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There's got to be some kind of way out of here:  
Music, information, categorization, and  
commodification

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**There's Got to Be Some Kind of Way Out of Here  
Music, Information, and Commodification**

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## **Introduction**

At least in theory, the emergence of certain information and communication technologies (ICTs), including personal computers and the Internet, enables people to discover and interact with a greater diversity of music than in the previous century of recorded sound. Nonetheless, a number of issues remain pertinent in considering the ways that ICTs can actually create barriers to such activity. In order to gain some understanding about this seemingly paradoxical state, it is necessary to consider such barriers within several contexts. A broad overview of the history of the recording industry, going up to the recent emergence of music content within ICT platforms, also considers how intellectual property laws have fostered increased levels of music commodification. Technological determinism and notions of the “information society” seem to operate in conjunction with such trends, which also tie in with genre’s historically privileged role as a way of categorizing music. Finally, critical perspectives on the “culture industry,” by theorists like Theodor W. Adorno and his intellectual descendants, will be considered in relation to these trends, along with individual and societal uses of music.

## **Disclaimer**

The scope of this paper might seem quite ambitious in relation to its brevity, especially as it mainly brings in ideas associated with either Library & Information Science (LIS) or Media Studies (MS). Consequently, certain parts of this paper run the risk of sounding rather elementary and broad to those who work primarily in one field or the other. For instance, persons associated primarily with LIS might not care to hear yet again an overview of the development of MACHine Readable Cataloging (MARC), Anglo-American Cataloguing Rules (AACR2), and online public access catalogues (OPACs). As well, people from MS might look askance at the paper’s sweeping overviews of the ways in which the “information society” has become a “self-

evident” concept, as well as Adorno’s intricate ideas regarding fetishization, commodification, and the workings of the culture industry. Nonetheless, considering that the Faculty of Information and Media Studies (FIMS) encompasses LIS and MS, another purpose of this paper is to synthesize ideas typically associated with one area of study or the other, with music recordings at its centre (even though there might be some overlap of interests as well, as in the case of copyright legislation). In so doing, it examines various notions of “information” as they relate to music, the strategies employed by the culture industry to commodify music, and some likely connections between both. Such an interdisciplinary approach requires making concepts associated with MS comprehensible to people more comfortable with LIS, and vice versa. Ideally, this complementary approach will facilitate deeper critique of both traditional music categorization and commodification, and demonstrate prospects for interdisciplinary complementarity that might not seem evident at first glance.

### **A Brief History of the Recording Industry I: The Analogue Context (1876 – c.1980)**

With an interest in preserving the human voice and “classical” (or “serious”) music, Thomas Alva Edison (1847-1931) invented the phonograph in 1876. A decade later, Emile Berliner (1851-1929) patented the gramophone. The device had similar functions to the phonograph, but it utilized wax discs instead of wax cylinders. Berliner specifically intended to use the gramophone for mass production, prompting Edison to work on making his invention more competitive (Fink 1996; Groknow & Saunio 1998; Barrett 2010).

By the 1920s, better sound quality, stronger marketing strategies, and relatively simple manufacturing techniques enabled Berliner’s discs to prevail over Edison’s cylinders. The emerging ubiquity of radio provided even more listening options. Except for the price of the radio, people could hear music at no upfront or direct cost. Due to these factors, radio

corporations acquired enough capital to buy out many record businesses (Fink 1996).

Nonetheless, new recording technologies helped increase record sales during the latter part of the decade (Groknow & Saunio 1998). While wax discs remained the medium of choice for master recordings and duplicates, new electronic recording processes utilized vacuum tubes and specialized microphones to broaden sound range and fidelity, as well as the types of music recorded on disc (Fink 1996; Barrett 2010).

After World War II, newer technologies brought additional improvements to sound recording quality. Since magnetic tape offered greater flexibility to the editing process, it replaced direct-to-disc master recordings (Fink 1996; Barrett 2010). Recordings appeared on more durable vinyl, and long-play (LP) discs could contain up to 20 minutes of audio content on a single side (Fink 1996). Other technologies that appeared over the next few decades included “stereophonic” recordings, which listeners could hear on more than one speaker (Fink 1996; Barrett 2010), as well as the integration of individually-recorded master tapes on single “multitrack” recordings (Barrett 2010).

In the mid-1950s, record labels began signing on “rock ‘n’ roll” musicians to appeal to a growing youth market (Fink 1996). Between 1960 and 1970, especially with the emergence of groups like The Beatles, annual record sales in the United States more than doubled. Higher standards of living and levels of disposable income also contributed to this trend (Groknow & Saunio 1998). Along with cassettes, vinyl remained the primary format for sound recordings into the 1970s.

With higher levels of audio fidelity coming to the fore around the same time, record labels began to lobby for stronger copyright legislation (Marshall 2005). While bootlegging was not a new phenomenon, legislation against copying sound recordings had remained relatively weak for

decades. For decades, many bootlegs consisted of live classical and jazz performances, which the recording industry deemed too “specialized” to merit much concern (Fink 1996). In the late 1960s and early 1970s, however, the emergence of high-quality bootlegs of more profitable rock recordings prompted concern within the recording industry. The McClellan Act (1971) in the United States was a first step against bootlegs, but it only pertained to recordings made after it came into law (Marshall 2005).

Derived from the Berne Convention for the Protection of Literary and Artistic Works, and with a broader scope than the McClellan Act, the 1976 Copyright Law expanded such protections for many media in the U.S. Specifically related to sound recordings, performances are considered autonomous “works” in themselves, with performers and/or studio producers as “authors.” They usually yield ownership to record labels, which have the sole right to copy and distribute recordings, and to grant such permissions to others. The same legislation also discusses exceptions for “fair use” of copyrighted materials, which generally shares affinities with “fair dealing” in Canada, and it is used as a guide to assess such factors as non-profit educational usage, as well as their potential market impact (Fink 1996).

### **A Brief History of the Recording Industry II: The Digital Context (c. 1980 – Present)**

Although greatly improved since the time of Edison, analogue technologies still picked up background noise and distortion during the recording process (Fink 1996; Groknow & Saunio 1998). In the latter part of the 1970s, Sony and Philips produced a prototype of the compact disc (CD), which could store digitally-converted audio signals without distortion or background noise. It was also less vulnerable to wear and tear than its predecessors, and could play over an hour of music on a single side. For these reasons, CD sales rapidly outpaced those of less

expensive audio media throughout the 1980s, becoming the primary medium for sound recordings by the end of the decade (Groknow & Saunio 1998).

With decreasing prices, increased storage capacities, and the growing ubiquity of the Internet, personal computers became increasingly attractive within the commercial market during the 1990s. Hard drives could store digital music data, but the large sizes of audio files still rendered them insufficient for storing large amounts of music. For this reason, the MP3 encoding format became popular. It could compress audio files, increase the speed for downloading or sharing them, and enable people to store more music, albeit with some loss of acoustic “depth” and “warmth.” Furthermore, users could transfer personal digital music libraries to an MP3 player. Emerging on the commercial market in the early 2000s, Apple’s iPod is perhaps the best-known example. More recently, newer portable devices like the iPhone have integrated large-scale music portability with other functions (Blake 2010).

With the increasing ubiquity of ICTs throughout the 1990s, peer-to-peer (P2P) programs like Napster enabled users to share digital audio files. Many record labels and related interest groups, including the Recording Industry Association of America (RIAA), reacted by lobbying for legislation that would restrict such practices. Enacted in 1998 as an update to the aforementioned copyright laws, the U.S. Digital Millennium Copyright Act (DMCA) addressed RIAA concerns by prohibiting users from circumventing “digital rights management” (DRM) systems on recordings. Along with similar laws passed or pending in other countries, this measure not only places restrictions on copying recordings within a digital context, but it also clamps down on other “fair use” exceptions outlined in the 1976 Copyright Law. Furthermore, it allows recording companies to ask Internet service providers for information about people whom they identify as copyright violators. With the implementation of DMCA, along with similar laws passed or

pending in other countries, intellectual property issues have expanded beyond tensions between copyright and personal ownership rights, and now also encompass the privacy of data collected on individuals (Blake 2010).

In *A&M Records v. Napster* (2000), the U.S. Ninth Circuit Court of Appeals upheld a federal district ruling that further reduced the ability of P2P users to share music anonymously. Efforts to criminalize such activity gained legitimacy through public relations campaigns by the same interests that lobbied for the DMCA. Over a decade later, many groups and individuals continue to fight against the commercialized and licence-based “Celestial Jukebox” model, which heavily favours recording industry interests. Within the current ICT context, they object to the ways in which legislation has forced musicians and fans to participate in the increasing commodification of music, introduced more heavy-handed restrictions against those who copy music, and decreased privacy protections (Burkhart 2010).

### **The “Information Society,” Commodification, and Music Categorization**

Issues of music commodification can tie in with the seemingly neutral veneer taken on by “information,” a trend that emerged in the decades just after World War II. Persisting to this day, the “neutrality” and vagueness of the term can potentially encompass the storage and organization of data and metadata, as well as the documents they describe. Advocates of the “information society,” a notion that emerged in the 1960s, anticipated a postindustrial era, when an information-based economy would dominate, or even replace, manufacturing (Day 2001; Schiller 2007; Webster 2006). Nonetheless, the apparent “neutrality” of this term, which can encompass such things as seemingly self-evident genre categories for music, can mask how various interests have used the concept to reinforce their own worldviews (Day 2001; Harris *et al.* 1998; Schiller 2007; Webster 2006).



The growing emphasis on “information” as a vital tool for progress in the 1960s aligned with the standardization of cataloguing and classification practices for numerous types of documents, including music recordings. Published in 1969, the *Alpha-Numeric System for Classification of Sound Recordings (ANSCR)* established standards for the physical categorization of sound recordings. The top level hierarchical element of *ANSCR* consists of broad subject categories, such as genre or performance type, which library staff can use to determine a recording’s physical location (McKnight 2002; Saheb-Ettaba & McFarland 1969). However, partially due to the differing structures of genre taxonomies and individual perceptions of genre-appropriateness (Aucouturier & Pacht 2003; Cunningham 2003; McKnight 2002), people might have difficulty finding a recording if they believe it belongs in a category that differs from the one selected by library staff. To complicate the issue further, “crossover” recordings do not fit easily with broadly predefined music categories like “classical” and “rock,” as they typically consist of different musical styles, or ensembles of performers associated with different genres (McKnight 2002).

Nearly contemporaneous with *ANSCR*, the implementation of MACHine Readable Cataloguing (MARC), the publication of the first edition of *Anglo-American Cataloging Rules (AACR)*, and the establishment of bibliographic networks like the Ohio College Library Center (OCLC, now Online Computer Library Center, Inc.) enabled libraries to standardize and share catalogue record information more easily. Such practices became well-established by the 1980s, with online public access catalogues (OPACs) appearing in many libraries (Rehbach 1989). With OPACs containing MARC records, they offer a higher degree of flexibility in searching and browsing than card-based predecessors. Nonetheless, catalogue records for music still primarily use genre as a basis for subject headings (McKnight 2002).

Since sound recordings needed to be categorized somehow, emerging top-down standards prescribed which information would enable users to find them. Consequently, with genre's privileged position, many other possible extramusical elements have been left out altogether (McKnight 2002). The inherent limitations of physical media may account for such decisions. Nonetheless, drawing upon Day's (2001) and Schiller's (2007) discussions about the growth of the "information society," it is also possible that the seemingly self-evident primacy of genre influenced decisions about selecting what seemed the "most important" information to describe sound recordings. Certainly within the music industry, genres have informed portfolio development and management (Negus 1999).

Emerging more recently, other indexing and retrieval platforms with music surrogates or content, including online vendor websites and social networking websites, appear to provide users with greater flexibility in searching or browsing for music. Social media and its associated colloquialism "Web 2.0" emerged in the mid-2000s to describe user-generated content. More specifically, it refers to platforms that allow users to have relatively greater creative control over online content than previously; the ability to form communities around specific interests more easily; and access to increasing levels of "non-text" content. Some sites, including last.fm and Pandora, focus primarily on music itself. Along with online vendor sites like Amazon.com, they also enable users to receive recommendations for further listening. With Web 2.0 capabilities, however, users can also upload music performances by themselves or others, and they can categorize content by adding tags (Blake 2010; Jennings 2007), a capability that Amazon.com now features as well (Amazon.com 2011).

Nonetheless, some of the same genre-related issues and problems associated with cataloguing and classification systems, as well as the accompanying assumptions of neutrality of information,

continue to pervade these platforms as well, filtering into recommendation and tagging practices. The zoological metaphor “long tail” acts as a way of conceptualizing the issues and problems that emerge. Graphically represented by a line on a chart, a very small number of things (whether sound recordings or tags) appear at the “head,” while a sharp drop in the line leads to numerous less popular things that constitute the “long tail” (Peters 2009).

On Amazon.com, recommendations are derived from an in-house “item-to-item” collaborative filtering algorithm, which focuses on aggregated purchasing, rating, and site navigation information from many users (Linden *et al.* 2003). A similar logic appears in social networking sites for music, based on notions of aggregated similarities among users (De Pessemier *et al.* 2009; Jennings 2007). While such platforms strive for “accurate” recommendations, the reliance on such algorithms indicates an almost unquestioning faith in their internal logic (Bonhard & Saase 2006). In addition to favouring relatively popular items and missing out on many other things that end up in the “long tail” (Celma 2010), such algorithms lend a heavy emphasis to genre-based categories (albeit indirectly) within recommender systems as well. This discounts the complexities of users’ interests, which may change over time (Bonhard & Sasse, 2006; Celma, 2010; Celma & Lamere, 2011). Furthermore, systems end up providing recommendations that either seem too obvious or make little sense (Celma & Lamere 2011).

Even if user profiles already reflect cross-genre interests, whether in music or other media, recommender systems as they currently operate still impose limits on the ability of users to explore potentially similar music from different genres. This ignores the complexities of how humans engage with music. While formalized notions of “similarity” remain vague (Cambouropoulos 2009), listeners might actually base their own personal judgments on a mixture of music traits (Gabrielsson & Lindström, 2010) that potentially draw upon a lifetime of

personal experiences with music (Snyder 2000). Musical traits taken into account may include key, tempo, melodic structure, harmony, and numerous others, along with such extramusical traits as lyrics and notions of “aboutness” (Gabrielsson 2009; Downie 2003; Wedin 1972).

On the surface, tagging seems to democratize the categorization of music, and could even have the potential to facilitate cross-genre recommendation. Many sites with music-related content enable users to describe recordings or their surrogates (or even both on sites where metadata and content appear together), with users providing terms they find personally suitable or meaningful. In fact, a number of OPACs have also incorporated this feature (Spiteri 2006). That said, while tags have opened up the possibility of categorization by emotional state, along with specific contexts and events (Bischoff *et al.* 2009; Jennings 2007), genre-based tags still tend to predominate. In the case of last.fm, over 65% of tags relate to genre, including potentially contradictory ones for the same piece (Lamere 2008). Furthermore, as descriptive terms, tags provide less insight into potential appeal than ratings and reviews (Vig *et al.* 2010). The democratic sheen of tagging may actually reinforce the marginalization of certain genres, too. In a study of last.fm, the top ten songs for five emotion-based tags came from what one could broadly consider popular music, leaving out other types like classical, jazz, and “world” music (Neal *et al.* 2009). Once again, the long tail phenomenon relates to these issues of popularity bias, whether in terms of tags employed (Peters 2009) or the musical tastes of a site’s core user base (Lamere, 2008; Rahman & Siddiqi, 2011; Schedl, 2012).

Further reinforcing genre’s primacy, many researchers have tried to develop systems that automatically classify music in such a manner based on patterns found in audio content. Still, many such studies also acknowledge the pre-existing problems of defining the parameters of various genres, as well as errors made within the prototypical systems they have developed

(Annesi *et al.* 2007; Grimaldi & Cunningham 2004; McKay & Fujinaga 2010; Tzanetakis *et al.* 2001).

While concerns about the overreach of copyright laws and related privacy issues may seem important in relation to music indexing and retrieval, it is necessary as well to consider how technological determinism (Day 2001; Schiller 2007) can create additional barriers to users of music indexing and retrieval systems. The lack of reflexivity about the underlying assumptions of such systems, especially in relation to the explicit and implicit privileging of genre-based similarity over a seemingly infinite array of others, reinforces the technocratic constructs that undergird such platforms, and the commodification that goes hand-in-hand with them.

### **The Role of Music in Society**

With the ties that appear to exist between commodification and the “information society,” including the privileging of genre-based categorization *vis* music, acknowledgement of the work of German social critic, philosopher, and musicologist Theodor W. Adorno seems in order. He is perhaps best known for providing a foundation for analyzing the role of music within sociocultural contexts, the ways in which such structures affect engagement with music, and the commodification of music by the “culture industry.” While he wrote many essays on music and its social role, an overview of some of Adorno’s major works on the topic should suffice in making connections with other topics discussed previously.

One of Adorno’s best-known essays, "On the Fetish-Character of Music and the Regression of Listening" (1938), discusses the ways in which record and radio companies market various kinds of music. Essentially, he posits that the purveyors of both “popular” and “serious” music infantilize and bedazzle listeners through various modes of music production, with marketing

strategies parsed out for each type of market. These include gramophone recordings and radio, which provide listeners with illusory notions of market-derived freedom. In addition, with some connection to deconstructing genre-based categorization, Adorno critiques the status-seeking associated with many listeners of “serious” music, who perceive it as a marker of cultural sophistication (and, implicitly, wealth), as well as the reverse snobbery of those who listen to “popular” music and dismiss “serious” music as “too elevated.” In a wholesale dismissal of popular music, Adorno claims that it possesses a calculated balance of nominal novelty and familiarity to keep attracting listeners, which enables the industry to continue replicating itself. In terms of serious music, Adorno also critiques the development of marketable “classical” repertoires, along with the veneration of certain personalities (especially conductors like Arturo Toscanini) whom the music industry set up as “stars” who outshine the composers of the works they perform. In terms of composers, Adorno heaps particular scorn on the inclusion of the “Romantics” (c. 1830-1910) in such repertoires. Touching upon a very broad potential similarity between “popular” and some “serious” music, albeit with negative connotations, Adorno sees Romantic composers as no better than popular musicians, in that they strive to create emotional “effects.” Adorno contrasts this trend with the structural integrity he associates with the works of earlier (and typically Austro-German) composers like Ludwig van Beethoven. (Adorno 1988; Wilson 2003; Witkin 2003).

"On Popular Music" (1941) further outlines similar themes. Since “passive” listening can provide a form of escapism for listeners stuck in unrewarding and alienating jobs, popular music ends up reinforcing existing power structures. Sentimental songs enable self-pity, which tunes out the exploitative conditions of capitalist society, while dance music is set to “the rhythm of [one's] own exploitation and oppression” (Adorno 2002). Also from 1941, "The Radio

Symphony" returns Adorno to his critique of marketing "serious" music. He posits that, by familiarizing audiences with the same small repertory of "quotable" masterpieces (or at least parts thereof), certain radio shows about "serious" music flatter listeners into believing that they properly understand it, all the while aiding in its commodification. In addition, Adorno writes that the apparent democratization of an "elite" art form actually reinforces elitism by dispersing it through the mass media (Adorno 2002; Ross 2007; Witkin 2003).

Written with Max Horkheimer, *Dialectic of Enlightenment* (1944) claims that the ongoing cycle of cultural production and consumption, along with state-accepted and -enforced norms, can foster the development of prejudices against anything that might seem "abnormal." Furthermore, such attitudes can share affinities with, or even give rise to, authoritarianism (Adorno & Horkheimer 1998; Brunkhorst 1999). Adorno may have been thinking about Nazi Germany, which had banned so-called *Entarte Musik* ("degenerate music"). This epithet applied to music deemed by the Nazis as too "modern" or "decadent," usually by composers who were Jewish, Marxist, and/or members of the "Second Viennese School" founded by Arnold Schoenberg (Ross 2007). Such concerns might tie in with Adorno's admiration for the "atonal" music of Schoenberg, believing that its emphasis on so-called "wrong notes" and the lack of a home key allowed music (or at least that of the Austro-German tradition) to break free of socially-conditioned norms. Related to Adorno's interest in social criticism, the "emancipation of dissonance" could also remind listeners of their alienated existence within capitalist society, and was the real reason they tended to dislike it. (Brunkhorst 1999; Witkin 2003).

Adorno once again criticizes certain types of "serious" music in *Philosophy of Modern Music* (1949). He writes that the continuing composition of tonal music shares some affinities with authoritarian power structures, attempting to relive or resuscitate a "glorious" past that does not

exist (Adorno 1973). In other words, with the end of World War II and the horrors of Nazism made apparent, tonal music has no real place in the modern era. (Ross 2007; Witkin 2003). The book's main focus of critique is Igor Stravinsky, whose then-current interest in a "neo-classical" form of composition was pitted in diametric opposition to Adorno's hero Schoenberg (Adorno 1973). Interestingly, Schoenberg himself thought little of Adorno's work, criticizing his writing as, "this blathering jargon, which so warms the hearts of philosophy professors when they introduce a new awkward expression" (Auner 2003, 335).

Certainly to those unfamiliar with Adorno's approach, it might come as little surprise that his tendency to make broad generalizations has opened him to criticism. These include his assumptions about the "passivity" of most listeners and music creators; his idiosyncratic prejudices against certain kinds of music, including most infamously jazz; and his far-reaching abstractions that relate music too neatly to sociocultural constructs (Albrecht 2006; Martin 2006; Paddison 1996; Paddison 1993). He even makes an ambitious proposal for a study that he believes will "prove" his points, but that "they" would not allow it to happen:

It is true that thorough research has not, for the time being, produced an airtight case proving the regressive effects of particular products of the culture industry. No doubt an imaginatively designed experiment could achieve this more successfully than the powerful financial interests concerned would find comfortable (Adorno 1991, 104).

While his claims may seem a bit shaky and highly speculative, they are provocative enough to take into account for further inquiry into the complex interactions humans have with music.

### **Adorno's Legacy**

Certainly, Adorno has had some degree of influence on critical musicology, a field that started coming to the fore in the late 1980s and early 1990s. Unlike traditional musicology, which studies music (almost always of the "serious" sort) as an isolated phenomenon unperturbed by



the outside world, critical musicology places emphasis on how music operates within various sociocultural and political contexts (Ross 1994). Scholars in that field may or may not entirely agree with Adorno, and their analyses can draw upon any number of approaches, such as poststructuralism (Subotnik 2002), feminist theory (McClary 1991), queer theory (Brett 1994), postcolonial theory (McClary 2007), and numerous others.

At least broadly speaking, a critical musicological approach can seem relevant for considering the current state of recorded music, including the culture industry's obsession with various quantitative measures. As mentioned previously in relation to intellectual property, the expanding legal power of corporate interests enables them to have a tighter grip on recorded music, decreases the privacy of users under the pretense of enforcing copyright law, and could even be perceived as marginalizing listeners and creators of certain kinds of music. In the sense that the term "information" has broadened to encompass data, metadata, and documents, the integration of broadly defined "music information" into various ICT platforms could further exacerbate the potential dangers of such trends.

While not likely, one could speculate upon the arrival of a time when current technocratic issues within music indexing and retrieval systems will be remedied, enabling listeners to use more faceted categorizations of music, whether textual or non-textual, to engage in much broader music exploration. This deeper form of personalization holds some promise as an alternative to top-down modes of categorization, most especially those based on genre. Nonetheless, at least theoretically, other issues related to "insular listening" and commercial exploitation of listener differences could emerge as well (Murphy 2010). While its analysis of responses to a survey about iPod usage in urban environments does not discuss such a possibility, a study by Bull (2010) outlines some implications that seem relevant to such concerns. Listeners use the portable

listening devices to negotiate their surroundings, which provide a sense of well-being and empowerment. Bull claims, however, that iPods can also foster a “mediated solipsism” enabled by the culture industry. In addition to consuming commodified music, listeners can turn their surroundings into a personalized commodity, as part of the “soundtrack” to their lives. Drawing further on Adorno, especially in relation to alienation within commodified cultural contexts, Bull believes that this “headphone culture” has ended up acting as a substitute for interpersonal interaction (Bull 2010). Bull’s study provides some insights for serious consideration, and perhaps further study. Nonetheless, like the proposed experiment Adorno proposes in “The Culture Industry Reconsidered” (1991), it also tries too hard to “prove” a specific point about the “dangers” of personalization, giving it the air of a moral panic. With Bull’s apparent interest in making a broad point about “toxic listening,” even if his respondents did not mention it, his hypothesis seems (certainly from an empirical perspective) tenuous.

Another widely-known and seemingly “proscriptive” example from critical musicology, which expanded into a broader public debate, is a controversial essay by McClary (1987) that compares a section of Beethoven’s Ninth Symphony with an act of rape (a slightly revised version appears in her 1991 compilation *Feminine Endings*). Interestingly, what gets forgotten is the fact that McClary’s primary interest is in discussing a work called *Genesis II* by Janika Vandervelde, and not Beethoven’s Ninth, which does not get mentioned until near the end (McClary 1991, 1987). In a critique of critical musicology itself, van der Toorn cautions that such readings of music, especially given its nonverbal nature, run the risk of committing their own form of metaphorical violence as well, as they tell readers to “listen for” specific phenomena. Furthermore, such analyses can come across as too hermeneutically sealed to be understood by others, including academics in other fields who might not understand critical approaches (1995). Indeed, anyone

unfamiliar with the rationale and rhetorical assumptions underlying critical analyses might read them as too proscriptive and puritanical, deciding to summarily tune out and dismiss such ideas. On the other hand, such easy dismissal can close off possibilities for further study, triangulation, and even discussion about music within the “information society,” including the assumptions underlying genre-based categorization, the extent to which combinations of various factors (e.g. psychological, physiological, and sociocultural) and musical traits drive listener preferences, and so on.

## **Conclusion**

As music surrogates and music content converge within ICTs, music indexing and retrieval practices that reflect broader cultural constructs like genre remain well-entrenched. So does the consolidation and commodification of both music and information. Efforts to maximize the freedom of listeners to explore diverse types of music might provide one possible alternative to current models, as genres can reflect mutually-reinforcing corporate and sociocultural constructs. That alone will not generate substantive change, however, if too much faith is placed in technocratic solutions. They may even backfire if, as one could extrapolate from Bull (2010), broad musical tastes end up becoming narrow at individual listener levels.

Whether individually or as a part of their respective sociocultural contexts, humans engage with music for reasons ultimately difficult to summarize neatly into any kind of framework, be it technocratic, commercial, critical, psychological, or otherwise. Nevertheless, those who work with music indexing and retrieval systems should at least endeavour to foster the development of broader communities of listeners that transcend easily-commodified and technocratic constructs, including genre. Ideally, they would meet better the needs of people who (to paraphrase Jimi

Hendrix) might know what they want, but do not know how to go about getting it. As well, critical perspectives can ensure that music indexing and retrieval systems do not end up resting on technocratic oversimplification and easily-commodifiable assumptions about listeners' tastes. Within the context of FIMS, a dialogue between those in LIS and MS is crucial to such an endeavour. This is true not just with music, however, which is only one aspect of the media landscape. Cross-program investigations into similar issues across various types of media (whether film, television, photographs, books, video games, or numerous others) offer the potential for some fruitful collaborations as well.

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