## STUDIEN ZUR TECHNIK-, WIRTSCHAFTS-UND SOZIALGESCHICHTE

Herausgegeben von Hans-Joachim Braun

BAND 16

Zu Qualitätssicherung und Peer Review der vorliegenden Publikation

Die Qualität der in dieser Reihe erscheinenden Arbeiten wird vor der Publikation durch externe, vom Herausgeber benannte Gutachter geprüft. Notes on the quality assurance and peer review of this publication

Prior to publication, the quality of the work published in this series is reviewed by external referees appointed by the editor. Hans-Joachim Braun (ed.)

# Creativity: Technology and Music

In collaboration with Susan Schmidt Horning



# Bibliographic Information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available in the internet at http://dnb.d-nb.de.

# Library of Congress Cataloging-in-Publication Data

Names: Braun, Hans-Joachim, 1943- editor.

Title: Creativity: technology and music / Braun, Hans-Joachim (ed.);

in collaboration with Susan Schmidt Horning.

Description: New York: Peter Lang GmbH, 2016. | Series: Studien zur Technik-, Wirtschafts- und Sozialgeschichte, ISSN 0175-9868; Band 16

Identifiers: LCCN 2016033547 | ISBN 9783631543658

Subjects: LCSH: Music-Psychological aspects. | Composition (Music)-

Psychological aspects. | Creation (Literary, artistic, etc.) | Computer

composition. | Music and technology.

Classification: LCC ML3838 .C74 2016 | DDC 153.3/5-dc23 LC record

available at https://lccn.loc.gov/2016033547

### ISSN 0175-9868

ISBN 978-3-631-54365-8 (Print)

E-ISBN 978-3-653-07037-8 (E-PDF)

E-ISBN 978-3-631-69342-1 (EPUB)

E-ISBN 978-3-631-69343-8 (MOBI)

DOI 10.3726/978-3-653-07037-8

© Peter Lang GmbH Internationaler Verlag der Wissenschaften

Frankfurt am Main 2016 All rights reserved.

Peter Lang Edition is an Imprint of Peter Lang GmbH.

Peter Lang – Frankfurt am Main  $\cdot$  Bern  $\cdot$  Bruxelles  $\cdot$  New York  $\cdot$  Oxford  $\cdot$  Warszawa  $\cdot$  Wien

All parts of this publication are protected by copyright. Any utilisation outside the strict limits of the copyright law, without the permission of the publisher, is forbidden and liable to prosecution. This applies in particular to reproductions, translations, microfilming, and storage and processing in electronic retrieval systems.

This publication has been peer reviewed.

www.peterlang.com

## **Contents**

Preface
Hans-Joachim Braun Introduction9
Ann Johnson Seeing through the Machine: Creativity, Visualization, and Computer-Aided Drafting
Joseph C. Pitt Successful Design in Engineering and Architecture71
Hans-Joachim Braun Creative Processes in Technology, Music and the Arts: Chances and Limitations of Cognitive Science Approaches
Liane Gabora The Creative Process in Musical Composition: An Introspective Account131
Bjørn Alterhaug Improvisation: Creativity, Action and Interaction
Susan Schmidt Horning Creativity in the Trading Zone: Sound Recording as Collaboration169
Asif Siddiqi Technology, Transcultural Idioms, and the Question of Authenticity: Brian Eno and David Byrne in the Studio
Detlev Buchholz Automatic Music Composition versus Creativity
Contributors

- Kozulin, A. (1990). *Vygotsky's psychology: A biography of ideas*. Cambridge, MA: Harvard University Press.
- Leach, J. (2005). Modes of creativity and the register of ownership. In R. Aiyer Gosh (Ed.), *Code: Collaborative ownership and the digital economy* (pp. 29–44). Cambridge, MA: MIT Press.
- Leonard, J. S., Wharton, C. E., Davis, R. M. & Harris, J. (Eds.), (1994). Authority and textuality: Current views of collaborative writing. West Cornwall, CT: Locust Hill Press.
- Martin, G., with W. Pearson (1994). With a little help from my friends: The making of Sgt. Pepper. Boston: Little, Brown.
- Moylan, W. (2007). *Understanding and crafting the mix: The art of recording.* 2<sup>nd</sup> ed. Amsterdam: Focal Press.
- Osborn, A. F. (1948). *Your creative power: How to use imagination*. New York: Scribner.
- Palmer, K. (2007). "Creativity on Demand." *U. S. News and World Report.* April 22. http://money.usnews.com/money/personal-finance/articles/2007/04/22/creativity-on-demand <accessed July 17, 2014>.
- Ribowsky, M. (2000). *He's a rebel: Phil Spector, rock and roll's legendary producer.* New York: Cooper Square Press.
- Ross, A. (2007). *The rest is noise: Listening to the twentieth century.* New York: Farrar, Straus and Giroux.
- Schmidt Horning, S. (2004). "Recording: The search for the sound." In A. Millard (Ed.), *The electric guitar: A history of an American icon* (pp. 105–122). Baltimore: Johns Hopkins University Press.
- Schmidt Horning, S. (2013). *Chasing sound: Technology, culture, and the art of stu-dio recording from Edison to the LP.* Baltimore: Johns Hopkins University Press.
- Stillinger, J. (1991). *Multiple authorship and the myth of solitary genius*. New York: Oxford University Press.
- Sutherland, S. (1998). In a Maine outpost. A master of sound has built a Mecca. *The New York Times*, 29 March.
- Théberge, P. (1997). Any sound you can imagine: Making music/consuming technology. Hanover, NH: Wesleyan University Press.
- Travis, M. W. (1997). *The director's journey: The creative collaboration between directors, writers and actors.* Studio City, CA: Michael Wiese Productions.
- Williams, R. (1972). Out of his head: The sound of Phil Spector. New York: E. P. Dutton.
- Zak, A. (2001). *The poetics of rock: Cutting tracks, making records.* Berkeley: University of California Press.

## Asif Siddiqi

# Technology, Transcultural Idioms, and the Question of Authenticity: Brian Eno and David Byrne in the Studio

Abstract Asif Siddiqi investigates Brian Eno's and David Byrne's early efforts in appropriating non-Western sounds within Western pop music. His focus is on Eno's and Byrne's recording "My Life in the Bush of Ghosts" (1981), one of the first pop albums to use sampling techniques as their dominant artistic tool and one that was highly influential to subsequent generations of musicians. In this album the two musicians and record producers attempted to subvert prevailing notions of authorship and authenticity by distributing creative agency through a new kind of communal formation – based in the studio, but drawn from the world. Despite their best intentions, their appropriation of non-Western sounds through modern studio practices perfectly highlighted a set of contradictions about how technology can and has mediated our understanding of the valence of popular music in a globalized and unequal world.

### Introduction

One of the most ubiquitous soundtracks to life in downtown Manhattan in the summer of 1981 was *Remain in Light*, the fourth studio album by New York band Talking Heads. This was that rare work in pop music: it distilled a number of high-concept aesthetic and technical approaches into a singular whole; but it was also music you could dance to. An innovative hybrid of disco, funk, punk, Afrobeat, and electronic music, it sounded like nothing in the popular imagination. Touted since as one of the greatest albums of the 1980s, *Remain in Light* was principally the brainchild of Englishman Brian Eno and American musician David Byrne, both arguably at their critical peak. Some of the same stylistic and technical choices that informed *Remain in Light* were also in evidence in *My Life in the Bush of Ghosts*, an album released after *Remain in Light* although recorded at the same time, and credited only to Eno and Byrne. In recording and producing these two albums, and particularly *My Life*, the two deployed a variety of recording techniques that were later widely adopted in the world of popular music, such as the use of "found sounds" through sampling, randomized cut-and-paste recording

techniques, electronic drum loops, and processed soundscapes.¹ They also were deeply influenced by emerging literature in art history (especially on African art) and formal ethnographic studies of non-Western music. Most of these practices had precedent—they had been employed, for example, by electronic avant-garde musicians working outside of the world of popular music for some time—but Eno and Byrne were able to combine them with a pop sensibility thus exposing the techniques to a much broader audience (Kahn and Whitehead 1991).²

Besides their incredible influence on a generation of musicians, these two albums raised the stakes on the often complex ways in which technology mediates our understanding of the valence of creativity and authenticity in modern pop. In *My Life in the Bush of Ghosts*, Eno and Byrne used the then innovative technique of electronic sampling to incorporate "non-Western" sounds into their "own" compositions—what in the modern vernacular is often grouped under "world music." In doing so, the album reanimated a discussion about the location of authenticity in music, as technologies available in the studio allowed musicians to literally "drop in" other voices from the Global South removed of context, history, and global inequality.

Photo 16: Brian Eno (back) and David Byrne (front) recording "My Life in the Bush of Ghosts" (https://s-media-cache-ak0.pinimg.com/564x/fc/57/5b/fc575b53de43a7ef2873206bba9bda1a.jpg, accessed 13 July 2016)



Contestations over authenticity in modern Western music has, of course, a long history. As opportunities for both recording and reproducing sound became available to the broader Western public in the early 20th century, claims about the authenticity of musical expressions were frequently articulated, implicitly if not explicitly, within technological frameworks. One reductive form of this articulation—"Which is more 'authentic'? The recorded version or the live variant?"—has embodied (and often masked) contentious debates among practitioners, social theorists, critics, and audiences about the proper role of technology in the production and reproduction of music (Milner 2009). Creativity—embedded in actors, processes, and sites—has provided a sufficiently compelling nexus to frame this relationship between technology and authenticity. In the idiom of modern pop music and rock'n'roll, questions of authenticity are directly correlated with creativity—and particularly authorship within the creative process—a link that hinges

<sup>1</sup> New commercially available equipment included the Lexicon 224 digital reverb effects unit and the LM-1 Drum Computer, the first drum machine to use digitized samples from a "real" drum kit.

<sup>2</sup> Earlier examples of sampling within the pop idiom include works by Lee "Scratch" Perry, Gavin Bryer, and Holger Czukay (of the band Can), especially the latter's 1979 album *Movies*.

<sup>3 &</sup>quot;Authenticity" is an admittedly nebulous term that has many meanings and interpretations. Mirriam-Webster defines it as "conforming to an original so as to reproduce essential features," or "made or done the same way as an original," or "not false or [an] imitation."

on understandings of the use of technology in practices commonly defined as production (studio recording), reproduction (playback), and performance (for an audience). With the possibilities opened up by the technologies of sound production available to pop musicians in the late 20<sup>th</sup> century, certain studio recording practices—particularly sampling sound from non-musical sources—raised new and often troubling questions about authorship, community, and creativity.

In my essay, I draw from critical theory, the history of technology, and musicology, as well as my own interviews with David Byrne, to revisit Eno and Byrne's My Life in the Bush of Ghosts, one of the first pop albums to use sampling techniques as the central aesthetic conceit. My goal is to offer a critical intervention into the relationship between technology and authenticity, especially in the context of globalized pop music. The new technological and stylistic practices used by Eno and Byrne influenced a generation of younger artists in genres such as electronic dance music, hip hop, "world music," and mainstream pop. Critic Simon Reynolds writes that "the record's panoply of tactile rhythms, disjoined pulse grooves, and eerily pitch-smeared arabesques of melody looked ahead to the innovations of sample-heavy genres like hip hop, house and jungle" (Revnolds 2005, 141). In appropriating non-Western sounds, however, Eno and Byrne's original efforts unintentionally highlighted a deep dissonance about the ways in which notions of authorship, community, and creativity were bound up in questions of inequality and capital, troublesome contradictions that continue to shape the discussion of authenticity in modern pop music today.

## Music, Authenticity, and Technology

Discourses on the authenticity of musical forms can be traced back centuries, but with the possibilities opened by electro-mechanical reproduction of sound in the late 19th century, these discussions transmuted into often contradictory narratives about both the emancipatory power and compromising effects of technology. The rise of a consumptive culture in Europe and the United States in the early 20th century further altered the landscape. With the relatively easy availability of phonographs, the experience of music was removed in terms of time and space. Audiences could now consume music at both a time and place away from the actual performance. In addition, early electronic amplification systems allowed performers to project voice and music-beyond their immediate vicinity; whispers, sighs, and croons became part of the repertoire of vocalists—to the delight of some and the revulsion of others (Katz 2004; Frith 1986a).

In the interwar years, social theorists and public intellectuals such as Walter Benjamin and Theodor Adorno sought to theorize the relationship between recorded

sound and creativity as part of a broader project to consider art in the modern context. Although these touchstones have reached the level of clichés, it is worth recalling at least some of their pronouncements for they articulate the received wisdom about both the possibilities and constraints of the technologies of sound production and reproduction. Benjamin's oft-quoted meditation on "The Work of Art in the Age of Mechanical Reproduction" introduced important considerations to the relationship between technology and art. His claim that "the sphere of authenticity is outside the technical" articulated a kind of logic of *context* that privileged the original over the copy (Benjamin 1968, 214; Frederickson 1989). Benjamin was describing the practice of photography but his ideas seemed to suggest that the audience's engagement with reproductions of art (or by analogy, musical performance) was firmly in the realm of technology rather than the realm of technique, i.e., it left open a cultural possibility to define the authentic in relation to technology.

Adorno, meanwhile, has been much maligned for his supposed pejorative meditations on the "culture industry" (aimed largely at cinema and jazz), but his work can also be seen as complementary rather than contradictory to that of Benjamin, inviting an engagement rather than disengagement from the technology of musical reproduction. His later writings, especially, betray an appreciation for recorded sound (especially for opera) based on an understanding that the LP "allows for the optimal presentation of music, enabling it to recapture some of the force and intensity that had been worn threadbare in the opera houses" (Adorno 2002b, 284). One might say that Adorno sees the modern phonograph as re-investing music with its original "force" and "intensity" lost now in new settings of public performance. Thomas Levin, in abstracting Adorno's position, suggests that in the latter's opinion, "listening to something a number of times [made possible by recorded sound]... gives rise to a type of familiarity that is not a trivialization but is rather in the service of critical interrogation" (Levin 1990, 42; Adorno 2002a; Adorno 2006). Both Benjamin and Adorno then, implicitly, at least articulated a possible relationship between technology and authenticity although that relationship was always contingent on a set of factors, contexts, and expectations.

Similar questions about the authenticity of recorded sound were intensified with the emergence of rock'n'roll as a distinct genre in the postwar era. Rooted in older forms such as country blues, rhythm and blues, jazz, gospel, folk, and country music, rock'n'roll was a mongrel genre from its very inception, yet it generated enormous debate about what exactly represented authentic expression in the idiom. Authenticity was conveyed by myriad cultural markers, including authorship, the personal lives of performers, the degree of communality of groups, methods of instrumentation, vocal affectations, subject matter of songs, originality, and so

forth. Perhaps most important in the history of rock'n'roll has been an appeal to an ineffable a-historical past, a past that was frequently a cultural construct derived from complex negotiations among connoisseurs in the postwar era—in this case white, urban, and bourgeois—whose goal was to recover and reconstitute music history from a time before "now." The most well-known story here, of course, is that of John and Alan Lomax, the curators of the Library of Congress' "Archive of the American Folk Song," and Harry Smith, who produced the *Anthology of American Folk Music* (Filene 2000; Porterfield 1996; Lomax 2002). Many of the expectations of authenticity within rock'n'roll were drawn from folk, blues, and country archetypes constructed by musical curators such as Lomax and Smith (Peterson 1997; Wald 2004).

As rock'n'roll accumulated a sense of its *own* history independent from country, blues, or folk, questions of authenticity loomed larger. Some of this shift had to do with the changes in the idiom itself. By the late 1960s, over a decade after the first rock'n'roll records were released, musicians spoke of a more self-conscious genre, "rock" instead of "rock'n'roll," which embodied a certain gravitas and earnest seriousness lacking in 1950s rock'n'roll. Mostly American and British "rock" performers such as the (late period) Beatles, the Who, Jimi Hendrix, Pink Floyd, and others displayed a commitment to produce music that specifically highlighted authorship and authenticity. Authorship not only implied fidelity to the notion that their music was an expression of their own life experiences, but more important, it implied an *original* vision. Authorship reinforced the value of authenticity. If authentic music was always the goal—however difficult it was to define the concept—rock music placed an extraordinary degree of premium on this concept through ideas about authorship, instrumental virtuosity, performance, and so forth (Barker and Taylor 2007).

Technology was crucial to these musicians—particularly new instruments (such as synthesizers), better P. A. systems, and more accessories (amplifiers and guitar effects), yet mainstream rock fully embraced an aesthetic of authenticity that eschewed technology (broadly understood as inauthentic) in favor of virtuosity (broadly understood as authentic). Simon Frith argues that such models were rooted in two historical genealogies: Romanticism's ethos of art being an expression of the artist's inner being, and folk music culture's wisdom of

musicians creating a sense of community. Here, "if good music is by either set of criteria, honest and sincere, bad music is false—and technological changes increase the opportunities for fakery." Frith frames this relationship as an "art versus technology" dichotomy in modern pop (Frith 1986a, 267; Kendall 2005). Such invocations were designed at some level to divide sound technologies into reductive categories. In other words, the dichotomy was less about "technology versus authenticity" but rather that some technologies were acceptable and some were not. The exact demarcations between the two varieties were bound up in perceptions of skill. Here, the extent of a musician's interface with certain forms of technologies—measured by physical exertion or nebulous notions of virtuosity—determined where one type of technology might fall. It is noteworthy that such major seventies rock bands as Boston and Queen felt the need to explicitly list on the liner notes of their albums that "no synthesizers [were] used" and "no computers [were] used" in the making of their records; synthesizers, in the logic of the times sacrificed authenticity, originality, and virtuosity to cold hard automation (Boston 1978; Queen 1975; Zagorski-Thomas 2010). These declarations were, in part, designed to counter what many established rock musicians considered two emerging annoyances, if not threats, of the mid-1970s cultural landscape: the rise of programmed electronic music and the associated popularity of disco.

The role of the studio is important to consider here. Since the introduction of tape recorders in studios in the late 1940s, musicians no longer needed to come into the studio and reproduce their entire ensemble performance note-for-note (Morton 2000). And with the proliferation of multi-track recording by the late 1960s, rock musicians began to experiment with extraordinarily complex pieces that were difficult if not impossible to recreate in a live setting (Schmidt Horning 2013; Morton 2004). As innovations in studio technology opened up new avenues for music composition in the studio, many rock musicians began to see the studio as an integral part of their aesthetic vision. Bands such as the Beach Boys, with Pet Sounds (1966), and the Beatles, with Sgt. Pepper's Lonely Hearts Club Band (1967), were important progenitors of this trend, and certain studio producers such as Phil Spector and Jerry Wexler were identified with a particular "sound." Yet, even as studio technology seemingly allowed a measure of control to intervene, alter, and structure sound in ways that departed from stage performance, live recitals remained the bedrock of rock authenticity. In other words, for established rock musicians, the studio may have been a central site for creativity but it was not a site for authenticity, which could only be expressed in performance. Bands took subtle measures to deemphasize the studio ("we recorded that solo in one take") and emphasized live virtuosity.

<sup>4</sup> It bears mentioning that much of the rock music emanating from Britain beginning the mid-1960s was explicitly derived from the American (Chicago and southern) blues tradition, but as British musicians such as Led Zeppelin, the Rolling Stones, and Eric Clapton diversified their repertoire, they began to claim a more "original" vision that suggested only a debt to the blues rather than outright copying.

At the very same time, as I noted, in the late 1970s, two new overlapping genres threatened to upend the basic assumptions of rock: disco and electronic music. Disco and electronic shared with established rock the centrality of the studio in the act of creation. Where they departed was, however, in notions of performance. For disco, "performance" essentially meant DJs playing songs in a club environment. The actual content of disco music—metronomic beats repeated for long periods with circular bass riffs—also suggested a lack of virtuosity, as many baby boomers noted, although undoubtedly some of the animus directed towards disco was grounded in racist and homophobic strains in the bourgeois pop world (Echols 2010; Shapiro 2005). Disco's emergence as a powerful commercial force was engendered through a mutual exchange with European producers such as Giorgio Moroder, who were drawing from a growing genre of "popular" electronic music identified with such artists as Kraftwerk, Tangerine Dream, and Popol Vuh.<sup>5</sup> For these bands, who were fully using sequencers, electronic beats, and programmed music, playing "live" often meant conveying and emphasizing the automated nature of the music as much as possible. For example, German electronic music pioneers Kraftwerk were entirely happy to appear on stage and press a few buttons to "play" their music (Baker and Taylor 2007, 240-243). We see here how, for electronic and disco musicians, as opposed to conventional rock musicians, authenticity was deemphasized entirely in favor of creativity, which was dispersed in different sites—the studio, the club, the concert hall, and ultimately everywhere.

## My Life in the Bush of Ghosts

It is in this context—with mainstream rock employing a rigid set of standards for valuing creativity and authenticity which emerging genres such as disco and electronic music seemed to subvert—that Brian Eno and David Byrne recorded *My Life in the Bush of Ghosts*. Each had a history in the mainstream pop world but had displayed interest far beyond. English musician Brian Eno had made his name originally as a member of the glam rock band Roxy Music in the early 1970s but had moved very quickly into explorations of non-commercial idioms, particularly electronic and ambient music (Sheppard 2008; Tamm 1995). After leaving Roxy Music, he had embraced more "synthetic" forms of musical expression through his more idiosyncratic ambient solo albums in the 1970s (as well as his prolific production work) that veered into the avant-garde. Influenced partly

by approaches pioneered by the postwar experiments of Karlheinz Stockhausen and John Cage, Eno's musical sensibilities evolved to deemphasize live performance in favor of studio experimentation. Underpinning his evolving approach to sound recording was a fascination with cybernetics that led him to conceive of "composing music in the studio that would be anti-hierarchical" and "to work in a way that avoided or even erased a single domineering musical personality" (Steenstra 2010, 7–8). His production work meanwhile embraced the fringes of post-punk, particularly the so-called "No Wave" aesthetic that found beauty in chaos and industrial noise. He also made his name as a visionary producer with his late 1970s work with David Bowie, adopting the role of producer-as-auteur, a tradition that dated back to such luminaries as "wall-of-sound" creator Phil Spector, and Beatles' producer George Martin.

Byrne, meanwhile, was the guitarist, vocalist, and conceptual mind behind the New York band Talking Heads, which had originally emerged as part of the punk scene in the mid-1970s. Very quickly, however, the band's playful sensibilities and affection for adventurous dance music led them far from punk's minimalist and conservative aesthetic. All four members of Talking Heads were big fans of African pop music, and their mid-period work strikingly reflects that. Eno's production on such Talking Heads albums as *More Songs About Buildings and Food* (1978) and *Fear of Music* (1979) underscored Talking Heads' expert appropriation of bits and pieces of West African music, electronic music, disco, and especially funk, i.e., idioms invisible in mainstream (and typically white) bourgeois rock. The zenith of their stylistic explorations was manifested in these two albums and a third, *Remain in Light*, all produced in collaboration with Eno (Steenstra 2010; Bowman 2001).

As work on *Remain in Light* was beginning, in the winter of 1979–80, Eno and Byrne began conceiving of another musical project, inspired by two interrelated approaches to music—ideological and aesthetic in nature—that would guide them: they wanted to incorporate into the new recording their growing interest in African music, and also to creatively add "found sounds" through the use of innovative studio techniques best characterized as early forms of sampling. Both men had been deeply influenced by two books about African art, Robert Farris Thompson's *African Art in Motion: Icon and Act* (1974) and John Miller Chernoff's *African Rhythm and African Sensibility: Aesthetics and Social Action in African Musical Idioms* (1979). What these authors argued for is less important than what

<sup>5</sup> The most well-known hybrid composition embodying the merger of disco and electronic music was undoubtedly disco star Donna Summer's landmark "I Feel Love" produced by Moroder and released in 1977.

<sup>6</sup> Eno's contributions to post-punk (including "No Wave") are manifest in his many appearances throughout Simon Reynolds' *Rip it Up and Start Again*. Perhaps the most iconic and influential of Eno's production work in the post-punk genre was Devo's first album, *Are We Not Men? We Are Devo!* (1978).

Byrne and Eno took from them. Eno biographer David Sheppard suggests that the books "legitimized the duo's pan-global cultural sifting" while Sytze Steenstra, who has written about Byrne's work, argues that drawing from modes of cultural production in the African context, "these books present[ed] the outline of an artistic paradigm beyond the borders of rock music, a paradigm that emphasize[d] the exchange of art with the *community*, and the exchange of music with other forms of art" (Sheppard 2008, 324; Steenstra 2010, 56). Both Byrne and Eno were clearly fans of African pop, but their interest was not merely aesthetic but driven by intellectual—even anthropological—sensibilities that gave their fandom a much deeper underpinning. One overriding concern was to de-emphasize "authorship" in favor of "community." Byrne explained their initial approach to the album:

Brian [Eno], Jon [Hassell], and I fantasized about making a series of recordings based on an imaginary culture... Our idea was to make the record and try to pass it off anonymously as the genuine article. This appealed for a number of reasons ... partly because it would make us as "authors" more or less invisible. In our imaginings we'd release a record with detailed liner notes explaining the way music functioned in that culture and how it was produced [which would include] the kind of extensive notes common on [ethnographic field] records [of the period] (Byrne 2006).8

Although Byrne and Eno eventually abandoned this idea, the notion of being anonymous as authors remained an indelible part of the project, and was enabled to a large degree by the practice of using "found sounds," particularly disembodied vocalizations transported from unconnected sources. Here, the two sought to subvert what they saw as one of the most fundamental rationalizations for claims of authenticity in modern pop and rock, that the voice of the singer is an expression of some unmediated experience. As Byrne noted in a recent interview, "[t]here's an assumed connection between authorship and biography too" (Byrne 2014). He added that:

We both realized that the "found vocal" idea would be the thread that would pull the record together... I suspect the found-vocal idea ... appealed to us, as it eliminated any conflict or competition between us as singers: Neither of us would be singing on our own record of songs. It also solved a problem of "content"—the songs would clearly not contain any sort of autobiographical or "songwritery" comments (Byrne 2006).

Besides anonymity, sampling other people's *voices* effaced the notion of an auteur singer on an album, one whose voice represented a distillation of the vision of the ensemble. In that sense, they were prefiguring emerging popular musical trends in DJ culture, techno, hip hop, and pop where the voices in a musical piece are no more or less important in the overall soundscapes.

A principal source for these voices was AM radio, particularly Christian radio. Speaking of bible belt preachers using the radio as a pulpit, Eno noted at the time that, "I'm particularly fascinated by radio, especially in America. It's extraordinary how out of control it is... you get the nuttiest people in charge of the airwaves—it's fascinating" (Orme 1980). Byrne similarly had been listening to preachers on the radio and found a certain incongruence between the messages of piety and the vocal stylings that bordered on hysteria (Reynolds 2010, 123). Besides the vocalizations of southern preachers, Byrne and Eno also used "found objects" to create sounds in the studio, including biscuit tins, frying pans, plastic cassette boxes, and cardboard boxes. Studio engineer Dave Jerden remembers using "ashtrays, taped-together plastic garbage bins, lampshades, film canisters and pieces of wooden flooring [and shaping them] into coherent, polyrhythmic soundscapes" (Sheppard 2008, 330–331).

In recording the album, instead of laying down conventional tracks such as drums, bass, guitar, and so forth, mixing and sampling constituted the common thread of the recording sessions. My Life in the Bush of Ghosts was, in fact, one of the first albums—certainly the first by pop musicians—to incorporate sustained use of the practice of sampling in its tracks (Davies 1996; Holmes 2008). Such practices bore little resemblance to modern digital sampling, commercially unavailable until the early 1980s; it involved a variation of dubbing that drew in audio sources from sounds pre-recorded in other contexts, what composer R. Murray Schafer has called "schizophonia," i.e., the splitting of sound from their sources (Schafer 1977).9 Byrne and Eno's approach was not entirely original but drew from studio techniques pioneered by producers in the disco and electronic music scenes. Byrne recalls that "some of the most innovative mixing and arranging was happening in the dance music world, more so than in the rock world, which was becoming increasingly conservative and entrenched" (Byrne 2006). Here again, the idea of the authentic virtuoso musician was subverted. Byrne adds, "neither of us saw ourselves as virtuoso musicians (we probably prided ourselves that

<sup>7</sup> My emphasis.

Hassell, a trumpeter with a deep interest in innovative hybrids of Western and "Eastern" musical idioms, was an initial collaborator on the project but dropped out before the majority of the recording for *My Life in the Bush of Ghosts*. Undoubtedly, Hassell's aesthetic was a major influence on the new project. He and Eno had recently collaborated on an album entitled *Fourth World*, *Vol. 1: Possible Musics* (1980).

<sup>9</sup> The ethnomusicologist Steven Feld has invoked this term in some of his work to refer to how sound recordings can move in circuits and networks of actors and become recontextualized and resignified into different meanings. For the original, see Schafer 1977.

we weren't)—we tried to turn that into an advantage" (Byrne 2006). For each track, Byrne or Eno would select a particular sample—most taken from Christian evangelical preachers at rallies, angry radio talk show hosts, Arabic prayer cantations, or north African a capella voices—and then play the sample on one reel-to-reel tape recorder and then have another playing a minimalist backing track, often comprised of relatively simple loops using the Lexicon reverb unit and a disco-funk bass figure. Traditional musicians played some of the backing tracks but their contributions were usually deconstructed and cut up beyond recognition. The two tracks—a vocal sample(s) and a backing track—would then be approximately synchronized and played simultaneously and recorded into a third machine, producing the basic outline of a final track. If there was ever a notion of a performance, it was this single act using a network of studio technologies; as Byrne recalls, "... it was a kind of performance, using [the] play, stop and pause buttons" (Byrne 2014).

## "World Music": Celebration/Anxiety in the Age of Capital

Perhaps the most contentious aspect of this early practice of sampling was Byrne and Eno's use of non-Western vocal sources to create a vaguely eastern sounding but funky hybrid form, a prototype for the genre that would explode in the late 1980s under the rubric of "world music." Western popular musicians had, of course, long incorporated elements of non-Western idioms into their music, the most prominent being the Beatles' use of Indian classical music textures in some of their later tracks. In the 1970s, artists such as Miles Davis and Joni Mitchell played with and/or infused their work with West and Central African musical strains. But where their predecessors usually involved non-Western musicians in the recording studio, the technology and practice of sampling allowed Byrne and Eno to appropriate bits and pieces without reference to context, history, or genealogy. The result was sound collages that privileged conflicted feelings over linear context, embodying what theorists such as Fredric Jameson and Jean Baudrillard were calling the postmodern, made possible by the conditions of late capitalism where the basic codes of cultural production are dislodged from time and space

and jumbled into new and unrecognizable forms (Jameson 1991; Baudrillard 1994; Baudrillard 2012).

Byrne and Eno's fascination with African idioms underlay some of the aesthetic choices for the backing tracks but the non-Western found vocals were all appropriated from sources rooted in Islamic music, some from north Africa and others from the Middle East. 11 Three tracks on the Eno/Byrne album used sources from a record called The Human Voice in the World of Islam, the first volume in a six record anthology entitled "Music in the World of Islam" curated and edited by Jean Jenkins and Poul Rovsing Olsen and issued by Tangent Records in 1976. Both had a long career in producing ethnographic recordings: Jenkins was a curator at the Horniman Museum in London while Olsen was a composer and scholar employed by the Danish Folklore Archives in Copenhagen. Two of these songs on the Byrne/Eno album used a recording ("Abu Zeluf") by a young Lebanese woman, Dunya Yunis, originally put to tape in 1972 by Olsen. One of the songs, "Regiment," was probably the most accessible track on My Life in the Bush of *Ghosts*, and the one that seemed to most starkly highlight the sampling process. Over a disco-funk backing track played "live" (albeit altered and processed) by Busta Jones (bass) and Chris Frantz (drums), both of whom were part of the Talking Heads live ensemble, Yunis sings a beautiful melody in Arabic originally intended as an a cappella song.

The critical response to the album, released in February 1981, was mixed. Some saw the ingenious quality of the music marred by its structural approach. Jon Pareles, writing for *Rolling Stone* magazine, noted that, "*My Life in the Bush of Ghosts* is an undeniably awesome feat of tape editing and rhythmic ingenuity. But, like most 'found' art, it raises stubborn questions about context, manipulation and cultural imperialism" (Pareles 1981). Eno and Byrne's early responses to these charges seemed to fit one of two modes through which the Western public constructs narratives around Western musicians incorporating non-Western music or artists into their creative process. Identified by ethnomusicologist and anthropologist Steven Feld, the first describes a form of "modernist anxiety" based on the perception that whatever aesthetic pleasures might be derived from the intermixing of genres from the East and West, that at a fundamental level, these collaborations rest on systems of unequal capital and power rooted in colonial practices. Another parallel narrative is "one of celebration"; it sees such fusion of

<sup>10</sup> Byrne recalled in 2014 that "I seem to remember using the Lexicon as a primitive looping device. You could press a button and it would grab whatever was coming in and loop a little piece of it. It was pretty random. You couldn't edit the loop but you could slow it down or speed it up or make it sound wobbly. We sometimes used that as a kind of click track but with some vibe to it—and then often eliminated it later on." (Byrne 2014).

<sup>11</sup> Byrne later explained that there might have been a technical reason for this choice: "We used recordings of Arabic singers because their passionate voices didn't change key, just like the recordings of US radio preachers we also used. They both fit musically and added fervor to our tracks." (Byrne 2014).

styles "as unassailable global positives, moves that signify the desire for greater cultural respect, tolerance, and blending" (Feld 2012). Eno and Byrne's pronouncements from the time suggest a cautiously celebratory narrative. An exchange with a journalist in 1981 conveys a kind of response from Eno to critiques of the album:

<u>Journalist</u>: "How do you feel about the criticism that all this taking black music and adding white boy quasi-intellectual lyrical concepts to it is imperialist, that is, the critics' implication is that you're saying the music isn't 'intelligent' enough until you improve upon it, and that therefore what you do is patronising to black culture?"

Eno: "It's the kind of criticism that always happens if you transgress any of those boundaries ... The critics really think that white people ought to play white music and black people ought to play with blacks ... In my case it's not any kind of intellectual decision, it's a feeling in my own music that I'm moving in a certain direction and realising that here's a group of people who've moved much further and deciding I'll learn from them, consciously use some of their devices. It arrives from a kind of humility rather than a kind of arrogance... I regard myself as a student. I'm very humble about my understanding of African music, it's a vastly more complicated and rich area than I had dreamed of. I'd say that anything I'm doing is simply my misunderstanding of black music." (Robertson 1981).

His position appears to become more ambivalent in later years. In an interview from 1985, Eno evinces a self-awareness that "there's a big danger with just being attracted to the exotic ... one so often hears things ... that are pop records with a bit of African drumming, or it just becomes a kind of gloss on the music..." Implying that My Life in the Bush of Ghosts was an exception to the model, he continues: "And I'm always so nervous of doing something like that, I never want to do that because... it's kind of an insult to the music that you're borrowing to do that with." But when asked about his own work with the album and whether he had had second thoughts about using music done by other people, he elided the question about regret, refocusing it on the question of authorship: "what I thought about it was that I must at least make it clear who the people were and which records I had taken it from, which I did on the cover of the album because I thought it would be ... very rude just to take the music and not ... give any credit for it." He justified his appropriation of especially Yunis' voice by noting that "if some Arabic person took a couple of lines of one of my songs and put them in an Arabic pop song ... I'd be thrilled, I would! It would be like a wonderful thing to happen. And I couldn't honestly conceive of any of those people making an objection." Eno noted that he and Byrne had tried to contact the original people involved in the music but that "sometimes it wasn't possible to find people" adding that "[b]ut this is, it's a tricky, I know it's a tricky area, morally, because, um, you know ... we earn money from that record." He concluded by adopting Feld's celebratory narrative: "I don't think this can do the people any harm because ...

I've met so many people who said 'oh yeah, after that record I bought *The Human Voice in the World of Islam*' and, for many people that opened up a door to the music of another culture" (Feld and Kirkegaard 2010).

There are several threads running through these articulations. The first is an awareness, a discomfort about the whole project (the condemnation of others who do it). The second expresses itself as a celebratory narrative (by opening doors, etc.). The third is about authorship (although the project was driven by the imperative to erase authors, in fact, Eno was keen to attribute authorship by giving proper credit). And finally, there is the admission that there are structures of capitalist and corporate power that make this a problematic enterprise ("we earn money from that record").

Eno and Byrne's attempts to obtain legitimate permission and to credit (both in the liner notes and financially) their vocal sources form a long and complicated tale. Feld and Kirkegaard's detailed reconstruction of this process indicate that at the very least, Olsen, who originally recorded Yunis' voice, had deeply ambivalent and often negative feelings about the appropriation. That story, however, is less important here than the ways in which Eno and Byrne understood the issue of authorship in recording, producing, and then releasing My Life in the Bush of Ghosts. Their understanding of the texts by Thompson and Chernoff, as well as their general fandom of 1970s African pop, had drawn them into subverting conventional modes of authorship that was entrenched within the rock world at the time. They actively sought to de-emphasize normative (and what they saw as "Western") models of musical production through the use of early sampling technologies that allowed them to cut and paste disembodied voices from entirely different contexts, thus disrupting the connective between voice and authentic expression. In the liner notes to the 2006 CD re-release of the album, Byrne recalled that, "[i]n the West, anyway, the causal link between the author and performer is strong" (Byrne 2006). Furthermore:

We suspected that if one of us sang a song it might be assumed that he was the "author." Now these questions might seem quaint—lots of DJs and electronic records have guest singers and no one says anymore that it's the singer's record... This whole issue of authenticity and the singer being presumed to be the author... and therefore the emotions and ideas expressed in the lyrics are assumed to be those of the singer, well, we turned all those notions on their head and not everyone liked that (Sheppard 2008, 333).

By de-emphasizing sole authorship, they also sought to highlight a more communal experience where not only enjoyment but creativity itself would be distributed. $^{12}$ 

<sup>12</sup> Ironically, this effort was in many ways a rather culturally conservative one, for "community" was one of the key measures of authenticity in many popular music idioms,

Musician and anthropologist Georgina Born has described how the "[t]he ontology of the [traditional] musical work envisions a hierarchical assemblage: the composerhero stands over the interpreter, conductor over instrumentalist, interpreter over listener, just as the work ideal authorizes and supervises the score, which supervises performance, which supervises reception." But, she argues, the advent of "electronic and digital technologies [such as the internet and mp3s] afford and enhance a dispersed and collaborative creativity" (Born 2005, 25-26). The aspiration for this kind of "social distribution of creative agency" led Eno and Byrne to experiments in sound production, but if My Life in the Bush of Ghosts can be described as a "communal" project of sorts, the locus of agency—authorship—remained firmly in the studio, in the hands of the two men. And one must properly interrogate the meaning of "community" in this context. Paul Théberge's observation in reference to multi-track recording, that "by breaking the essentially time-bound character of group performance, overdubbing tends to emphasize individual contribution over that of the collective" is apropos here; despite the best intentions of Eno and Byrne and despite technical practices (such as sampling) that might democratize the act of creativity, the album reified the notion of artistic individuality (Théberge 1989; Zagorski-Thomas 2010). Although it involved a multitude of voices and sounds from different parts of the world, the album was attached—both by its principal conceivers and the structures of the capitalist recording industry—as an expression of the auteurist sensibilities of the two men whose names were on the album cover. 13 Their public roles as "authors" of the album say less about Eno and Byrne's intentions-which were largely benign and genuinely innovative in aesthetic terms-thanthe fact that their creative output was a commodity to be sold with monetary value (note Eno's admission that "we earn money from that record") and regulated by economic structures and imperatives at the service of multi-national capital.

Is it possible to historicize the album in the larger canon of Western art? In a recent interview with the author, Byrne suggests that their approach was simply emulating an uncontroversial tradition rooted in modernist aesthetic. In other

such as folk music. See Frith 1986b. For a useful summary of the theoretical concerns concerning distributed creativity see Keith Sawyer and DeZutter 2009.

words, others had done this sort of thing before, especially in non-musical idioms. Responding specifically to Pareles' charge of "cultural imperialism," he noted that "Pareles got his terms mixed up—what we were doing was not cultural imperialism, not as it is conventionally defined. It is rather taking something and putting it in a new context." His claim rested on positioning the album as part of:

the Modern tradition (NOT just postmodern, though maybe that too). Modern artists of all types used vernacular objects and images and made them part of their own work, recontextualizing them. [Kurt] Schwitters used train tickets; [Georges] Braque and [Pablo] Picasso used newspapers. One could, if one wanted to, claim that someone else designed that train ticket and that newspaper page and their work was being used without compensation—but really? [Andy] Warhol used vernacular images of car crashes and pop culture icons; [Robert] Rauschenberg used *Life* magazine pictures (Rauschenberg was indeed sued, and he switched to using his own photos.) Legally, the term for this is "transformative"... our work was similarly transformative, just like the work of those artists (Byrne 2014).

But what happens when the "vernacular" has a cultural valence that cannot be understood without accounting for the unequal relationships between two cultures—inequality grounded in both history and the vagaries of globalization? Understood within that framework, one might plausibly see this project, as Pareles saw it, as "cultural imperialism." But I think this is not the only (or even most important) force at play here. Rudimentary sampling technology allowed Eno and Byrne not just to copy the cultural idioms of the "other," but to edit, manipulate, cut up, and alter the creation of the original performer and in such a way as to render context impossible to define or pin down. Their stated goal was to redefine the question of attribution as irrelevant, to push "appropriation" of non-Western music to its logical conclusion by completely effacing notions of authorship and authenticity. (As Byrne noted, with the album, "we turned all those notions [about authorship and expression] on their head.") But in practice, the album's ambition was weighed down by complex and unclear notions of attribution, agency, and authenticity that were relatively new in Western popular music. Unfortunately and inevitably, their experiment ran headlong into the structures of global capital which forced a compromise.

### Conclusions

My Life in the Bush of Ghosts was one of those albums that sold very little but proved to have a long shelf life. Hank Shocklee, who produced one of the most influential hip hop albums of all time, Public Enemy's It Takes a Nation of Millions to Hold Us Back (1988), remembered that the album "inspired [him] to think

<sup>13</sup> It is also not a bit ironic that Jon Hassell, who had many of the original conceptual ideas for the project (but who did not participate), was upset later when he heard Eno and Byrne's compositions. In an interview in 1997, he said, unaware of the irony, that he was "outraged" by the album because "this was clearly a not-too-subtle appropriation of what I was doing... I thought this was a very unethical thing to do and the fact that I was never credited—even for being an inspiration—is a testament to the testosterone in the room at that time." (Sheppard 2008, 333).

outside the box and opened [his] head to new musical and most importantly non-musical experiences" (Toop 1995, 123). Many other ground-breaking artists have acknowledged the influence of both *My Life* and its associated *Remain in Light*—Kate Bush, Bjork, Moby, and DJ Shadow, to name but a few. The lineage of modern electronic music, especially techno, house, trance, drum and bass, hip hop, "global fusion," and "world beat," but also large elements of present day mainstream pop, trace their lineage to the experiments of Eno and Byrne. Yet, as others have shown, the legacy of *My Life* remains complicated because of its "appropriation" of non-Western elements (Feld and Kirkegaard 2010; Feld 2012; Reynolds 2005, 129–141). As one of the first Western albums merging both sampling and non-Western soundscapes, it foreshadowed a vast industry of "world music" that unmoored local cultural modes of expression from their original reference points and attached them to contested referents such as "west" and "east." Ironically, it was precisely the notion of referents that Eno and Byrne were seeking to efface by creating music that was from nowhere and everywhere.

Their most important legacy, I would argue, was an attempt to subvert prevailing notions of authorship and authenticity in mainstream rock music. That this attempt complicated rather than undermined received notions of authenticity and authorship in rock and pop does not rob the project of its fundamental achievement: drawing from emergent genres such as disco and electronic music through a carefully considered use of studio technology, they brought into collision early sampling methods and non-Western music in a pop setting. Their manipulations of technology created and then complicated the boundaries between the "authentic" African and the "artificial" studio. They sought to distribute creative agency through a new kind of communal formation—based in the studio, drawn from the world. That they failed to fully do both is not so much a measure of their lack of self-awareness or indeed creativity, but rather a measure of the power of global systems of inequality—both as cultural construct and economic reality—that overpowered any attempts to subvert the broader aesthetic, creative, and cultural norms. The resulting album, a highly influential and critically acclaimed body of work, perfectly highlighted a set of contradictions about how technology has mediated our understanding of the valence of popular music in a globalized world.

The author would like to thank Hans-Joachim Braun, David Byrne, E. Cuenca, Susan Schmidt-Horning, Simon Reynolds, and Simon Zagorski-Thomas for their comments in writing this essay.

### References

- Adorno, T. W. (2002a). *Essays on music*, R. Leppert & S. H. Gillespie Eds.), (pp. 283–287). Berkeley: University of California Press.
- Adorno, T. W. (2002b). "Opera and the long-playing record." In *Essays on music*, R. Leppert (Ed.), trans. Susan H. Gillespie. Berkeley: University of California Press.
- Adorno, T. W. (2006). *Towards a theory of musical reproduction: Notes, a draft, and two schemata*, H. Lonitz (Ed.), Cambridge, UK: Polity Press.
- Barker, H. & Taylor, Y. (2007). Faking it: The quest for authenticity in popular music. New York: W. W. Norton.
- Baudrillard, J. (1994). Simulacra and simulation. Ann Arbor, MI: University of Michigan Press.
- Baudrillard, J. (2012). The ecstasy of communication. Los Angeles: Semiotext(e).
- Benjamin, W. (1969). The work of art in the age of mechanical reproduction. In *Illuminations*, H. Arendt (Ed.), (pp. 217–252). New York: Schocken.
- Born, G. (2005). On musical mediation: Ontology, technology and creativity. *Twentieth-Century Music* 2(1), 7–36.
- Boston. (1978). Don't look back. LP Album.
- Bowman, D. (2001). This must be the place: The adventures of Talking Heads in the 20<sup>th</sup> century. New York: Harper.
- "Brian Eno & David Byrne—Ghosts." Undated. Accessed August 6, 2014. http://bigozine2.com/roio/?p=941.
- Byrne, D. (2006). Liner notes to Brian Eno and David Byrne. *My Life in the Bush of Ghosts*. Compact disc.
- Byrne, D. (2014). E-mail interview with Asif Siddiqi, January 24, 2014.
- Davies, H. (1996). A history of sampling. Organised Sound, 1(1), 3–11.
- Echols, A. (2010). Hot stuff: Disco and the remaking of American culture. New York: W. W. Norton.
- Eno, B. & Byrne, D. (1981). My Life in the Bush of Ghosts. LP Album.
- Feld, S. (2012). *My Life in the Bush of Ghosts*: 'World Music' and the commodification of religious experience. In B. White (Ed.), *Music and globalization: Critical encounters* (pp. 40–51). Bloomington: Indiana University Press.
- Feld, S. & Kirkegaard, A. (2010). Entangled complicities in the prehistory of 'World Music': Poul Rovsing Olsen and Jean Jenkins encounter Brian Eno and David Byrne in the Bush of Ghosts. *Popular Musicology Online* 4. Accessed August 6, 2014. http://www.popular-musicology-online.com/issues/04/feld.html.

- Filene, B. (2000). *Romancing the folk: Public memory and American roots music.* Chapel Hill: University of North Carolina Press.
- Frederickson, J. (1989). Technology and music performance in the age of mechanical reproduction. *International Review of the Aesthetics and Sociology of Music*, 20(2), 193–220.
- Frith, S. (1986a). Art versus technology: The strange case of popular music. *Media*, *Culture & Society*, 8(3), 263–279.
- Frith, S. (1986b). The magic that can set you free: The ideology of folk and the myth of the rock community. *Popular Music*, 1, 159–168.
- Holmes, T. (2008). *Electronic and experimental music: Technology, music, and culture,* 3<sup>rd</sup> ed. New York: Routledge.
- Jameson, F. (1991). *Postmodernism: The cultural logic of late capitalism*. Durham, NC: Duke University Press.
- Katz, M. (2004). *Capturing sound: How technology changed music*. Berkeley: University of California Press.
- Kahn, D. & Whitehead, G. (Eds.), (1992). Wireless imagination: Sound, radio, and the avant-garde. Cambridge, MA: MIT Press.
- Kendall, G. P. (2005). Authenticity, creativity and technology. In A. Tomasino (Ed.) *Music and culture* (pp. 202–208). New York: Pearson Longman.
- Levin, Th. Y. (1990). For the record: Adorno on music in the age of its technological reproducibility. *October*, 55 (Winter), 23–47.
- Lomax, A. (2002). The land where the blues began. New York: New Press.
- Milner, G. M. (2009). *Perfecting sound forever: An aural history of recorded sound.* New York: Faber and Faber.
- Morton, Jr., D. L. (2000). Off the record: The technology and culture of sound recording in America. New Brunswick, NJ: Rutgers University Press.
- Morton, Jr., D. L. (2004). *Sound recording: The life story of a technology*. Baltimore: Johns Hopkins University Press.
- Orme, J. (1980). Eno: The electric boogaloo" (interview with Brian Eno). *Melody Maker*, February 14.
- Pareles, J. (1981). "David Byrne and Brian Eno: My life in the bush of ghosts" (review). Rolling Stone, April 2.
- Peterson, R. A. (1997). *Creating country music: Fabricating authenticity*. Chicago: University of Chicago Press.
- Porterfield, N. (1996). Last cavalier: The life and times of John A. Lomax, 1867–1948. Urbana: University of Illinois Press.
- Queen (1975). A night at the opera. LP Album.

- Reynolds, S. (2005). Rip it up and start again: Postpunk, 1978–1984. London: Faber and Faber.
- Reynolds, S. (2010). *Totally wired: Postpunk interviews and overviews*. New York: Soft Skull Press.
- Robertson, S. (1981). The life of Brian in the Bush of Ghosts (interview with Brian Eno). *Sounds*, March 7.
- Sawyer, R. K. & DeZutter, S. (2009). Distributed creativity: How collective creations emerge from collaboration. *Psychology of Aesthetics, Creativity, and the Arts*, 3, (2), 81–92.
- Schafer, R. M. (1977). The Tuning of the World. New York: A. A. Knopf.
- Schmidt Horning, S. (2013). Chasing sound: Technology, culture, and the art of studio recording from Edison to the LP. Baltimore: Johns Hopkins University Press.
- Shapiro, P. (2005). Turn the beat around: The history of disco. New York: Faber and Faber.
- Sheppard, D. (2008). On some faraway beach: The life and times of Brian Eno. Chicago: Chicago Review Press.
- Steenstra, S. (2010). Song and circumstance: The work of David Byrne from Talking Heads to the present. New York: Continuum.
- Tamm, E. (1995). *Brian Eno: His music and the vertical color of sound*, 2<sup>nd</sup> ed. New York: Da Capo Press.
- Talking Heads (1978). More songs about buildings and food. LP Album.
- Talking Heads (1979). Fear of music. LP Album.
- Talking Heads (1980). Remain in light. LP Album.
- Théberge, P. (1989). The sound of music: Technological rationalization and the production of popular music. *New Formations*, 8 (Summer), 99–111.
- Toop, D. (1995). Ocean of sound: Aether talk, ambient sound and imaginary worlds. London: Serpent's Tail.
- Wald, E. (2004). *Escaping the Delta: Robert Johnson and the invention of the blues.* New York: HarperCollins.
- Zagorski-Thomas, S. (2010). The stadium in your bedroom: Functioning staging, authenticity and the audience-led aesthetic in record production. *Popular Music*, 29 (2), 251–266.