North

American sociology that were concerned with bringing a flexible concept of culture to bear on the sociology of organizations and industries, while continuing to acknowledge the importance of symbolic/semiotic systems on the production of culture. As such, the perspective presented an alternative both to then-dominant Marxist and functionalist perspectives. It additionally has much in common with Howard Becker's contemporaneous concept of art worlds (1976), but with more focus on organizational/institutional dynamics than on different types of professional individuals. Notably, the production of culture concept emerged out of a decade of research on jazz, rock, and popular musics and discoveries that the rise of rock and decline of swing jazz (as the dominant popular music form, at least) couldn't be understood simply from aesthetic features, consumer demand, or the work of the "individual genius" alone. The perspective has had considerable subsequent adoption outside of music studies, becoming in the words of Paul DiMaggio "hegemonic in the sociology of the arts and media" (2000: 108) and framing studies of industries including fashion, visual art, restaurants and microbreweries, and photography.

As Marco Santoro has noted, "the heuristic usefulness and epistemological importance of the production of culture approach rests in the fact that it is indeed attuned to the specificities of cultural objects as symbolic representations and meaning structures, while still being focused on matters to do with social institutions and modes of social organization" (2008: 8). By looking primarily at the production of informally produced symbols, and by treating music primarily symbolically, the focus remains largely on identity construction and formation. Toward this end, concepts like "authenticity" have been central in the production of culture perspective approaches toward recorded music, as authenticity can be discussed both as a quality of a symbolic object and as a social value within genre-specific music communities. Correspondingly, the focus on symbolic aspects of production has meant a lack of attention on other aspects of recorded music; in addition to having symbolic value, recordings are material artifacts that facilitate very real embodied experiences (i.e., those that transpire during the acts of production or listening) and as such are irreducible to a symbolic valence alone.

While Peterson regularly revised and honed the production of culture perspective in response to his ongoing research into music industries (and especially the US country music industry), the standard model of the perspective hinged upon six concepts: (1) technology, (2) law and regulation, (3) industry structure, (4) organizational structure, (5) occupational careers, and (6) the market. This six-part structure is useful to analyze when thinking about what precisely defines production within this perspective—and it is useful to scrutinize all that is occluded by focusing on these six concepts. For example, absent are the very objects that production produces, their aesthetic qualities, or the reception of these products. The perspective does not contain any explicit conceptualization of time or temporal unfolding and, therefore, is not well suited for analyzing the workflows of production.

Thinking through labor solely with the framework of careers or industry/ organizational structure misses most of what is interesting in the field of production, for example, distinctive differences in how engineering, arrangement, production, mixing, etc., are done for different forms of music ostensibly contained within "the industry." Peterson's book on country music (1997), for example, does not attend to recording studio practices in any meaningful way; recording practices and studio-sited performances are deemed inessential for understanding how country music, as an industry structure, fabricated a cult of authenticity. The conflation of "the market" with "the audience" (Dowd 2004: 240) correspondingly conflates consumer activity with audience reception. Thus, there is little critique of whether the commercial success of particular symbolic objects necessarily means that consumers subscribe to the symbolic meanings intended by the producers of those objects.

Keith Negus's long-term study of the cultures of major record labels situated in the UK provides a distinctive take on the "mundane mediations of the music industries" (1999: 174) that largely follows the production of culture perspective. The main aim of his research is to demonstrate how "all industries are cultural" (ibid.: 23) and to provide a sociological account of the creation and maintenance of musical genres. His first book, *Producing Pop*, included a brief discussion of studio-sited production (1992: 82-93), which is discussed from the perspective of artists and repertoire (A&R) representatives rather than the perspective of engineers, producers, musicians, or audiences. None of the discussion of studios and engineers appears to be based on ethnography conducted within studios, which contrasts with the first-hand accounts he provides from A&R reps and record label executives. In his follow-up book Music Genres and Corporate Cultures, Negus further clarifies his research aim as understanding "how staff within the music industry seek to understand the world of musical production and consumption by constructing knowledge about it . . . and then by deploying this knowledge as a 'reality' that guides the activities of corporate personnel" (1999: 19). Negus's focus on the industry and organizational structure of record labels explicates "the conditions within which great individuals will be able to realize their talent" (ibid.: 18).

While industry structure serves as one of the pillars of the production of culture perspective, rarely is the term "industry" defined or problematized. Instead, "the industry" is taken for granted as an empirical category, where it is typically synonymous with the major transnational record labels and radio conglomerates. But as recent ethnomusicological scholarship has shown, "the industry" is perhaps not best understood as an empirical category. Chris Washburne (2008) has shown how the New York–based salsa music industry is best understood as a scene. Benjamin Brinner's study (2009) of Israeli-Palestinian ethnic music collaborations depicts an industry that transpires at the intersection of the social networks of dozens of individual musicians. Eliot Bates's research (2016) into an emergent

industry for Anatolian minority language musics in Turkey theorizes it both as an actor-network and as an inheritance of Ottoman-era craft guilds. Louise Meintjes's ethnography (2003) of South African record studios situates the industry for mbaqanga music within sets of embodied practices and complex articulations of racial difference and power. In all cases, the industry does not exist so much as it is performed, contested, enacted, negotiated, and recontextualized. It makes little sense in the early twentyfirst century to talk of "the music industry," even as corporate mergers have further consolidated the control of recorded, broadcast, and live music performances (Williamson and Cloonan 2007).

The production of culture also lacks a coherent theory of technology; it alternates between social and technological determinist poles but lacks a consideration of the more nuanced relations between people and technological objects that, for example, comprise the labor of STS as a field. For example, Peterson (1990) suggests that the shift from 78 RPM shellac to vinyl records had a direct role in the emergence of rock 'n' roll. While this may have been the case for the United States in the late 1940s and early 1950s, as Osborne (2012) has shown the situation in the United Kingdom was different. The country was slower to adopt the new formats, and new genres became popular without any wholesale change in format. Works such as Wallis and Malm (1984) and Gronow and Saunio (1998) have shown just how asymmetrical the adoption of media formats have been in different countries. What is necessary, therefore, is a site-specific consideration of how certain technologies become part of social formations and cultural practices.

Another problem that faces the study of production concerns the tendency to reduce the role of recordists, engineers, producers, arrangers and other people involved in the production of recorded sound to that of "intermediaries" and therefore equivalent to A&R reps, accountants and other record label/ music industry employees. The "intermediary" concept is quite problematic with regards to academic writings on popular music production for a number of reasons. First, while the work of music critics, publicists, A&R reps, accountants, record producers, engineers, arrangers, or session musicians all do contribute to the subsequent "reception" of music by audiences, the kinds of labor-and the effects of these different kinds of labor-do not necessarily contribute in similar or symmetrical ways. As David Hesmondhalgh has shown, some of the myriad uses of this term in Anglophone scholarship on popular music and cultural industries come from a pervasive misreading of Pierre Bourdieu's concept of intermediary, which most specifically was concerned with the role of critics in the field of cultural production (Hesmondhalgh 2006: 226) rather than the labor of what Hesmondhalgh terms "cultural managers." Second, the intermediary concept is problematic as it assumes the presence of a specific relation between an artist/musician/creator and an audience in which the intermediary mediates. This inherits the legacy of early uses of the term "mediation" in reference

to the mediation between an individual and God, or subsequent uses of the term to refer to diplomats and the mediation between sovereign states or between an individual and the state. But the relation between a broad field of creators and an even broader field of potential audiences is not clearly built upon a binary relationship, especially when considering the complexities of the circulation of physical media and networked distribution of digital content and cultural products. As Hesmondhalgh noted, "we need a better specification of the division of labour involved in mediating production and consumption in culture-making organizations than that offered by Bourdieu and by those who have adopted the term 'cultural intermediaries' from him in these many different ways" (2006: 227).

A more productive, but simultaneously more expansive and diffuse, concept of mediation transpires in the work of Antoine Hennion, where the concern moves beyond simply navigating human social relations and considering the role of nonhuman actors, especially technological objects, on human interaction and creative practices. For Hennion, producers and other studio workers have a vital role in mediating between the public and the artist, but in doing so "the aim of the entire organisation of production is to introduce the public into the studio" (1983: 189). Thinking of mediation in this way is productive insofar as it permits the analysis of systems where built environments or technological objects come to have a considerable influence on creative and social labor, and provide much needed attention on the ways in which certain objects occupy highly charged and influential positions within cultural practices (e.g., the microphone, see Stokes 2009). In a later work, Hennion addresses the sociology of music as a field when he argues that "music enables us to go beyond the description of technical and economic intermediaries as mere transformers of the musical relationship into commodities, and to do a positive analysis of all the human and material intermediaries of the 'performance' and 'consumption' of art, from gestures and bodies to stages and media" (2003: 84).

Producers, "Production Personnel," and Auteurism

Concepts of sound recordist agency and the role of the sound recordist have, in recent years, become key foci in both sound and music studies. In his 1977 article "The Producer as Artist," Charlie Gillet theorized the role of the record producer as similar to that of the film director. This prompted the emergence of another disciplinary focus, that of "the producer as auteur" which situated the producer as driver of a commercial musical project.

By 1990, an entire issue of *Popular Music and Society* was dedicated to studies on the impact of technology—specifically sound recording and music production technology—on recorded, popular music. Yet such early

studies recognized the complex intersection between musical composition, performance, musician and recordist agency, and technology in the production of recorded music. Muikku (1990), for example, categorized producers into four specialist groups: those working for one record company, freelancers, those working for their own company and artist-producers. Others theorized the role of the record "producer" as similar to that of a composer (Moorefield 2005) or film director, thus resulting in a sub-discourse of "the producer as auteur" (Warner 2003). This line of thought was perhaps most notably pursued by Evan Eisenberg in *The Recording Angel* (2005), as he described:

But for the most part the small army of engineers, studio musicians and assistant producers that takes part in a typical recording is simply ignored. In charge of this small army is the producer, who is the counterpart of the film director. (2005: 94–95)

The idea that a music production process is overseen by one individual is, however, controversial and has attracted critique. In an early work, Ed Kealy argues that, despite the shift from a craft union mode of organization to an entrepreneurial one, sound recordists still very much were part of a collaborative work environment (1979). In *The Poetics of Rock*, Albin Zak focused on the difference between the production roles of producers and engineers, as follows: "[Engineers] are the participants in the process who best understand the technological tools in terms of their potential for realizing musical aims" (2001: 165). Correspondingly,

Most rock producers play some sort of aesthetic role as well, which may overlap with songwriting, arranging, performing, and engineering, either in participation or in lending critical judgement or advice. Most importantly, producers must nurture the overall process and preserve a larger creative vision as the process moves through myriad, mundane details. (2001: 172–73)

However, Zak stopped short of fully endorsing auteurism, instead reinforcing the collaborative process involved in record production, as he stated: "But the idea that a producer should be such an auteur—imposing his or her own sound and vision on diverse projects—is controversial, as is the 'artist/ record producer' conflation (unless, of course, the producer is also the featured performer)" (2001: 179). In *The Art of Music Production* Richard James Burgess categorized the producer in four interesting ways: The All-Singing-All-Dancing-King-of-the-Heap, The Faithful Sidekick, The Collaborator, and Merlin the Magician (2002). While these distinctions reflect Burgess's own professional practice and can therefore be taken as an accurate reflection of recording industry roles within a particular production milieu, the categories—particularly the final of the four—reinforce mythological

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understandings of the role of the recordist in music production processes and do little to theorize the impact on resulting recordings. There is, however, acknowledgment that producers operate in both auteurist and collaborative modes.

In his book Any Sound You Can Imagine, Paul Théberge considered the impact of new digital recording technologies on the process and professions of music production. This book focused on the so-called "democratization of technology" (1997: 29-30) and the availability of recording tools to performers in the 1980s and early 1990s, showing how producers become consumers of technology. Links between the proliferation of cheap, accessible, and predominantly digital recording technologies and new recordist roles have been drawn by a number of scholars (Théberge 1997; Katz 2004). The production, dissemination, and consumption of digital music has undoubtedly resulted in a conflation of traditional recording and production roles as defined by Zak. As Virgil Moorefield suggested, "At the top of the current charts, one increasingly finds cases in which the producer is the artist is the composer is the producer; and technology is what has driven the change" (2005: 111). Mike Howlett's "The Record Producer as Nexus" is less concerned with the relationship between production technology and personnel, more focused on the producer as an intermediary, and about "engagement with otherness" in terms of "the song and the performance, the engineering and the industry" (2009).

The Art of Record Production

The art of record production, sometimes termed "the musicology of record production," is a distinctive scholarly field that emerged largely out of practice-led research initiatives in British universities (and later in North America, Australia, and continental Europe). The annual conferences of the Association for the Art of Record Production, and since 2007 the *Journal on the Art of Record Production*, have been one of the main milieus for the scholarly analysis of recorded music. In their introduction to an edited collection, Simon Zagorski-Thomas and Simon Frith argue that "in the studio technical decisions are aesthetic, aesthetic decisions are technical, and all such decisions are musical" (2012: 3), which encapsulates one of the main concerns of this branch of musical research. Conspicuously absent, however, is any substantive consideration or theorization of the social. Because of that, this field would seem to be the antithesis of the production of culture perspective.

For example, Zagorski-Thomas (2014) employs an eclectic framework drawing on actor-network theory (ANT), the social construction of technology (SCOT), and a systems approach to creativity (especially Csikszentmihalyi 1997) in order to propose a new approach to musicology that is more responsive to the analytical challenges of recorded music. He

proposes a methodology that focuses around four questions: (1) who and what the participants are in the study (including the possibility of technologies as active participants), (2) types of knowledge and understanding, (3) types of activity (including both the specialized labor of recording production and the more general cognitive/physical activity), and (4) the ecology/environment in which this process occurs. This framework enabled Zagorski-Thomas to write with considerable detail about the techniques and technologies present in the field of production, perhaps the greatest achievement of this approach (especially in comparison to previous scholarship such as production of culture perspective works).

Broadly speaking, the bulk of art of record production literature by other scholars, even though it has differed in theorization, has stuck to variants of this methodology, including the problematic dichotomy between the object of study (the first three questions) and its context (the fourth question). Specifically missing in such a framework is, for example, any necessary discussion of musical meanings, power, identity, politics-and sociocultural issues more generally. While the same could be said for most musicological scholarship before the 1990s, what Philip Bohlman has noted as musicology's "remarkable capacity to imagine music into an object that [has] nothing to do with political and moral crises" (1993: 414-15), the field has changed substantially. It is not clear why it is necessary, in arguing for a musicology of record production, to roll back the considerable achievements that musicology has made in showing how music is constitutive of social realities (e.g., DeNora 2003; Turino 2008). Analytical work, such as that carried out by Tagg and Moore, is notably absent from the discourse too, as is work considering the production of music and sound outside the traditional realm of the commercial, popular music recording industry. That is not to say that the Art of Record Production forum is not valuable; it most certainly is and, to a large extent, it has made significant inroads into establishing and continuing a vital discourse once absent from popular music studies and the creative, artistic realm of audio engineering.

Still, space remains in sound and music production discourse for further work. This book aims to address this notable gap, thus broadening the discourse beyond the recording workplace and into domains such as fieldwork, television, the Internet, and live music. Here, we present 13 innovative and original new ideas pertaining to the production of music and sound drawn from both traditional and contemporary research bases and methodologies. In order to widen the literature and contribute to this field beyond the loci of records and recordings, this book is organized into six key sections.

The chapters in *Situating Production: Place, Space and Gender* (Section 1) begin with an exploration of the contexts of production, but move beyond questions of context to understand how recordings always carry with them traces of their spaces, places, and gendered modes of production. Tom Western, in Chapter 2, moves our analysis beyond

the oft-assumed studio/field recording dichotomy to understand how both are equally "artificial constructs of sonic manipulation," especially in relation to editing choices and microphone selection and placement. Moreover, field recordings are a technology used to produce place—and as such exist as forms of cultural production. Drawing on the early history of ethnomusciology and the formation of the International Folk Music Council (IFMC), Western shows how field recordings were instrumental in the very foundation of the field of ethnomusicology and used by the IFMC "to produce idealized versions of place." Yet this process wasn't (and isn't) unproblematic, as field recordings can also evoke a spirit of displacement, leading listeners to project place onto field recordings.

In Chapter 3, in an analysis of UK-based popular music practitioners, Damon Minchella considers how space becomes an intrinsic aspect of the creative process of making audio recordings, and grounds practitioners' experiences of the world. The chapter uses a novel framework that draws on phenomenological enquiry, sound studies approaches to theorizing aural architecture, and a systems model of creativity and is supported by ethnographic data taken from long-form interviews. Minchella arrives at three conclusions: that the "atmosphere" of a space has more effect than other aspects of spaces, that technological and acoustical concerns are secondary to the feel of the aural architecture, and that spaces leave an imprint on the sound produced within.

Chapter 4 turns the attention to the significance of gender within production environments, where Paula Wolfe explores three themes: "the role of production within the creative process, the influence of the lyric on the production process and the impact of gendered 'cultural notions of age' on the women's representation." This is done through a comparison of the Argentinian folk/electronica artist-producer Juana Molina with the allwomen rock band Savages. For Molina, there is no meaningful separation between composition and production processes—both are part of a broader creative act. For Savages, the work they did contributed to what they termed an "indestructible sound," and they cultivated a close relationship with a male producer who facilitated their distinctive way of coming together as four soloists.

While recordings often do significant work as representations of culture, and questions of representation have been frequently assessed in ethnomusicological literature, recordings go beyond representation to constitute sociocultural realities in themselves. Section 2, *Beyond Representation*, shows how an exploration of production labor enables us to understand the broader cultural work that recordings do. Eliot Bates, in Chapter 5, analyzes the production of music for a Turkish dramatic comic TV show *Furtuna*, which constituted a project of "rethinking, reframing and representing the Black Sea." He specifically focuses on the labor done by arrangers, a distinctive occupation in Turkey that is responsible for orchestration decisions, project management, and the creation of the musical

and sonic concept for the TV show's soundtrack. Despite the newness of the TV series medium (private television broadcasts began in Turkey only in the 1990s), TV show music inherited many elements from album production, especially an infatuation with arrangements of so-called "traditional" folksongs specific to the region being represented. Ultimately, the productive labor of arrangement, like the show's script, stages an encounter between a rurally marked Eastern Black Sea and an urbanly marked Istanbul.

In Chapter 6, Karl Neuenfeldt discusses the production of an album of Torres Strait (Islander) music performed by The Custodians that draws on contemporary styles and Western popular music recorded aesthetics while preserving a sense of the traditional ancestral music. The album *Kodangu* strives to "reposition Mabuyag Islanders, and by extension other Islanders, in contemporary narratives, arguably functioning as an aural, textual and visual memory device." In doing so, Neuenfeldt shows how the production process of making indigenous recordings "can be a means of reclamation and celebration." Simultaneously, production and creative labor can serve as a form of research that goes beyond the audible to enhance the impact that albums have once they circulate.

Section 3 moves the spotlight onto discourses of *Electronic Music* production, an area rich in both technological and production aesthetics. This section deals with electronic music from two unique perspectives: Patrick Valiquet considers the historical trajectory of acousmatic music and education in Quebec, Canada, before Mike D'Errico deals with aspects of controllerism in the production of hip-hop before. Both these chapters contribute considerable historical and contextual findings to studies of music production.

Patrick Valiquet in Chapter 7 focuses on both the historical and the educational as opposed to practical aspects of electronic music production. Valiquet considers the historical context of acousmatic music before tracing the origin and trajectory of its educational place in Quebec, Canada. Drawing on extensive ethnographic work, Valiquet evaluates various observations on acousmatic music curricula to include the place of theory, perception, and technical skills. His findings exemplify the extent to which acousmatic music pedagogy and concomitant production results in democratization. Critically, Valiquet draws significant conclusions surrounding the masculine coding of electronic music's tools and the exclusion of women from electronic music historiography.

In Chapter 8, Mike D'Errico explores the blurred lines between music performance and production among DJ producers. In tracing the trajectory of controllerism via turntablism, D'Errico posits computer game controller design as integral to the playability of music software. His case study focuses on Daedelus, a US DJ who places interactive audio control at the center of his performance and production aesthetic. D'Errico's findings concern the necessity of failure in gaming and how such aesthetics "bleed into the realm of digital music." He also summarizes failure as evidence of