

# Mediating *Music*: materiality and silence in Madonna's 'Don't Tell Me'

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## Abstract

*This article investigates how the concrete sound of and recording process behind a pop tune relate to the possibilities and constraints of its electronic media. After a brief presentation of some theoretical issues related to the question of mediation and materiality, we address the claim that digitisation erases the material aspects of mediation through an investigation of contemporary popular music. Through a close analysis of the sound (and the silence) in Madonna's song 'Don't Tell Me', from the album *Music* (2000), as well as in a handful of related examples, we argue that one can indeed identify specific aural qualities associated with digital sound, and that these qualities may be used to achieve different aesthetic effects as well as to shed light on mediation and medium specificity as such.*

## Introduction

Mediating technology is considered a central and defining trait of popular music: pointing to a state 'before' or 'outside' of this mediation, a state of 'raw' or 'original' sound, makes no sense here. In principal, this is true of all music genres, since no music is unmediated. The acoustic surroundings of music mediate it in different ways: a large church hall and a room for chamber music are different sonic 'media'. However, while a classical musical recording is dominated by the principle of fidelity – 'of trying to create as realistic an impression of a musical performance as possible – however artificial that "realism" actually was' (Clarke 2007, p. 14) – the role of mediating technologies in popular music is different on at least two counts. First, the recording is the primary medium for popular music. The introduction of certain mediating technologies has thus delimited the field of popular music, in the sense that they are a constitutive aspect of it – part of the origin of the field itself.<sup>1</sup> Second, there is a sophisticated tradition for highlighting, playing with, and commenting on mediating technologies within popular music practices.

In this article we will investigate how the concrete sound of and recording process behind a pop tune relate to the possibilities and constraints of its electronic

media. We seek a more nuanced understanding of the specific and historical roles of different media used for both music production and music consumption (for example, radios, home stereos, personal stereos), as well as the role of mediating technologies that cut across these media (for example, analogue versus digital sound). The age of digitisation has occasioned claims of *convergence*, of a 'post-medium' state that reduces the role of individual media such as home stereos, radio and television; we will therefore also address the assumption that digitisation erases the 'material aspects' of musical recording. We will not discuss the *medium specificity* of these media in a modernist sense (such as claiming that the essence of painting is 'flatness'; see Krauss 2000). Still, we believe that technology *is* important for the particular sound of popular music – as are the social and institutional practices of music and media production – and that this has not been radically changed by the introduction of digitisation.

After a brief presentation of some theoretical issues related to the question of mediation and materiality, we will address the claim that digitisation erases the material aspects of mediation – thus bringing about a totally new post-medium condition – through an investigation of contemporary popular music beginning with Madonna's song 'Don't Tell Me', from the album *Music* (2000). Through a close analysis of the sound (and the silence) in this song, as well as in a handful of related examples, we will argue that one can indeed identify specific aural qualities associated with digital sound, and that these qualities may be used to achieve different aesthetic effects as well as to shed light on mediation and medium specificity as such.

### Music in a post-medium condition?

Writing in the mid-1980s, Friedrich Kittler joined many of his contemporaries in forecasting a loss of materiality and difference among media due to their digitisation (and hence convergence). His claim is straightforward:

The general digitisation of channels and information erases the differences among individual media. Sound and image, voice and text are reduced to surface effects, known to consumers as interface. ... Inside the computers themselves everything becomes a number: quantity without image, sound or voice. And once optical fiber networks turn formerly distinct data flows into a standardised series of digitised numbers, any medium can be translated into any other. (Kittler 1999, pp. 1–2)

Thus the very *concept* of a medium loses its significance, according to Kittler and his fellow critics, as digital media converge through fibre-optic networks. A related argument proposes that digitised media lose the qualities associated with the process of recording and distribution when compared with the mediation and reproduction processes of analogue media. In their eulogy to the phonograph, Eric W. Rothenbuhler and John Durham Peters join those who draw a sharp distinction between analogue and digital media while raising interesting claims about the semiotic status of their respective sounds:

In terms of the logic of the sign-referent relation, the difference between analog recording and digital recording is the difference between indexes and symbols in Peirce's scheme. The analog recording is an index of music because it is physically caused by it. The digital recording is a symbol of music because the relation is one of convention. (Rothenbuhler and Peters 1997, p. 249)

One certainly might question the premise that an analogue recording bears a direct physical relationship to an original sound event, though this was once the

case, during the era of direct engravings of live performances. For most of popular music's history, however, even analogue recordings have been compiled from multiple recordings or sessions, not unlike digital recordings. Furthermore, digital recordings have routinely been released in both analogue and digital versions, ever since Ry Cooder's *Bop Till You Drop* (1979) was recorded digitally. Thus, even analogue records may be the result of a digital recording process, as analogue recording equipment is often used in the production of CDs. In other words there are often no 'pure' chains of either analogue or digital mediation, as Rothenbuhler and Peters seem to assume. This is the case with more recent as well as older analogue recordings.

In addition to challenging the problematic 'indexical/physical' premise in Rothenbuhler and Peters's argument regarding the recording process, we would like to discuss the distinction they make between digital and analogue *reproductions*. In Rothenbuhler and Peters's view, not only does digital recording lack an indexical relation to a physical aural event but the digital *record* – the compact disc, in this case – bears no indexical trace of its *use*. Digital sound can be reproduced without any generational loss and played back without any signs of wear and tear over time. In contrast, the playback of analogue records

audibilises two histories: one of the recording and one of the record. . . . The data encoded on the CD do not mix with the history of the disk; they can be obscured by dirt and scratches, but dirt and scratches cannot sound from a CD player. As the history of records speaks while they are being played, they thus invite us to think about the passage of time; by contrast, CDs obscure it. (Rothenbuhler and Peters 1997, p. 255)

Clearly, the history of an LP becomes part of its sound. The question is, however, do digital recordings offer something similar? Madonna's song 'Don't Tell Me' uses a familiar pop and rock format: the instrumentation is modelled on the traditional lead vocal with a band, and the form of the song is binary, with verse and chorus. We could even say that contrary to the sound and texture of much contemporary dance music, which is almost unthinkable without recent technological developments, 'Don't Tell Me' could have resulted from analogue tape recording techniques or even a live performance.<sup>2</sup> The song's medium, or mode of production and reproduction, however, plays an important part in both its musical and its cultural significance. One of the most striking material traces of mediation on this track is the use of 'digital dropouts'. The effect mimics a CD player having problems reading the information on a disk, which can happen with a dirty or scratched CD or a 'worn-out' laser. In both cases, the effect is indeed caused by wear and tear, and the result may be understood as an index of use in the sense reserved by Rothenbuhler and Peters for analogue playback alone. Thus digital sound and reproduction technology can in turn invite us to think about the 'passage of time' or the 'history of the disk', to use Rothenbuhler and Peters's terms. Furthermore, digital technology can invite listeners to reflect upon the act of mediation and technical reproduction, as will become clearer below. In the following we will dwell on the introduction of the silent pauses in the opening bars of this song and what they may mean, and also discuss how this effect changes its meaning and function in the course of the song.

### 'Textual' and 'medium silence' in 'Don't Tell Me'

Silence functions differently in various media and communicative situations. In pantomime, for instance, silence is part of the 'frame' and therefore represents a

normal state with no special relevance or import. In theatre, however, silence is a communicative activity<sup>3</sup> that must be interpreted in relation to whatever precedes or follows it. Planned silence might also appear as part of the scripted performance and is often written as pauses in plays, film scripts, music notation, and so on. When silence is a part of the text whether as performed or scripted, we call it *textual silence*. Both performative and scripted textual silence might range from a dramatic cæsura to a form of 'neutral' space. In groove-oriented music, for example, the space between the notes creates the 'groove' – where and how the sound ends is as much a part of the rhythmic pattern as where and how it starts (Danielsen 2006b, p. 54). This is, however, a form of textual silence that is commonly non-attended and devoid of drama. Conversely, when the old Cantor in the classic movie *The Jazz Singer* (Crosland 1927) surprises his son (Al Jolson) singing jazz in his home, he cries 'STOP!', resulting in a nineteen-second pause before dramatic music resumes beneath the action, the silence is dramatic. This stunning gesture is perhaps the first theatrical use of *textual* silence in cinematic dialogue (and perhaps in cinema altogether).

In addition to the broad categories of silence as a state or frame for performance and silence as communicative activity in the form of performative or scripted textual silence, aural media, such as stereos, radio, television, film, and so on, may invoke a 'medium silence', where the medium ceases to function as an error of technology. Put differently, when early sound films such as *The Jazz Singer* were introduced in theatres, medium silence through equipment failure or human error was much more common than textual silence, as exemplified in the following newspaper account of the first sound film exhibition in an Oslo cinema:

The same way people from the countryside quickly get used to the clatter and noise of the city, the silent movie supporter will soon enough come to accept the many noises of the sound film. We experienced this already yesterday: When the sound equipment shut down ... and the movie finally went silent, it not only seemed comic, but the mute scenes seemed empty and stupid. (*Arbeiderbladet*, 12 September 1929)

Medium silence such as this is of course typically non-intentional and even considered a major taboo, as with 'dead air' in commercial broadcasting.<sup>4</sup>

A form of medium silence may, however, also be used for aesthetic purposes and even assume a communicative role similar to that of textual silence. In Madonna's 'Don't Tell Me', the CD as a digital medium, and the possibilities of digital dropout, are exploited right from the beginning of the song.<sup>5</sup> The sonogram shown in the Figure gives a visual representation of the digital dropout, showing how the so-called 'digital black' cut-outs (represented in white) make the music skip the first beat of the second bar. As shown in the sonogram, the silence in 'Don't Tell Me' is, on a technical level, 'digital silence': the signal drops out completely, leaving no hiss or other 'dead air'-related sound but instead a complete lack of sound.

The presence of digital silence in 'Don't Tell Me' is framed by the generic expectations raised by the acoustic riff during the first bar, which drive us to expect a repeated – or developed – rhythmic figure in the following bar. When silence is 'introduced' on the fourth beat, one might expect it to be an 'active' silence in the sense described above in theatre, one that increases the tension and encourages our expectations of an answering phrase or riff. However, designed as a *complete silence* – a 'digital black' – it is clearly *not* part of such generic conventions and thus seems strange, even inappropriate. Hence, when the riff then reappears in 'mid-air' during the fifth beat, confirming a missed downbeat and the cut-off of the musical



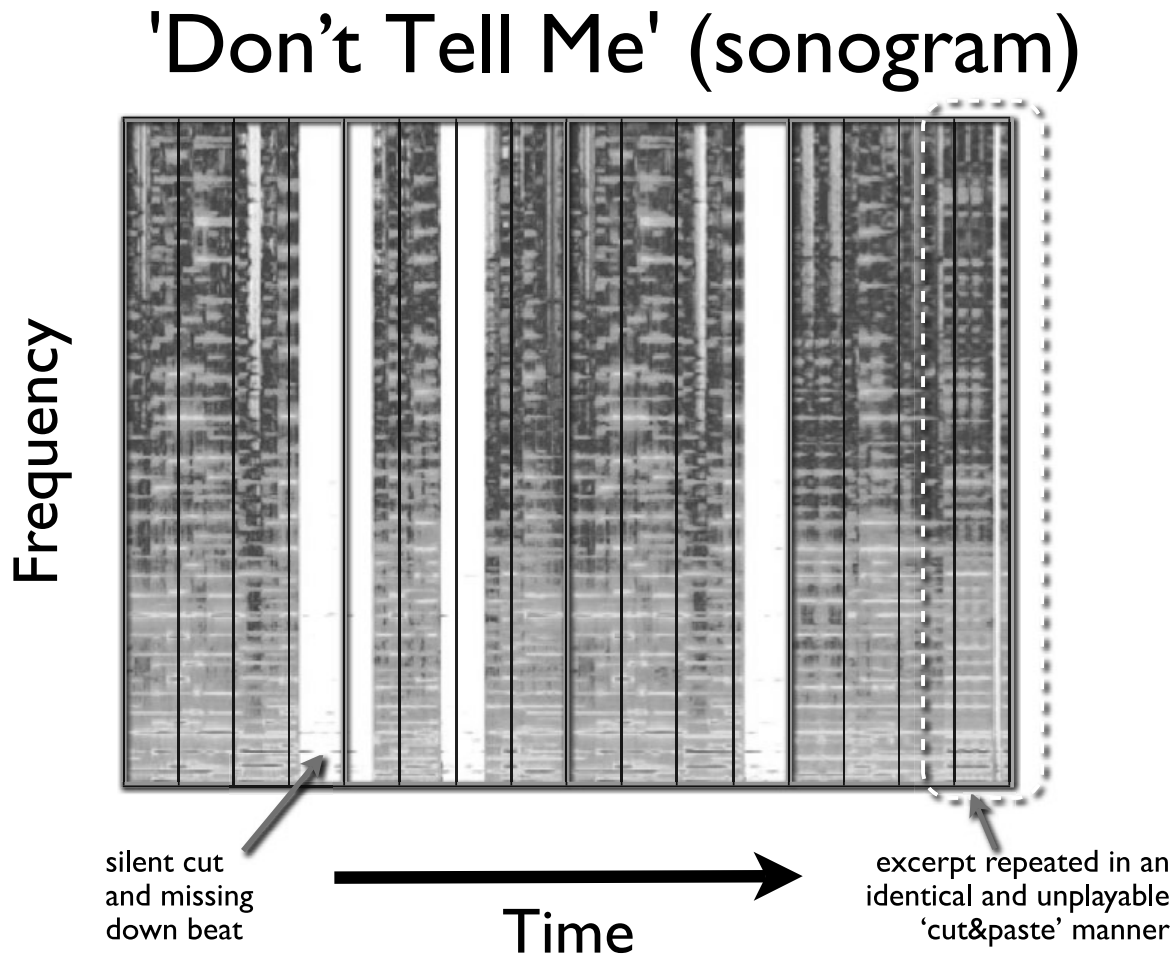


Figure. Sonogram of the first four bars of the introduction to 'Don't Tell Me'. A grid is added with fine lines representing each new quarter-note beat; the thicker lines mark new bars.

phrase, the silence is at least for some seconds clearly proven to be a 'digital dropout' – that is, a medium silence. It ceases to be part of the text and is instead (at least initially) marked as a technical error, which in turn drains the pause of the potential communicative force it would have retained if the riff reappeared on the 'downbeat'.<sup>6</sup>

When the subsequent silent pauses begin to form a rhythmic pattern in a steady temporal flow, however, the framework changes, and we hear the seemingly random digital dropouts as a highly meaningful device, rhythmically and otherwise. In other words, it soon becomes clear that the presence of digital dropouts on this track is *not* a sign of a worn-out or broken medium. After this category shift from medium silence to textual silence has taken place, however, the effect of the dropout still plays on the initial similarity between the two, continuing to signify a form of digital 'weariness'. This connotation only gradually fades away, as the effect of the digital dropout becomes less conspicuous until it mimics a more or less neutral and almost purely musical pause.

The use of silence in 'Don't Tell Me' takes on yet another layer of meaning in light of the lyrics. Whereas *sound* has long been associated with life, fullness, temporal progression, and community, silence has been associated with death, emptiness, temporal immobility, and isolation.<sup>7</sup> Along these lines, the use of silence in 'Don't Tell Me' may be 'making audible' the place outside of sound *and* time that

is alluded to in the lyrics. After the dropout effect is introduced in the intro, the first verse reads:

Don't tell me to stop  
 Tell the rain not to drop  
 Tell the wind not to blow  
 'Cause you said so, mmm

This is underscored by the way Madonna's voice is edited. The word 'stop' in the first line tellingly ends with a silenced 'p', giving the impression of a human voice suddenly being cut off and underscoring the lyrics' allusion to immobility, break in temporal flow, or absence of life. The effect of the inserted silence in this song, then, is threefold: initially it comprises an indexical sign of the act of digital mediation; then it is a repeated and purposeful musical-aesthetic effect; finally, it is a rhetorical gesture related to the theme of the song.

### Mediation as a signifier of past and present

As was pointed out above, the role of silence in 'Don't Tell Me' is atypical of the singer-songwriter tradition and the country music genre alluded to by the format and instrumentation of the song. This discord between musical style and mode of mediation is crucial to the initial interpretation of the digital black as medium silence. The resonance of the digital dropout also raises the issue of digital mediation more generally as part of our appreciation of the song: Even when it has become 'normalised' as an almost purely musical negative of the rhythmic pattern, the dropouts still signify their medium in the way they add to the rhythmic and textural qualities of the sound. When the additional layers of rhythm have entered the sound, the groove in general contributes to this identification of a 'digital signature', as it conveys a highly quantised, digitised feel that is typical of much club music from the digital era. This rhythmic character could not have been realised in the same way – at least not to such an extent – through analogue media, for several reasons. First, analogue media are rarely able to reproduce silence without any noticeable hum or noise, as can the digital black. Second, there are many quantised tracks operating here according to a subdivision of 32nds. The hi-hat, for example, may have been produced by quantising a poorly played hi-hat pattern: quite a few strokes seem to be positioned in odd places, most typically one 32nd before or after what would, in a played groove, be regarded as a more idiomatic location. The bass drum also contributes to this quantised feel. The upbeats to the downbeats are straight 32nds, and throughout the song there are some characteristic recurring bass drum rolls of 32nds. Such micro-rhythmic designs are unplayable on a drum kit. Finally, the last beat of the fourth bar has a short soundbite likewise repeated in a way that is impossible for a musician in a live performance (both in its rhythm and its utterly identical sound) but easy to 'copy and paste'.<sup>8</sup> Borrowing from Stan Hawkins, this song is realised in ways that 'make live performances simulated events' (Hawkins 2004b, p. 6).

The sound production of 'Don't Tell Me' is not unique in displaying the signature of its mediating technologies. Another distinctive artist employing similar techniques from the same time period is Squarepusher, the performing pseudonym of British electronic music artist Thomas Jenkinson. In 'My Red Hot Car' on the album *Go Plastic* (2001), the presence of digital music technologies leaps out from the very first bar. The 'high-definition' feel of the programmed, quantised rhythm tracks

and processed voice are the first signs of digital mediation. The most striking sign, however, occurs in the middle section of the song, where Jenkinson explores the possibilities of digital editing via an extensive montage of chopped-up sonic material that results in an ironically 'well-formed cacophony' of sounds.

The use of silence in this case, though, is quite distinct from 'Don't Tell Me'. While we clearly hear the silent 'bursts' as digital silences in 'My Red Hot Car', they never resonate as medium silences but wholly as textual ones. In fact, Squarepusher's gaps of silence attract little attention at all. First, they are either much shorter than in 'Don't Tell Me' or enveloped in other continuous patterns of sound or reverb. In addition, the rhythmic use of silence only gradually appears in the song after a sixteen-bar intro, when a chopped-up vocal enters on top of a repeated four-bar pattern in drums, bass, and synth organ that continues into the verse. The musical silence here represents a playful processing of digitised sound rather than a digital dropout of the medium itself, and the pauses are neutral gaps between the sounds, 'negatives' in the rhythmic pattern. They are no less important for this, of course, and lend the song its specifically contemporary feel through their clear display of a digital signature.

While 'My Red Hot Car' points to one specific moment in the history of music production, 'Don't Tell Me' plays on the relation between old and new in popular music, as well as on the contemporary listener's sensitivity to the aural signatures of different media. In a short essay called 'The revenge of the intuitive', Brian Eno reminds us that artists often play on these sensitivities: 'in the end the characteristic forms of a tool's or a medium's distortion, of its weakness and limitations, become sources of emotional meaning and intimacy' (Eno 1999). Joseph Auner, in an essay called 'Making old machines speak: images of technology in recent music', also addresses the meanings produced by relating old and new technologies in music. From the pre-digital era he points to Pink Floyd's montage of old and new media on the album *Wish You Were Here* (1975). In the transition between 'Have a Cigar' and 'Wish You Were Here', the poor, noisy sound of an old distribution medium, an AM transistor radio, is contrasted with the crisp, intimate sound of the new technology of that time, home stereo equipment (Auner 2000, pp. 7–9).

From the digital era, Auner uses several songs by Portishead to demonstrate how the foregrounding of recording media and musical technologies may be further deployed 'to engage tradition and to manipulate memory and time' (Auner 2000, p. 13). As he rightly points out, Portishead can produce a very strong emotional charge simply by using samples and allusions to outmoded styles, old movies, and soundtracks in a highly stylised, sometimes ironic, way. While the use of overtly marked analogue sound here may serve several functions, such as exposing vulnerability or an aching subjectivity, Portishead's focus on the limitations and weaknesses of old mediation technologies, such as the noise caused by dust and scratches on a well-used (and therefore well-loved) vinyl LP, contributes to a sense of nostalgia – the mourning for a lost past that runs through many of their songs. Nevertheless, Portishead also emphasises the contemporary digital technologies through which they create their effects. In this respect, Portishead's use of old modes of mediation differs from a more traditional nostalgic use, where the expressiveness of the old modes is left undisturbed by the transparency of the contemporary media actually in charge of the mediation.

As Auner also points out, old technologies often connote authenticity, warmth, or wholeness, while the framing contemporary mechanisms that mediate these old

sounds remain inaudible.<sup>9</sup> In one of the Portishead examples discussed by Auner, 'Cowboys' from the album *Portishead* (1997), a highly distorted electric guitar is sampled and looped. Instead of playing on this instrument's connotations to rock authenticity, however, the sample is used in a way that not only foregrounds 'the fragility and imperfections of the old materials, but exposes their artificiality' (Auner 2000, p. 30). In fact, the sound of this 'guitar' is so remote from the sound of a traditional rock guitar that it would not be likely to trigger these associations at all. It is also possible that the source of Portishead's guitar sound is, for example, a synthesizer instead. Auner's point is valid regardless: instead of letting the act of mediation remain transparent, Portishead foregrounds their mediating technologies, impacting both the sound and the meaning of their music. In another example, 'Undenied' (*Portishead*, 1997), Auner points to the group's play on absolute digital silence versus noisy vinyl silence (Auner 2000, p. 14). The song is in fact marked by continuous vinyl noise, but it is interrupted at two key moments, when its absence – revealing the digital silence enveloping the musical sounds – intensifies the emotional tension and the charged, trembling voice of singer Beth Gibbons.

According to Mark Katz, vinyl noise, real or digitally simulated, is now firmly part of our modern sonic vocabulary and can be powerfully evocative: 'In the age of noiseless digital recordings, this sonic patina prompts nostalgia, transporting listeners to days gone by' (Katz 2004, p. 146). Eric Clarke also points to the distant and nostalgic quality of 'worn vinyl' (Clarke 2007, p. 19). In Katz's view, this 'phonograph effect', as he calls it, first became a valued and meaningful sound when digital technology eliminated it. However, as pointed out above, even though digital mediation is literally noiseless, there are other forms of 'noise' that display the signature of the medium. How do these traces of digital mediation signify in relation to this exchange between past and present modes?

In the Madonna universe, there is no mourning, not even an ironic one, for the loss of the past. Nor is there any attempt to restore its sound. Instead of commenting on the limitations and weaknesses of old technologies, or exploring their potential expressiveness, Madonna and her production team bring the presence and potential malfunction of a *contemporary* medium to the fore: it is the weaknesses and limitations of the new that are put into play. In fact, Madonna's use of an old, or perhaps timeless, format (the song), past technologies (the acoustic guitar), and a traditional musical style (country) comes close to the Jamesonian notion of pastiche, in that there is no claim for the validity of the relation to a presumed origin, a real past, or a real tradition, nor is there a 'satiric impulse' in the use of these elements (Jameson 1984, pp. 65, 67). Instead, the past and the musical tradition possibly representing it are approached by way of connotations to previous styles. In this respect, Madonna's music resembles Beck's highly eclectic use of former styles and genres, a feature also commented upon by Auner in his essay (Auner 2000, p. 16).

In fact, the way in which the dialogue between tradition and contemporary music technology evolves in 'Don't Tell Me' resonates with an overarching theme of the album *Music*, and of Madonna's oeuvre in general: the play with, reinvention of, and cooptation of stereotypical identities and forms.<sup>10</sup> In parallel with how Sean Albiez (2004) describes Madonna's visual image as 'a hyperreal urban/rural cowgirl ... a club version of the Western look', the musical solutions in 'Don't Tell



Me' demonstrate a resonant artistic strategy: 'Don't Tell Me' is the club version of country-pop. Moreover, its polished sound bears all of the signs of glamour and artifice commonly associated with a Madonna production. As Albiez writes, there is very little on the album that 'announces itself as Country music per se, but the turn to acoustic instrumentation within a digital environment and songwriting that alludes to acoustic singer-songwriting ... mixes the organic with future machine music' (Albiez 2004, p. 131). The traces of the process of mediation, whether enacted upon the presence of a digital medium or the iconography of Western music, transform country and western – a style connoting authenticity and traditional American values – into a sort of hyperreal travesty. Neither the singer-songwriter tradition nor the country genre (and the modes of production associated with both) necessarily imply something outdated in the first place. When juxtaposed with digitally chopped-up rhythms, however, the song format and instrumentation appear to belong to another era.

The use of digital silence as a marker of digital mediation takes on very different meanings in Portishead's nostalgic, 'second-hand' aesthetics and Madonna's pastiche-like musical style. Still, in both contexts, the audible interplay between the signatures of old and new (re)production media has in fact become an indispensable part of the meaning of the songs, both aesthetically and semantically. Moreover, when Madonna uses the silent dropouts as an allusion to the fragility of digital sound production, this is not immediately recognisable as a conventional sign of historicity, such as the phonograph effect mentioned above, or scratches on film. In the course of the song, however, she makes the digital glitch into an effect marking the specificity and historicity of a contemporary medium. And in marking the present as history in this way, she also completes a powerful act of communication, asserting her sensitivity to contemporary culture as well as her power to pull back from it and 'go meta'. In a few bars of music Madonna and her team of producers and engineers comment wryly that digitisation is passé (and so 1999) while asserting Madonna's place as the Queen of (or over?) Pop.

### **Stardom and genre: economic and industrial factors**

If produced differently – for example, as a 'live' performance – 'Don't Tell Me' could perhaps have supported the claim that the medium in the age of digital reproduction leaves no mark on the content. However, Madonna is a branded pop star, which means that there are certain industry and listener assumptions regarding the 'package' Madonna ought to deliver. As Hawkins points out, the potential of her 'authenticity' lies in the possibilities of her transformation, and her authorial position 'remains bound up in the construction of herself through visual and sonic production' (Hawkins 2002, p. 52). One aspect of this concerns her use of state-of-the-art production methods – how she 'skilfully recycles herself through music technology' (Hawkins 2004a, p. 189). Another (related) aspect concerns her tendency to pick up, explore, and comment upon the latest innovations and trends. One might ask whether it is even possible for an artist like Madonna to record 'Don't Tell Me' without commenting on the medium and the 'artificiality' of its potentially nostalgic format.

So how does the manufacturing of stardom impact the discussion of digital technology, and of media specificity versus media convergence? As Frith and

Goodwin point out, the most important commodity produced by the music industry may not be records or songs but stars (Frith and Goodwin 1990, p. 425). We might then say without downplaying Madonna's artistic intentions that the economic and institutional music industry constraints linked with the branding of Madonna the star could have overruled any alternative strategy in her appropriation of genre, or at least of new technology. Even though country music is a new field of 'research' for Madonna, her pastiche-like approach to tradition in 'Don't Tell Me' resonates with earlier Madonna productions, which also play with stereotypical identities and forms. Moreover, the song displays her signature polished, 'artificial' sound.

Then there is the different role of technology in various genres. Although new media have powerfully impacted the development of the cultural industries in general, they hold different positions and have different uses in, for example, country and pop music, respectively. As Keith Negus has pointed out, a particular genre in fact represents an entirely novel form of creation, circulation, and consumption of popular music: 'Genre categories inform the organisation of music companies, the creative practices of musicians and the perceptions of audiences' (Negus 1999, p. 3). Particular 'genre cultures' develop different ways of producing and distributing music, including the appropriation and use of new technology. This means that even if digital technology is central to the production and distribution of both country *and* contemporary pop music, it brings with it different expectations regarding how it will be used and, especially, whether it will be allowed to leave its mark on the sound. In a genre culture like country, which concerns itself less with contemporariness or artificiality and more with authenticity and tradition, the ideal is media transparency. The actual mediating medium, digital music technology, ought to disappear in favour of the audibility of a vintage medium, such as steel guitar or analogue recording devices.

In other words, when we consider the role of mediating technologies in the age of digital reproduction, other factors such as the manufacturing of stars or the 'genre culture' of the musical tradition may in fact override the technological 'imperative' – the tendency to use the latest technological innovations in the most contemporary way (a tendency that is often assumed by the discourse on technological mediation of music within technically oriented disciplines).<sup>11</sup> Nor can we overlook economic interests: even though the culture industry ultimately depends on innovation, the development of new products – artists or musical styles – is expensive and risky. Thus, as David Hesmondhalgh points out, the creative autonomy of artists is often ultimately limited, and there is a danger that any change in artistic direction will receive an unsympathetic response from the record company (Hesmondhalgh 2002, p. 169).

Last but not least, listeners' expectations of Madonna clearly limit her choice of artistic 'course'.<sup>12</sup> Pop music is a dialogue between artists and their audiences, or, in the words of Negus, 'Musical sounds and meanings are not only dependent upon the way an industry is producing culture, but are also shaped by the way in which culture is producing an industry' (Negus 1999, p. 13). Madonna cannot be nostalgic, then, nor can she leave her medium unremarked. Her music is *expected* to include connotations of contemporariness, such as the use of medium silence. Moreover, it is in the interest of the culture industry to maintain these different cultural spheres and channels of circulation. The act of mediation cannot be separated from such forces.

## Distribution media and listening practices

So far we have discussed expectations related to production and institutional practices, but there are also issues surrounding the sonic constraints of distribution media, as well as associated listening practices. The fact that music is *distributed* digitally, and that this form of distribution is shared with other digitised types of information – pictures, text, and so on – does not mean that music is no longer different from graphics, or that radio listening is no longer different from using an iPod. Convergence as applied to new media is often (mis)used as a ‘totalising term’, covering everything from ‘black boxes’ to markets, networks, and rhetoric (see Fagerjord and Storsul 2007). Hesmondhalgh, discussing Manuel Castell’s analysis of the role of media in the information age, criticises what he calls Castell’s ‘homogenisation-through-convergence’ hypothesis. Hesmondhalgh finds, for example, that the development within the cultural industries after World War II – during what he calls ‘the complex professional era’ – is characterised by ‘a pattern whereby new technologies tend to supplement existing ones, rather than replacing or merging them, leading to an accretion of separate devices’ (Hesmondhalgh 2002, p. 236). According to Hesmondhalgh, this pattern has not changed significantly during the last twenty years.

The fact that old and new technology can exist in parallel means that digital audio technology as a medium is always going to be understood in relation to earlier audio-related technologies and practices. This fact impacts how the juxtaposition of different mediating technologies may be used to comment upon the passing of time via the historicity of a particular medium’s signature. When Auner addresses Pink Floyd’s transition between ‘Have a Cigar’ and ‘Wish You Were Here’ (*Wish You Were Here*, 1975), he writes that it

sounds as if it is sucked out of the speakers into a lo-fidelity AM radio broadcast. The radio is evoked first through the cramped, tinny sound quality and static, and then confirmed as the radio is retuned through several channels – in what is itself a striking trajectory through newscasts, discussions, and excerpts of symphonic music – before settling down on a station broadcasting a mellow guitar accompaniment. As the radio continues to play, we become directly aware of the person in the room who has been tuning the radio, as he clears his throat, sniffs, and then starts to play along on an acoustic guitar. (Auner 2000, p. 8)

Importantly, this effect, writes Auner, would not in itself have been recognisable to someone listening to it on a portable AM transistor radio. Rather, the effect depends on FM stereo or home stereo listening, which boomed in the mid-1970s, when this record came out.

Similarly, the effect of the digital dropouts in ‘Don’t Tell Me’ depends on a certain kind of distribution medium and playback in order to achieve the status of, first, medium silence, then textual silence. Two typical ways of hearing ‘Don’t Tell Me’ would be on the radio or on a CD player connected to home stereo equipment. In both cases, it is likely, at least the first time, that the listener would experience the dropouts as a sign of a bad CD player, before realising that this was but another of Madonna’s clever tricks. In the case of radio listeners, there could be no way of knowing for sure, listening to the musical text alone, whether the song was being played on a CD player, DAT, or hard drive, for that matter. Yet the effect of this well-known digital glitch associated with CDs is likely to make listeners assume a mechanical failure.<sup>13</sup> In both cases the initial silence would be heard as medium silence – that is, a problem with the CD player – not as textual silence or an aesthetic

effect. If, however, the listener saw the video on MTV or bought the LP, she would, for different reasons, probably immediately have heard this as textual silence. In the video, the continuous movement of the image would have indicated that there was nothing wrong with the TV signal. In the first seconds of the music video, Madonna is walking along a highway toward the camera in a tracking shot. Her movements freeze simultaneously with the silent dropouts. However, the camera movement continues seamlessly, revealing that Madonna is performing in front of a blue screen. After the frozen silent pauses, the camera continues tracking out with Madonna 'in sync' with the background until it reveals the frames of the blue screen and the artificial setup for the video, with Madonna walking on a treadmill. In any case, the juxtaposition of the continuous movement in the background and Madonna's frozen movements in the foreground immediately reveals that these are not technical errors but part of an intended aesthetic effect.<sup>14</sup>

In the case of the LP, Madonna's dropout effect simply does not make sense within the context of the technological constraints and possibilities that record players afford (see note 6). (Flaws more typical for LPs as technologies would be bursts of 'white noise' or a Portishead-like scratchiness.)

Listening conditions and the choice of playback medium therefore influence the way certain artistic effects are heard. This also points to the inherent problem of judging material traces of technology and mediation from listening alone. As Umberto Eco wrote three decades ago, it is a fundamental characteristic of *any* sign that it can be used to tell a lie (Eco 1976, pp. 58–9). Any act of mediation thus introduces something 'between' the original sound (if such a thing exists) and the hearing of this sound. The hiss of history sometimes heard on CDs may thus be the sign of a digitised version of a vintage recording as well as a post-1980s pop production parasitically sucking the authenticity, grandeur, and historicity from the scratches of an old record.

Moreover, when it comes to radio listening, whether or not 'Don't Tell Me' is produced and transmitted by analogue or digital means is in some ways subordinate to the radio itself as a medium for the shaping of the song's sound. For example, institutional and economic factors, such as the signing of stars to fit radio play (as indicated above) as well as the generic constraints of radio formatting (see Maasø 2002b), have played pivotal roles in the shaping of pop music's sound in the past, and they will continue to do so in the digital future. Also relevant to claims of convergence is the fact that listening practices will most likely *not* converge but rather diverge as people are provided with even more possibilities for mobile and private listening on an increasing number of listening devices. Thus, the fact that media and mediation are increasingly digital does not imply convergence on all levels and in all senses, but rather a complex mix of processes of divergence and convergence.

## Progress and nostalgia

As pointed out above, *new* digital technological means rely on established cultural modes. Also, the latest work of Madonna and her producers follows from what has come before. In general, Madonna's 'Don't Tell Me' fits well into the 'genre culture' of contemporary pop music and its expectations concerning the creation, circulation and consumption of this tradition. By the same token, the appropriation of new technology happens first and foremost within the framework of existing values and practices (see also Danielsen 2006a), not in a cultural vacuum.



This framework includes a persistent faith in the transparency of contemporary media that can be linked to narratives of progress and innovation underlying the story of new technology within modernity.<sup>15</sup> This faith is not limited to the present, of course. We might therefore ask why digital audio is necessarily a particularly strong candidate for transparency 'forever'. At some point in time, will not digital audio come across as dated or obsolete as well, thus succumbing to the dialectic of old and new described by Auner? In this dialectic, old technologies are often left to connote authenticity and pastness, while the new or contemporary medium is allowed to remain transparent until it too becomes 'old' and opaque.

A case in point here is Katz's (2004) analysis of Fatboy Slim's 'Praise You'. Katz describes his 'shock' when the vocals 'start to skip' in a prolonged digital 'vocal stutter', creating a 'superhuman' fermata. The effect of the stuttering vocals is very similar to Madonna's digital dropouts in 'Don't Tell Me', since the stutter certainly also demands our attention as a digital device, or, in Fatboy Slim's own words, 'Look, I sampled this' (*ibid.*, p. 147). Particularly interesting in Katz's account is the way the analysis downplays the *other* signs of digital mediation, which are striking right from the very start of the tune. One need not listen with headphones (*ibid.*, p. 147) or be particularly 'attentive' to hear the obvious loop-points in the piano sample every other bar (the first at 0:04), the extra layer of crackling sound that is introduced right before the sampled vocals (0:16), and so on. Perhaps Katz is right that to 'most listeners' this might appear to be 'an unretouched aural snapshot of an actual performance' (*ibid.*, p. 146), at least in 1998 (or at the time he wrote the book, which was published in 2004). Not long after, however, most listeners familiar with this and similar electronic genres would *immediately* recognise this as a digitally constructed (play with a) performance in front of a chattering audience and not the 'real thing'. With Ragnhild Brøvig-Andersen we would call these initial signs of digital editing 'opaque mediation' (Brøvig-Andersen, 2007), a term she uses to describe similar purposefully obvious samples or rough edits in trip-hop. While such edits are not as attention-eliciting as Fatboy Slim's 'vocal stutter' or Madonna's silent dropouts, they nevertheless become obvious over time as digital devices intended to be significant for listeners who have heard similar effects time and time again. The awareness of such effects may, we believe, develop rather quickly in a 'genre culture'.

Perhaps, as Auner suggests, we are 'trained' to overlook the limitations of *current* technology – at any point in time – and to believe its promises of transparency and fidelity (Auner 2000, p. 10). Nor is this training simply a matter of the culture industry pulling a veil over the eyes (or ears) of innocent consumers. It is also a matter of our senses and 'meaning-making' skills becoming gradually aware of the small artefacts of new forms of mediation and production – the hiss of an FM tuner, the hum of analogue stereos, the edit points of samples in a loop, the quantisation noise in lossy data compression, and so on. Thus when home stereo equipment filled our living rooms toward the end of the 1970s, this medium was thought to leave no mark on the 'content' of the music it played. Although we may today notice the analogue noise accompanying Pink Floyd's 'Wish You Were Here', when the album was released we did not hear the medium in this way. The home stereo equipment or FM stereo radio supposed to bring us this magnificent, impressive contemporary production remained transparent.

The claim of the disappearance of materiality in the age of digital reproduction must also be read in light of modern stories of progress and innovation. The (digital) loss of the medium specificity of our analogue past in fact seems to relate to the flip

side of such a narrative, the mourning over a lost, more authentic or 'warm' human past.<sup>16</sup> Portishead addresses this aspect of the modern world's ambivalent relationship with its own modernity in their nostalgic play with the weaknesses of analogue technology. As Madonna reminds us, however, digital technologies *also* have material aspects and may take on a certain weariness. Moreover, the opacity of digital mediation comes forward in its typical modes of musical production and reproduction.

While listeners were certainly aware of the 'phonograph effect' before the era of digitisation, the crackling of vinyl was, in Rothenbuhler and Peters's words, most obviously related to the history of the *record*, or the distribution medium, and less to the *recording*, or the production medium. Madonna's 'Don't Tell Me' reminds us about the possibility of the former also in digital mediation, while Portishead, Squarepusher, Fatboy Slim and others primarily address the possibility of the latter. Common to them all are the different signs of 'opaque mediation' and the use of digital effects *as* digital effects. Such material traces of digital mediation become gradually more opaque as listeners grow accustomed to them, and at the same time they lose some of their aesthetic effect as new, attention-grabbing technological devices. In the future we might thus not only talk about the 'phonograph effect' but also the *digital effect*. Perhaps we might also mourn its passing.

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## Endnotes

1. See, for example, Middleton (1990, p. 4) for a critical discussion of technologico-economic factors delimiting the field of popular music.
2. In fact, 'Don't Tell Me' has been recorded in quite different versions that actually do resemble such traditional performances. The song was originally written by Joe Henry (Madonna's brother-in-law) with the title 'Stop' (and later released on the album *Scar*, 2001). Madonna and producer/songwriter Mirwais (Ahmadzai) then reworked the song as 'Don't Tell Me' on *Music*. More recently, Lizz Wright released her own version of 'Stop' on the album *Dreaming Wide Awake* (2005), crediting Joe Henry as the writer.
3. See a fuller discussion in Jaworski (1993) and Maasø (2002a).
4. Dead air on television may lead to channel switching; on FM radio, dead air allows the signal of a competing channel to seep through and 'steal' the frequency. See Mott (1990) or Maasø (2002a).
5. Other kinds of technical errors can create aesthetic effects that are similar to 'medium silence', such as the use of 'broken film' and faulty projectors in the animated classic *Duck Amuck* (Chuck Jones 1953).
6. As will be discussed later, silent dropouts allow for various interpretations according to the listening conditions and playback medium, and sometimes they are not medium silences at all. A technical error caused by a scratched LP would typically lead to an ellipsis of the temporal flow without any silence. LPs could thus cause a *skipped* beat but not a *missed* beat. In the latter case, silence interrupts an ongoing temporal flow that continues after it, which is not the way a needle tends to behave when meeting a scratch on an LP.
7. See Maasø (2002a, pp. 95–6); Peters (1999, pp. 160–1); Schafer (1994, p. 256).
8. See the last bar of the Figure. These effects, seen in the sonogram, are also obvious when listening to the track.
9. One of Auner's main concerns is 'the question of how instruments and media become marked as "old" or "obsolete" in the first place' (Auner 2000, p. 6). As our examples reveal, the relation of old and new in the field of musical media is rather dynamic; as Auner also points out, the age of a three-hundred-year-old Stradivarius or a thirty-year-old Stratocaster do not mark these instruments as somehow 'obsolete'.
10. In the essay 'I'll never be an angel', Hawkins comments on Madonna's strategy of changeability, pointing out how 'her "scrambled" identity achieves its continuity through a high degree of self-reflexivity' (Hawkins 2002, p. 42).

11. As Andrew Feenberg has pointed out, there is often a certain determinism at work in analyses of the role and impact of technology on modern society. Its premise, which originates in a particular reading of Marx, is that 'social institutions must adapt to the "imperatives" of the technological base' (Feenberg 1999, p. 77).
12. Simon Frith (1988, p. 4) notes that the five-record box set *Bruce Springsteen and the E Street Band Live* had to be marketed in accordance with Bruce Springsteen's highly non-commercial image in order to be successful, ironically, in commercial terms.
13. According to Wikipedia, many listeners returned their CDs, believing it was a disc malfunction (see [http://en.wikipedia.org/wiki/Don%27t\\_Tell\\_Me\\_%28Madonna\\_song%29](http://en.wikipedia.org/wiki/Don%27t_Tell_Me_%28Madonna_song%29), accessed March 27, 2007).
14. Research on audiences, however, shows that people pay relatively little visual attention to music videos – roughly fifty per cent of time spent in front of the screen (see Maasø 2002a for a review of such studies). Still, eye contact with the screen is usually best at the *beginning* of new segments, which is where the digital dropouts stand out in 'Don't Tell Me'.
15. This faith in the transparency of contemporary media relies on an underlying assumption of history moving towards a situation of total media transparency. At the same time we experience former new technology in the rear-view mirror as opaque. A similar view on history has been pointed out by Feenberg in his discussion of technological determinism. He claims that such a problematic position relies on a teleological view of history, according to which technical progress appears to follow a unilinear course, a fixed track, from less to more advanced configurations (Feenberg 1999, p. 77).
16. See, for example, Berman (1982).

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