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The Changing Materiality
Of Music

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Abstract: A great deal of effort has gone into discussing issues of copyright in relation to the new materialities of the digital distribution of popular music; there has, however, been less focus on the changes that these new developments may invoke with respect to the cultural and social usages of music. Against the backdrop of recent discussions of popular music as material culture it is argued that emergent usages must be seen in relation to accumulations of different materialities and that such a perspective highlights issues related to both aesthetic reflexivity and agency.

Keywords: cultural commodity, materiality, reflexivity, music, MP3

INTRODUCTION

The former more obvious and "solid" link between a musical representation and its sustaining materiality is increasingly destabilized. Yet, contrary to what seems to be the drift of much contemporary commentary, music as a cultural form has not become disembodied but rather woven into and out of an additional range of devices and appliances: personal computers ("own" source of streaming), MP3-players as well as various new "hybrid" forms.¹ Many (most) of these new consumption technologies (and/or possibilities) have emerged in the wake of

¹ MP3 stands in "techno-speak ... for Motion Picture Experts Group One, Audio Layer Three - a reference to its origins as an inter-standard compression program when it was invented in 1991." The MP3 program "operates [now] as an open file format allowing users to convert the masses of data that make up audio files into smaller [,compressed], near-CD-quality MP3-files" that can be transferred over the internet. See Conrad Mewton, Music and The Internet Revolution (London: Sanctuary Publishing, 2001), p. 25.
internet-based practices of listening and distribution. While these new technologies in different ways affect meaning-producing aspects related to the actual reproduction of the musical text, some of the more profound changes seem to relate to aspects of storage and thus distribution. Such changes have traditionally played a significant role within recurrent cultural and social trajectories linked to the availability and mobility of popular music. Although these trajectories in various ways also have been related to changes in the style and composition of the music itself, what follows is an attempt to demarcate, “within” these trajectories, some of the social/cultural issues related to reception as these are affected by the growing instability of the relations between content and media.

While arguments about possible developments of the future somehow are part of this discussion, as the title promises, the substance of the following is more modest. History tells us that we should be extremely wary of extrapolating social and cultural developments from technological possibilities. Any (new) medium arises out of a ”network of conventions” in which physical materials are, and become, entwined in various ways (Gracyk 1996, 69). The sedimented norms relating to a century of analogue music media thus necessarily constitute the main backdrop of emerging practices. A preliminary frame for understanding new modes of interaction in relation to the new devices through which many (young) people increasingly interact with popular music may thus arise out of

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2 Russel and David Sanjek single out 4-5 major historical trajectories in relation to the ways in which music has reached its audiences: technological innovations that have admitted the transmission of music through a range of media; an expansion of markets; the refinement of techniques of commercial exploitation; the ongoing “democratization” of the available music; technological evolution leading to a rethinking of the laws of copyright. See Russell and David Sanjek, *American Popular Music Business in the 20th Century* (Oxford: Oxford University Press, 1991), p. vi.

3 The distinction made here between reception and the structural or semiotic characteristics of music is not meant to convey an underlying perspective according to which music ought to be understood as an entity in itself. This will, I hope, become clearer as the discussion progresses.

4 Gracyk here operates with a constructivist notion of artistic media: “A medium arises from a set of human practices with a range of materials” (p. 70).
attempts to relate fundamental and significant parameters of the new to descriptions of and theorizations about some of the social implications of established cultural/material forms of popular music. What follows then is, in other words, an attempt to look at some of the technological differences that may make a difference in relation to established forms of interaction between social actors and cultural forms. The central processes at stake here may be grasped through the concept of an object’s “affordances,” which Tia DeNora (in *music in everyday life*) applies to both musical media and musicological structures. This concept refers to the various usages “afforded” by a specific piece of technology in relation to a field or context of use, which “constitutes and reconstitutes” “affordances” as trajectories of use develop (DeNora 2000, 38-39); this of course also accounts for the material forms already in use in these contexts. As this makes clear, “affordances” can only be talked about in relation to actual practices of interaction. The main task in the following is thus to raise questions, which may constitute vantage points for more empirically grounded studies. Given an emphasis on aspects of availability and mobility, a first productive step in this direction may go through a closer look at the materiality of popular music as a cultural commodity form.

**POPULAR MUSIC AND MATERIAL CULTURE**

While a focus on material aspects to some extent is a flight from the intangibility of music, it is also a perspective that leads to a kernel of issues at the heart of popular music as a cultural form. The development of a mass market for music is inseparable from the opening of a gap between the music as played and directly experienced and music as represented in/on an artifact that could be disseminated through a growing variety of media. A focus on popular music as material culture is thus — on a number of levels — interwoven with questions relating to distribution. The appropriation of music in artifactual form is most often situated at the intersection of everyday practices and the workings of larger commercial and social networks. Cultural commodities thus very

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5 With its mixture of well-grounded theoretical reflections and empirical details (largely) obtained from qualitative interviews, this book has been very helpful in my attempt to reflect upon some of the implications of the new materialities of music.
rarely, and increasingly less so, simply "appear" where they do by coincidence. Important questions thus relate to when, why, how and with what consequences, people are exposed to certain music-bearing artifacts. Steve Jones recently has argued that the "spatial distribution of music wrought by new technologies provides an opportunity for cultural studies to bring distribution to the centre of the study of media" (Jones 2002, 213); yet others have called for perspectives linked to distribution way before the prevalence of new digital technologies. Will Straw for instance argued — in a seminal article from 1991 — that changes within popular music should be seen not as the result of "artistic" (individual) developments nor as due to workings within the music industry, but rather as the outcome of processes of social differentiation as these are linked to — or "articulated within" — particular "terrains": the "interlocking of sites and institutions within which the music is disseminated." (Straw 1991, 384).

While such processes in themselves do not give us access to the affective and thus meaning-producing relations to and experiences of music emerging out of the various devices through which people encounter music they do provide us with a background out of which a series of relevant questions might arise. A closer look at the characteristics of the cultural commodity form and related needs and markets might thus get us closer to understanding some of the issues at stake in relation to the material aspects of music. This is precisely what Straw sets out to do in "Music as commodity and material culture" (Straw 2000).

A leading question for Straw is here whether the "fragility" of the cultural commodity should be explained by the nature of the related "cultural use values" or by a more general argument about the diachronic aspects of such commodity production. By drawing attention to the accumulative aspects of the consumption of popular music (in a materialist sense), this discussion helps highlight some of the articulations, i.e. those between production and the market and the somewhat different but related links between use values and commodities, in relation to which changing materialities will have to be seen.

Regardless of how one wishes to explain the "fragility" that Straw is concerned with, it is important to point out that it does not refer to the commodity as such but rather to its linkages to the market and/or to the related use values in the sense that it is a product of the difficulty of predicting which
commodities will relate to which — or any — needs. The related use values are, however, anything but “fragile” in the sense that the commodity can be “consumed” any number of times without a seemingly diminishing use value. The use value does diminish and/or change, however, and Straw rightly points out, from a more economic perspective, that the “fragility” of the commodity should be seen in relation to the fact that new commodities often soon will point towards — and to some extent define — new but related use values, which (at least temporarily) will diminish the ability of formerly-purchased commodities to satisfy cultural use values, which in the case of popular culture often is — and perhaps increasingly so — extremely contemporary. Most of the time we relate to the present through popular culture and in that sense most cultural use values are — in a modern and changing world — “fragile” in that the related need for “meaning” constantly is given new form, partly through processes of social distinctions. Formerly purchased commodities will not cease to be relevant, but will take on different meanings linked to personal, collective and/or cultural histories.

It is questionable, however, whether this succession of commodities can be explained solely through the “economic logic encouraging the overproduction of titles and a sensibility which expects most of them to fail,” as Straw suggests (Straw 2000, 152). Overproduction is by Straw defined in economic terms as the production of more titles than can be expected to reach a satisfying profit-generating level. Although the album as a commodity form most often is treated as a “title,” it could also be argued that this particular form of bundling (of more or less discrete entities) is part of a profit-generating strategy of “overproduction” in the sense that it “forces” people to buy more music than the tracks they really want. It is precisely this that makes it possible for the costumer to get more music per dollar. Since the strategy of “albuming” both is a way of reducing risk (by reducing the number of releases) and promotion costs and a way of utilizing the existing production capacity, this can hardly be called overproduction in an economic sense (see Grønnestad 1999). And the same can in fact be argued to account for the overproduction of titles, which within a larger commercial frame hardly can be called overproduction either. As Straw points out, it is expected within this logic, that this (over-)production is necessary in order to get to the more successful productions (partly because
these less-successful or failed productions generate invaluable knowledge that will lead to the big successes). “Overproduction” can thus only be designated as such after a certain period of time during which a certain level of profit was expected.

Turning towards popular music as material culture, overproduction is (by Straw) linked to its material traces, i.e. the accumulation of commodities as waste. But what might seem like waste is in fact not overproduction but simply unsold and accumulated reproductions. The point is that what there is too much of is not production (or R&D, if we follow Lash & Urry) but unsold artifacts. We cannot tell, however (even by a counting on an aggregate level), whether a particular CD or record sitting on a shelf or lying in a basement is a trace of overproduction (a lot of unsold copies might very well exist of extremely successful albums). Thus, if we shift the perspective from an economic to a (material) cultural one, the notion of overproduction, and thus waste, is even more difficult to sustain. One could assert that any music that finds listeners (regardless of numbers) is not waste. In addition, people not using the music in question have indeed often affixed the designation of overproduction. Very commercially successful music has in fact often been deemed a wasteful use of studios and distribution channels, which otherwise could have been used for something more valuable.

Straw is certainly right in pointing out that the accumulation of commodities – sold or not sold – is linked to a “commodity form whose life is directed towards exhaustion and commercial decay” (Straw 2000, 152 & 157). Yet it seems that an analysis of this “fragility” based solely on the diachronic workings of the market for musical texts must, as pointed out above, be connected to the notion of cultural use values. Put differently, production can

6 In terms of terminology it should be inserted here that Scott Lash and John Urry have argued that the making of records or CDs should be termed production rather than reproduction, and the actual making of the content should then be called “design, product development or R&D.” The main reason for this distinction seems to be an attempt to avoid “Benjaminian” connotations of an “‘auratic’ work of art existing prior to production and distribution. Yet the term reproduction does not necessarily invoke such meanings and production does in fact – despite its connotations of assembly lines – describe rather well the many processes resulting in the final “production.” (Lash & Urry 1994 , p. 123).
only have the form and effect that Straw argues because cultural consumption relates to specific time-bound and partly ephemeral forms given to underlying (perhaps more stable) cultural use values. When Straw argues that the "fragility of cultural commodities stems not from the flimsiness of their use value but from a particular relationship to exhaustion and repeatability" he is thus both right and wrong. The "constant eclipsing of texts and meanings" arising out of this particular "relationship" is linked to the nature of the linkages between the logic of cultural commodity production and use values.

What Straw rightly calls our attention to are (some of) the social (economic) and cultural aspects linked to the succession, and thus accumulation, of artefacts both on the shelves of consumers and in their basements and other more or less official places where such commodities accumulate. It is precisely in relation to such social processes that transformations might occur as the material forms through which popular music is disseminated/distributed take on different shapes. New conditions in relation to the availability and mobility of popular music necessarily entail new processes of succession and "modes" of accumulating musical artefacts, and it is here we must start in order to get to the various usage-related implications of the new materialities.

**NEW MATERIALITIES**

This focus on the accumulation of musical texts might seem backward, but is founded on both a more general argument and a more specific observation relating to present usages of new storage possibilities. With regard to the former, it can be argued that much (most?) music is used, and thus gains meaning in relation to both succession and a larger body of (competing) artefacts – what one hears partly becomes significant because it has been picked among a variety of choices (which might play into the actual deciphering of the musical text as well). The second, and more specific, reason is that although new, digital distribution channels have opened up through the internet, most usages of new storage media will take place in relation to, and on the background of, existing forms of storage, accumulations of primarily audio CDs (and to some extent records). What we see then is to a large extent content existing on "conventional" storage media shifting unto or into different
types of devices, and the social and cultural implications that I wish to reflect upon here thus concern experience and usage in relation to aspects of access and choice as made possible by different materialities of music storage, some more "permanent" than others.

In the most profound and formal terms, the changing materiality of popular music is founded on the conversion of the musical representation from analogue “engravings” to the digital form of the binary alphabet. While this happened already sometime in the 70s with a number of changes related to the production of music, the changes with respect to consumption technologies started with the audio CD in the early 80s, and became more pertinent up through the 90s with the ability, via computer technology, to separate, and thus reproduce, the musical text, in digital form, from the industrial artefact, the CD, without diminishing the quality (contrary to the possibilities of reproduction via tape). “[D]igital formats,” says Paul Goldstein, “offer three powerful advantages for creativity and economy: fidelity, compression, and malleability” (quoted in Vaidhyanathan 2001, 151). It is these ”qualities,” if the notion of malleability implies the ability to sever content and medium, that lie behind the (re)location of the musical text on/in a range of new artefacts, devices and contexts: the personal computer, the MP3-player, and the minidisk (although this is a slightly different technology). The primary focus in the following is thus on usages of popular music in relation to the computer and the related MP3-player.

With regard to these developments, one might make a distinction between those that have grown out of “stand-alone” applications and devices and those related to the internet and/or the connectivity of individual computers. The minidisk as well as the possibility of making fixed and permanent reproductions on rewritable CDs belong to the former category, and are — at least to some extent — more or less straightforward extensions of existing possibilities and practices (i.e. home recording). Here the music is simply relocated from one ”external” storage media to another. The more profound changes with regard to music’s new materialities are, however, linked to the internet and notions of availability, connectivity and mobility. And it is mainly in relation to these developments that discussions of a de- or immaterialisation have arisen. But while the severance of the musical text from the artifacts sanctioned by the
music industry may seem a dematerialization this is not entirely so (contrary to what many seem to argue). Although the actual digital code contained on a (hard)disc by way of magnetic currents is not engraved into the surface as grooves on a record it is just as material as for instance the analogue signal contained on a tape. One could of course argue that the electrical current in which the code is transported through (internet) cables from one storage media to another makes the code immaterial, yet so were television signals without us necessarily speaking of TV as immaterial or virtual.\(^7\)

A comparison between TV and the internet, as a means of distributing music, is, however, only partly valid. In one sense the internet is like earlier "dematerialized distribution" taking place through the broadcast media (as Grønnestad points out). Yet, although the streaming of music over the net is widespread, and although it is also possible (although with some difficulty) to "record" the music being streamed over the internet (as it was possible to tape your favourite hits from the radio), this is arguably not where the important changes in the material culture of popular music is taking place. Whereas (partly) "immater" broadcast practices distribute a realisation of the musical representation, a reproduction of the music as it unfolds in time, the alternative distribution practices challenging the industry distribute the representation itself. What is reproduced here is thus not the music but its representation — distribution and reproduction thus here (almost) coalesce. This "traffic" thus leaves a lasting material trace, or "tangible evidence" to use a phrase used by Joshua Meyrowitz in a related (but different) discussion, and as such cannot be compared to broadcasting or streaming (Meyrowitz 1985, 83). Although an increased mobility in different ways has been an integral part of the development of reproduction and storage media throughout the history of recording, the new digital possibilities are thus related to an extension (or even radicalization) of both the ease and speed with which musical text can be edited and/or relocated/reproduced.

These developments hang together with changing/changeable relations between the content and the (reproduction) medium; and/or, in other words, a transformation of the relations between the "levels" of storage and

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\(^7\) This parallel was pointed out to me by my colleague Rune Dalgaard.
reproduction. Steve Jones writes in relation to the development of recording technology that as "each method of recording developed, it required another level of interpretation before it could be heard of seen" (Jones 1992, 48). While it might have been possible to (partly) decipher early records by positioning your nail in the groove, the digital code is not even visible to the eye and requires a range of programmed algorithms to be converted back into sound waves. And while "interpretation" might not seem the most appropriate concept to describe that process of translation it is worth pointing out that this process no longer — at least to the same extent — is fixed or built into reproduction media but rather something that can (also) be changed and (re)programmed.

This means, in addition to possible changes related to the auditive aspects, that the visible aspects of the musical texts (its visual representations including those linked to the music’s unfolding in time) increasingly become a matter of choice (and technical abilities). Yet again, the visual aspects do not disappear but become transformed. The musical representation is thus not being dematerialised, although in a sense more fragile, but rather converging with, if that is the right term, a range of reproduction media. The musical text (as a discrete entity) is no longer necessarily tied to an “external” artefact or storage media, but “merely” a subsection of a larger body of information stored on an internal (and rewritable) storage medium within a computer or MP3-player. Yet, although this information is as material as traces on a tape, it might not be experienced as such (something to which I shall return below).

Regardless of who "wins" the current format-struggle, i.e. that between the established industry and the alternative, user-generated format MP3, which to a large extent feeds off the established format(s), each individual user will arguably increasingly accumulate musical artefacts under somewhat changed circumstances, which entails a choice of materialities and content. One of the most significant aspects here is that the cultural commodity’s adjacent forms, the copy and/or the gift, have obtained renewed significance. Accumulation might thus to a greater extent than earlier be an amalgamation of different materialities and cultural forms. In addition, with regard to the various applications allowing gift-related exchanges of music over the internet, it seems that accumulation partly becomes a collective enterprise through which each
“member” makes more widely available part of his or hers own accumulation(s). The conglomerate of these thus becomes a globally distributed but continuously shifting musical archive or “database” in relation to which the title of Robert Burnett’s 1996-book, *The Global Jukebox* (about the international music industry), gains a wholly different meaning (Burnett 1996). It is the combination of the ability to compress and “manage” the musical code, making possible the “global jukebox,” and new miniature storage and reproduction devices, mainly MP3-players in various shapes and combinations, that might contain markers of interesting changes in our relations to music. It must be emphasized, however, that the foundation of these new developments, both the making of either one-to-one or compressed copies and the sharing over the internet, to a high degree still is the content of the industrially-sanctioned artefact, the CD.

The actual tracks of a CD are, however, no longer bound by the artefact sanctioned by the industry and can therefore be accumulated, (re)arranged and listened to according to different criteria and mechanisms. From this point of view, the decisive question is what one perceives the basic unit of the musical texts to be, the single track or the album, i.e. whether the album is to be understood as a collection of “immaterial, economically distinct entities literally bound together by plastic” or a communicative (artistic) entity, a unified work, bound together by content, theme or style (Grønnestad 1999, 12). The answer to this question will obviously differ according to both the individual album and/or the perspective applied. If increasing numbers of consumers (not part of the LP-generation) increasingly view the album not as a form defined with reference to aesthetic concerns but rather as a form of “coerced purchase” through which additional content must be bought in order to get the desired parts (which there are indications of), the new digital possibilities might indeed put the album under severe strain. And since the album (also) is part of a larger corporate strategy, copy protection is just as much about preventing the split-up of an economically-driven bundling as it is about the prevention of copying the whole entity. If consumers should be

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8 (My translation); an additional feature of records in relation to this was the two sides: (most) singles had an A- and a B-side, and some LPs were “split” according to different criteria (“Tatoo You” by The Rolling Stones was, for instance, split between a “rock” side and a
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convinced that the album remains a good “bargain” between price and volume (as discussed above) more emphasis should perhaps be given to coherence and a uniform quality. This might be happening — perhaps as part of the current rock revival. A spate of compilation albums also point in the direction of the viability of bundling, although from a rather different perspective. Regardless, however, if the practice of bundling continues, as it most likely will, it will for many consumers increasingly be a matter of choice (economic, technological and not least aesthetic) among other “modes” of acquiring music. As a consequence, aspects of aesthetic reflexivity become more central, something which ultimately may reconfigure established cultural forms.

If music increasingly come to be distributed digitally (both legally and through piracy) — perhaps with a dwindling importance of the idea of an album — notions of overproduction and waste (as the material residues of not purchased commodities) would have to be linked to a build-up of stored information, a different and less directly visible materiality. More importantly, however, this might make the notion of overproduction stand out more clearly as a consumption- and not production-related reaction to a market, which is increasingly difficult to navigate let alone conceive in its entirety. With the thresholds to market entry being lowered (both with respect to production and distribution), entirely new business models might develop, however, making present consumer-strategies of relating to changing markets obsolete, and thus "re-write" notions of overproduction. Such developments cannot, however, be ascertained merely by theoretical means and will be (partly) determined by the cultural and social practices, which develop around these new materialities.

CULTURAL FORMS, ACCESS AND USAGE

It is important to emphasize, as already noted, that for most users the new materialities are added on to accumulations of existing musical artefacts — new media and technologies do very rarely simply replace older ones. For quite some time, more and more users will thus face a choice of reproduction and storage media, a media matrix, with different possibilities and cultural connotations. What is likely to happen is that new media will allow new practices, which are

“ballad” side).
related to the functionalities of and practices developed in relation to existing media, which in the process somehow will be recast. The veneration, and return, of the LP over the last few years is thus partly a renewed and “exaggerated” significance of a form with both a specific and a more general history (in one form or the other, the record did after all last around one hundred years). In light of recent processes linked to digitalization, the LP, also (or especially) by listeners, who have not grown up with this format, gains an “auracric” originality (if we can use such a term), which it did not possess (or at least very rarely) when it was the primary commercial medium (an example of how affordances are constituted and reconstituted).

One issue that this points towards is the extent to which different materialities may enter into hierarchies, or core and periphery, of genres and artist. In a related but earlier discussion of the characteristics of electronic media, Joshua Meyrowitz argued that the “economy” (in a wide sense of that term) of singling out individual artefacts (e.g. books) establishes more discriminatory, and thus identity-forming, structures of choice than the mechanisms underlying the appropriation of the flow of TV, the programmes of which are “not experienced as physical objects with independent physical dimensions” (Meyrowitz 1985, 81). Although MP3-files still have to be singled out, or appropriated in “bundles,” we might make a parallel argument in the sense that the “economy” of this process points at “objects” with a less direct relation to the formation of identity, an argument which may be reinforced by the changing visual aspects. One might thus see a distinction through which the most venerated artists and genres reside on the most permanent, tangible and visible storage media, which will have to be appropriated individually and which in addition are sanctioned by the artist and/or industry. This would not only resonate well with wider cultural discourses venerating the near and tangible over the distant and “virtual” but also with more specific authenticity-centred discourses circulating in and around cultures of popular music. Such “complete” commodities might thus be perceived as enclosed entities of communication (including the visual aspects) and would as such not only signal, or stand in for, a more valuable and lasting relation to the artist but somehow also, at least for some, constitute an ethical manifestation of that particular relation. A related aspect of this is the increased tendency to “enhance” the value of certain titles
by giving them a more "touch-inviting" wrapping, i.e. a designed cardboard booklet (often with extended, more narrative, liner notes), and/or issuing them in limited numbers. Here, the actual artefact, and its material trajectory, becomes part of the communicative process.

Practices of downloading music should perhaps, as a continuation of this, not be seen as a general protest against existing forms of distribution and bundling, but rather as a sign of an unwillingness to acquire all music this way. This is linked to the often-repeated argument that downloaded music is "additional" music in the sense that it would not have been acquired had it not been for this possibility. Since this practice leaves no, or at least no directly visible, material trace, it could be argued, in an argument similar to that which Meyrowitz makes with regard to television, that this would lead to a greater willingness to appropriate and engage with music (at least temporarily) that is less central to formations of identity (Meyrowitz 1985, 81-85). Alternatively, one may also, in different and more fan-related settings, find an increased emphasis on music available in non-commodity forms, which are seen as containing a more direct, and non-industrially coerced, communication with the artist. While such distinctions between musical artefacts to some extent long have been part of the consumption of popular music, the ease of access and availability of different music make such choices of format and relations to the music and artist more pertinent. And although factors distinguishing the different materialitites may differ significantly for each specific user and/or cultures of popular music (as my two examples suggest), the important point here is that a wider range of distinctions undoubtedly will have to be made.

Another aspect of this range of materialitities concerns the level of "directness" in relation to experiences of music. Would it be fair to assume, as some do, that experiences and/or relations to music become more "direct" when the various paratexts (e.g. cover and liner notes) formerly contextualizing the music increasingly are severed from the actual (digital) musical text. To the extent that the music's major paratexts really are unknown to the listener, the relation might be argued to be more direct — all depending on how one perceives the nature of the semantic relations between visual and musical texts. Such an argument does, however, point towards an almost objectivist notion of musical meaning according to which all extra-musical and meaning-giving
contexts either add to or detract from a core of already-given meaning. A more productive perspective, for this kind of study, is however, a view in which musical meaning always is the product of contextualised interactions. What often seems the case is that the music listened to in MP3-format is music already known somehow, and that a different, but highly related, set of visual aspects are attached – both directly and indirectly. With regard to the former, it is common practice to either download or copy existing covers for copied CDs. With regard to the more indirect "attachments," one should not forget, as already noted, that since the "base" of most digitalized practices still is the audio CD, the promotion which is both auditory and visual continues as "normal" and as such contextualise also MP3-based usages. Finally, it should be pointed out that a whole range of contextualisations are available on the internet: sites with more or less official CD-covers, official artist sites, homepages of record companies, music journals, music guides, fan sites etc. Thus, as it is wrong to assert a wider de- or immaterialisation, it needs stressing that popular music, at least potentially, is re- rather than decontextualized.

The increased availability of music is thus followed by a more general, but related, availability of music-related texts. This indeed affects the conditions – demands and possibilities – of what has been termed "aesthetic reflexivity" (as well as related notions of agency). In relation to existing parameters of choice (traditional marketing as linked to the retail sector) the new materialities to some extent (re-)locate a heightened "burden" of choice on the individual. While this at one level make processes of aesthetically-related "self-regulation" less contingent on the market it also puts additional strain on the ability to "mobilize cultural forms" with the "appropriate" both internal and external "abilities." This might, for different users, point in the direction of both more individualized "research" and usages and a heightened dependency on both local and more globally distributed networks of aesthetic knowledge. One aspect of this, linked to the changed conditions of accumulation, might be a (slight) shift of the focus of aesthetical reflexivity from the actual usage of chosen forms to the processes of acquisition and choice. "One could claim," says Kostas Kasaras, "that the notion of originality

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9 For much more detailed discussions of this aspect, see DeNora 2001.
has been replaced by the need for affluence with digital music ” (Kasaras 2002, 2). The ability, which DeNora finds in her study, to “know what you want” (in terms of actual music in relation to specific social “conditions”) might thus — at least for some — be replaced by “knowing how to get it” (a technologically-related ability with a number of gender-related implications) (DeNora 2001). The practice of acquiring music will no doubt, at least for some time, come to play a more significant part within certain cultures of popular music. Rising levels of availability will perhaps turn more of us into something resembling collectors (something to which I will return).

With regard to actual listening practices, the new materialities might, however, also have implications for the ability of “knowing what you want” out of your accumulated musical artefacts. DeNora describes in her study how most of her respondents had a keen sense of what music to choose for what circumstances (in relation to what the music was supposed to “do” for the listeners). As with the more general question of availability, the extended capability and mobility of for instance MP3-players both increase and make more pertinent questions of aesthetic reflexivity. Music’s ability to be “part of the reflexive and ongoing process of structuring social and social psychological existence” will thus increasingly have to thought in relation to new possibilities (DeNora 2001, 49): what music do I convert into a more mobile format, and how and where is this music used/”needed”? Seen in relation to a general development towards mobility and miniaturization within the distribution of popular music, the latest development expands the ease with which a range of musical choices can be integrated into daily life. In addition, and regardless of whether the album was mainly an economic strategy, the new materialities make possible a more “atomised” listening, which makes it easier to fit musical accompaniment into available, and even smaller, time-slots.

Both the original walk-man (with a cassette) and the discman “contained” separate storage media which had to be replaced and stored somewhere else when wishing to listening to something else, which not only might have restrained a shift of music, but also limited the number of alternatives since these would have to be carried around in artefactual form. This is not so with the MP3-player, which allows a quicker and easier change of music, which means that the musical choice — often among a wide range — so to speak has to
be made all over each time the device is turned on. The organization of the album is just one way of organizing songs in MP3-format. Another possibility is to establish playlists, which not only can be put together in a variety of ways (e.g. genre, artist, periodization, “mode” of use etc.) but also continuously re-edited. In addition, as was possible to some extent with 3-CD players, as well as boxes with CDs connected to auto-stereos, the new technology makes a “radical” re-editing possible, namely “randomised” listening within the whole collection or within a specific playlist. While this can be likened to a juke-box format, it might — with increasing numbers to randomly choose from — seem to point in the direction of radio. There is, however, a difference between listening to own and “outside” (edited) sources, a distinction, which can be characterised by different “socialities” of use. Meyrowitz writes that “the cassette player cuts you off from the outside world, while the radio ties you into it” (Meyrowitz 1985, 90). Although such a distinction in some ways is problematic — listening to one’s own music sources in a variety of ways also “ties you into” the surrounding world — it can be claimed that various radio-like services on the internet increasingly will blur distinctions between own and edited listening practices.

If using own source digital music, the extent to which one chooses all over each time, or/and uses playlists or randomised listening, obviously depends on how “strong” the album as a cultural form is for the actual user, and how the accumulation of tracks has been put together to start with. In relation to the possible dis- or reintermediatization of the trajectories from producers to consumers, one might assume that different types of intermediaries increasingly will intervene in these reflexive processes (for instance by supplying pre-selected playlists), which somehow may blur the own/outside source distinction even more than it is already. A variety of new “services” may thus develop to alleviate the increasing “demands” on reflexivity. Apart from those mentioned already (i.e. various internet-based services) it is, however, unclear what these intermediary services will be. As it stands right now, a greater part of the “task” of defining the “artistic medium,” here seen (in the words of Theodore Gracyk) as a “mode of organizing perception and of unpacking meanings,” is thus (at least temporarily) handed over to the listeners (Gracyk 1996, 69). In a number of more or less limited ways, it is thus no longer the embodiment which
frames perception, but perception which frames embodiment. The overall point is that the new possibilities also at the level of usage increase demands on aesthetic reflexivity, which perhaps also means extended possibilities for music as (in the words of DeNora) "a material that actors use to elaborate, fill out and fill in, to themselves and to others, modes of aesthetic agency" (DeNora 2001, 74).

**IMPLICATIONS OF INTERSUBJECTIVITY**

As discussed above, most usages of own-source popular music necessarily happens against the background of some sort of accumulation (which implicates matters of choice). Various aspects of the possible "affordances" of the new materialities relate — through the aspects of availability, mobility and the cultural commodity form — to changing conditions of accumulation and therefore use of popular music. One way of approaching some of these might proceed through a closer look at aspects related to practices of collecting. The new materialities might, as hinted at above in relation to notions of "abundance," point toward a more central position of such aspects; and, in any case, practices of collecting may help put into perspective more "normal" usages.

There is obviously a difference between the ardent practice of collecting and an accumulation which "merely [is, in Straw’s words] the physical residues of processes of commodity turnover and stylistic change" (Straw 1997, 5). And such differences will somehow relate to different usages of the collected/accumulated music. One should be careful, however, to over-emphasise dimensions of reflexivity that may point squarely at ingrained distinctions between those who take their music seriously and those who do not. This distinction has often been related to rock and pop, as well as to the "record collector’s obscurantist interest in the marginal," which, as Straw points out via Eric Weisbard, "may seem to be fully continuous with rock culture’s myths of oppositionality" (Straw 1997, 5).¹⁰ Not only has the rock-pop distinction often been gendered, so has the very practice of collecting. It is

¹⁰ For a discussion of the rock-pop distinction in relation to "seriousness", see Keightley 2002.
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precisely at this distinction between the simple and “accidental” accumulation of artefacts and the practice of collecting that such activities become part of “the broader discourse about popular music,” within which aspects of gender often have been centrally located (Straw 1997, 5). Through aspects of knowledge, systematicity, and “expertise,” the often male-dominated practice of collecting plays into a number of gender-related issues linked to usages of popular music.

Yet it is, if we follow Straw, also precisely through aspect linked to “systematicity” that the practice of collecting stands in an ambiguous relation to the notion of masculinity, which often has been caught between an emphasis on the instinctual, a-social “knowledge” or skills and a more institutionally-bound social knowledge, which threatens to undermine the male as an independent location of power. In relation to popular music, and increasingly so in relation to a wider sphere of popular culture, this dilemma has often been negotiated through the figure of “the hip,” a “lived” and experienced (yet accumulated) knowledge of the proper canon(s) as well as a cultivated feeling for the ways and contexts in which, as well as to whom, this knowledge is and can be displayed. Such decisions, which the hip (apparently) make almost “instinctually,” are an integral part and explanations of practices of collecting, which in (very) overall terms, according to Straw, can be seen to exist somewhere in between “public displays”/“cultural monuments” and “private havens” or refuges. In relation to aspects of masculinity, these features (which can be mixed in various degrees) can be related to respectively an active, mature masculinity linked to aspects of control and a more re-active and compensatory (“nerdish”) shielding of the social (and sexual) world. The characteristics and affordances of the new materialities discussed above might play into such processes in different ways.

Aspects of collecting linked to “festishistic obsession[s]” might indeed both be enhanced and transformed by the new technology. While increased possibilities of availability might induce to hoarding (as discussed above), the actual object(s) of festishistic desire might change. Part of the attraction in relation to collecting is linked to the scarcity of physical objects which, for instance by being issued for a specific (foreign) market, are endowed with a value-enhancing aura (the artefact was somewhere else, but now its here
“rescued” in my collection). It should be inserted here that attempts to “enhance” the materiality of the CD (touched upon earlier) is linked to pleasures of ownership not unlike that of collecting. If, however, content increasingly is severed from specific artefacts, fetishistic desires might be redirected at the music-holding technology, i.e. the newest devices, i.e. high-capacity hard-drives, and/or more intangible aspects of abundance. This means, if music ownership increasingly is distinguished by its materiality, that a collection no longer is a “framed” entity of records (and tapes) but also a more unstable and less clearly objectivised amount of information — as always measured by its “completeness” and by either number of songs or mega bytes. The element of “size,” always an important social marker in connection with collections/accumulations, is here gaining new implications. This also means that aspects of knowledge, also as a social marker, in relation to collection/accumulating somehow is transformed — or supplemented: the value of knowing about and the ability to find a rare edition in a second hand store might thus be supplemented by the ability to find your ways around an expanding network of internet-based knowledge and availability, which both may yield lots of well-known music and the obscure. In relation to the dynamics of the market, an additional element is here introduced in the sense that high value often is attributed to the ability to locate MP3-copies of new releases even prior to their official release. The social aspects of the collection as a refuge may thus, under these changed conditions, become more and more related to the internet and virtual communities in which the practice of collecting itself is the main topic on the social agenda.

Aspects of availability and mobility relate, however, not only to the actual practices of collecting. Via the changes described above, music collections might be “displayed” and used within a widening range of contexts, and thus relate to processes characterised by a wider register of social psychology (not least in relation to gender) than the “mono-social” contexts of collecting.11 The first thing worth noticing in relation to a collection’s “monumental” capacities

11 This is based on Straw 1997, pp. 3-10. The distinction made here is not meant to imply that more power-related usages of the collection cannot be found within “homonocial” environments.
is the possible transformation of the visual aspects discussed above. In contrast to the conventional record collection, a collection based on different materialities will have to be brought to signify through various means. To the extent that more and more music is distributed in less-fixed artefactual forms, the identity-related aspects of showing off knowledge will have to be (continuously) rethought. This brings another dimension to the increasing demands on aesthetic reflexivity (as discussed above). One “solution”— as always with respect to identity-building aspects that are not directly visible — is to turn the relevant “qualities” into discourse. Another is to bring the collection alive by playing various tracks that may help to demonstrate its up-to-dateness, width and depth (all depending on social situation). Important changes may in fact relate to the collection-in-use.

As the storage capacity of MP3-players grows, it becomes possible to make larger and larger portions of one’s collection mobile. The aspect of “wearing knowledges,” which Straw discusses in relation to the masculinity of collecting (and which I touched upon above) thus gains an additional meaning. The knowledge which such a collection “represents” can be, and has often been, used as a “foundation” of aesthetic agency in various settings, and the mobile collection might thus help define “the aesthetic textures of [more and more] social occasions” (DeNora 2001, 111). This will not only be a matter of a specific, genre-based, mobile collection but perhaps also — and partly because of increased levels of availability — a question of being able to deliver the right music for the “right” occasion and time. In terms of the “appropriateness” of music and related matters of choice, DeNora discusses an example of music as a “setting” for intimate encounters:

In short, Melinda and her partner were engaging in the aesthetic reflexive activity of configuring, via their musical choices, the prospective structure of their encounter: a time for relaxing, being sensual, slowing down, being romantic and celebrating things ‘feminine’ — softness, slowness, quiet, decoration. In this respect we can see, expanded on to the local, real-time interactive plane, music’s role as a device for configuring aesthetic agency (DeNora 2001, 111).

The point that I wish to make in relation to accumulations/collections of music is that increased levels of availability and mobility will play into various aspects of the social psychology attached to such usages of music. Through the mobile collection each of us (males?) may attempt to bring our familiar sources of
aesthetic agency into other more or less privatized spheres. Negotiations concerning music as a means of "orchestrating social activity" (something often highly related to gender) may thus expand beyond those contexts with which we are familiar with such activities, which — as the majority of the other "potentialities" surveyed above — will increase demands on our aesthetic reflexivity.

**CONCLUSION**

The overall aim of the above has been an attempt to frame some of the questions that the basic contours of the materialities of popular music of the near future give rise to. What has emerged out of this discussion should be thought of as a preliminary, but hopefully suggestive, (theoretical) frame for further research. Questions of reflexivity and agency have been raised in relation to aesthetic (and technological) materials. The crucial task, however, concerns how such questions relate to larger transformations of (cultural) democracy. It is in this direction that I will venture as part of a larger research programme in Denmark entitled "Media and Democracy in the Network Society" (MODINET). Yet, at bottom, the various aspects touched upon are ultimately empirical issues, that only can be approached via actual and specific interactions between musical media and social actors. The next and necessary step in the direction that I have proposed is thus through a materialist ethnography focusing on the actual usages of popular music in its new material casings. This working paper is a first small step in that direction.

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