Domestic space, music technology and the emergence of solitary listening

Tracing the roots of solipsistic sound culture in the digital age

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As has been repeatedly pointed out, musical culture has changed radically with the development of digital technology and the Internet. These changes have affected both the way music is produced and consumed. With regard to the latter, the possibility of instantly accessing enormous quantities of music at any time of the day in whatever location imaginable has put the consumer of music in a situation that only ten or fifteen years ago was unimaginable. Today one can download as many playlists as one wants from any preferred streaming site and turn them into a virtually unlimited music library that can be brought to almost any corner of the world, whether it is the North Pole, a busy city like New York or Mumbai, or the shopping mall around the corner. In addition, modern noise-cancelling headphones effectively block out any unwelcome environmental sounds, making it possible to stage one's own personal sound- and musicscapes at will. This possibility to constantly carry around a plurality of more or less carefully designed sound worlds has created a situation where many people in modern society increasingly live in their own privatised sound bubbles. It is a situation above all characterised by what has been described metaphorically as a 'solipsistic' sound culture, in which individualised and solitary listening has become the norm (Bull, 2007, pp. 26-33).

Although digital technology has enabled a radicalisation of solipsistic sound culture, the kind of solitary listening characteristic of this culture was in place well before the invention of portable compact disc players, iPods, mobile phones and the Internet. The possibility of creating and carrying along one's personal sound bubbles became a reality with the Walkman in 1979, although the way was already paved by the pocket transistor radios of the mid-fifties (portable crystal receivers with headphones being available a couple of decades earlier). In this article we develop some hypothetical considerations that concern the broader contours of a process in which, during the course of the 20th century, technological developments in conjunction with transformations of domestic space enabled a new way of listening to music that has been taken to its logical conclusion

in our digital age.[1] More specifically, we will suggest that in a society marked by increasing individualism, the emergence of the modern living room and the appearance of ever more sophisticated technologies for sound reproduction were central preconditions for a new kind of solitary listening that proved congenial to modern musical listening practices as these have developed in connection with digital technology.

Our argument hereby adds an important layer to the 'archaeology of iPod culture', as outlined by Michael Bull in his investigation of mobile music listening in urban space (Bull, 2007, p. 18 – smartphones now having replaced iPods). According to Bull, this kind of solitary listening is characterised by a 'privatising auditory impulse' that can be found already 'in the earliest stages of Western history, in Homer's *Odyssey*' (Bull, 2007, p. 18). In the *Odyssey* the protagonist outwits the Sirens by excluding his fellow oarsmen from the aural experience. They stuff their ears with wax so as not to be seduced by the Sirens' alluring song, while Odysseus himself is tied to the mast, unable either to steer his ship or command his crew. In sum, as Bull explains, 'Odysseus's ability to experience the Sirens' song is purchased at the expense of the sailor's lack of that experience' (Bull, 2007, p. 19).

Bull presents his reading of the ancient legend as an extension of Jonathan Sterne's historical positioning of the privatising of auditory space as beginning with 'the early communication technologies of the West – the telephone, phonograph and radio' (Bull, 2007, p. 18). These modern technical innovations are nevertheless significant in that they all developed in tandem with what Sterne calls '*audile technique*, a set of practices of listening that were articulated to science, reason, and instrumentality and that encouraged the coding and rationalization of what was heard' (Sterne, 2001, p. 23). Thus Sterne means to offer 'a counternarrative to Romantic or naturalistic accounts that posit [...] hearing as the sense of affect' (Sterne, 2001, p. 95).

In contrast to both Bull and Sterne we will emphasise the role of emotion and affect (broadly understood) for recorded music as an omnipresent mass-mediated phenomenon. In this we read the story of Odysseus according to a more common interpretive tradition, as being about the seductive power of the other's voice (Peraino, 2003), especially as this voice becomes available for the listener's voluntary and repeated consumption. We also set the Western aesthetic ideal of contemplative listening, understood as an audile technique (Sterne, 2001, p. 97), in relation to a more idiosyncratic kind of solitary listening that evolves around the middle of the 20th century in response to new developments and genres within popular music and domestic music consumption. Finally, we connect this mode of listening to a growing individualism after the Second World War; an in-

1 In describing our considerations as hypothetical we readily acknowledge that further historical evidence may be required to substantiate some of the claims we make. However, we believe that the arguments we develop below have a strong *prima facie* plausibility.

dividualism particularly well-represented in popular music, but also evident in the star system of cinema and the modern mass media. Since our discussion concerns the modern Western world in general, we draw our examples freely from different geographical areas, such as Great Britain, North America, Germany and Sweden.

Solitary listening?

In 1923, in the June issue of the new British magazine *The Gramophone*, an article is published that purports to discuss the 'morals and decencies' of 'gramophoning', in particular the urgent question whether one should 'play the gramophone directly after breakfast' (Williams, 1923, p. 45).[2] More important in the present context is that it also reveals an attitude towards music listening that by now is largely forgotten, namely that listening was almost without exception a collective, not a solitary, activity: listening to music was something one did in company with others. With this background as a given, the article opens by frankly stating that 'nearly everyone has a gramophone' (by the First World War there was a gramophone in every third household in Great Britain, see Morgan, 2010, p. 140). After joking about the possibility to listen to music in the bedroom or in the bathroom, even after having a standard bacon and egg breakfast, the author asks the reader to imagine the curious situation of encountering a person listening to music in complete solitude:

> [Y]ou would look twice to see whether some other person were not hidden in some corner of the room, and if you found no such one [you] would painfully blush, as if you had discovered your friend sniffing cocaine, emptying a bottle of whisky, or plaiting straws in his hair.

However, the (supposed) reaction of the reader is ill-founded, the author goes on to say, and there is no reason to dismiss the behaviour as indecent, just as we will not dismiss the solitary (and silent) reading of a book. The gramophone, it is concluded, 'is not a toy' and '[t]he perfect gramophonist has imagination'.

What this example indicates is that by 1923 it was still uncommon (in Great Britain at least, but most likely elsewhere in Europe too) to listen to music in solitude. Music was something one listened to collectively,[3] even when the music was pre-recorded on disc, as indeed was done in the many gramophone societies cropping up in the 1920s, and for one of which *The Gramophone* was the public voice (Morgan, 2010). However, this practice was rapidly changing,[4] and an important basis affording this change was the very

2 The article is briefly commented in Katz (2010, p. 20; 2012, p. 16).

3 Music was still seen mainly as an activity, rather than as an object. Volgsten (2015a; 2015b).

4 In a 1926 issue of the Swedish weekly journal *Hemma* (At home) a short novel is featured picturing a middle aged woman listening to radio through headphones: 'Indeed, wasn't she sitting there with the phones to her ears, deaf and absent to everything. [...] Then, just as he appears, she looks up, raises her hand to show she doesn't want to be disturbed, shouting that it is a wonderful organ concerto' (Svedenborg, 1926, p. 1358).

space in which music was increasingly consumed, i.e. the new living room. Starting with the more well off layers of the middle class and spreading to the lower classes, as the living room was decreasingly used as bedroom for one or more members of the family, it became a room for leisure and retreat. In Habermasian terms the space allotted to music consumption transformed not only from a public to a private and an intimate sphere (Habermas, 1991), but the intimate sphere divided further into exclusive individual spheres, as the role of social representation was progressively superseded by an ideology of recreation. This change went hand in hand with the growing gramophone industry. As noted by Theodor Adorno already in the 1930s, the most significant aspect of the phonogram was its ability to absorb and preserve time (Adorno, 1934). And as we will suggest, the most temporal of technologies required its corresponding space.

From salon to living room: a brief historical background

Music at home is probably as old a phenomenon as are homes and music respectively. However, limiting the scope to the Western world, it was not until the 16th century that 'spaces for music began to appear in private dwellings' (Howard, 2012, p. 9). Although specific music rooms were rare, spaces were adapted for musicking (singing, playing and listening; Small, 1998) in cabinets, private chapels and *grandes salles* of the social elite. An illustrious example is that of Queen Christina of Sweden, who after her abdication and conversion to Catholicism in 1654 allocated a certain hall for music in her new residence in Rome, where she also gathered her new music academy, the *Academia arcadia* (Morelli, 2012, p. 314; Murdoch, 2012, p. 271), of which composers such as Arcangelo Corelli and Alessandro Scarlatti were members.

Between the court culture, as exemplified by Christina's academy, and the modern living room, one finds the bourgeois salon of the 19th century. Notable for its modest and intimate character is the salon of Bettina von Arnim in Berlin during the first half of the century (Klitgaard-Povlsen, 1993). Significant in this context is that the 'salon' may denote both a particular space and a specific function, which in different ways point forward to twentieth century music consumption. For instance, it is possible to discern different types of the musical salon, such as the private concert with professional musicians, the assembly wherein professional musicians played in the background, the musical salon

['Minsann satt hon inte där med lurarna för öronen, döv och frånvarande för allt. [...] Dock, just som han kommer fram till henne, ser hon upp, höjer handen avvärjande för att visa att hon inte vill bli störd och skriker att det är en härlig orgelkonsert.'] Reading this little drama ninety years later, one may think the situation depicted was commonplace. However, the overall theme of the novel is modern technology (including the characters speaking in a wireless telephone) in traditional surroundings. What we can reasonably conclude is that the mid 1920s was a watershed for solitary listening practices in the sense that this was the decade when such practices first started to appear more regularly. What we should *not* conclude is that these practices were widespread.

with amateurs playing together, and the salon wherein the family members sang and played together spontaneously (Gstrein, 1991).

Although one may discern a divide between the public and the private in these types of salon, it is evident that musicking was a collective, not solitary, activity. Moreover, '[t]he line between private and public extended', as Jürgen Habermas has pointed out, 'right through the home' (Habermas 1991, p. 45). Even the earliest living rooms, which replaced the parlours in the United States at the turn of the twentieth century, filled the function of displaying the cultivated personality of its owner to portions of the public (Halttunen, 1989; Kruse, 1993). Cases in point are also the many salons and living rooms displayed in the Swedish monthly journal *Svenska hem i ord och bilder* (Swedish homes in words and pictures), published from 1913 through 1955, publicly manifesting the exquisite tastes of the upper-class homes (Volgsten, forthcoming).[5] Although this representational function still remains in many homes during the course of the twentieth century, the living room increasingly becomes an area for private activities and solitary recreation (Löfgren, 2013, p. 7).

The twentieth century is also the century in which phonogram technology turns music into a domestic matter almost worldwide, across almost every class but the homeless. As average incomes increase among the lower middle and the working classes, and as living rooms become more common (in Scandinavian countries, for instance, this development takes place from the early 1930s through the 1960s; Perers, Wallin and Womack, 2013), the latter are the spaces where recorded music is increasingly being listened to, even when the gramophone has no assigned space of its own as common inventory. This is particularly significant in Europe, where the jukebox never achieved the popularity it had in the United States (Segrave, 2002; in Great Britain, it became widespread only after the Second World War, see Horn, 2009). Even so, the living room is important in the United States too, not least during the period in the 1930s when the radio is the technology that maintains the interest in recorded music. Thus, the living room is not only an important depository space for records produced and sold by the industry, it also becomes a space wherein it is possible to listen to music, more or less at one's own will.

A technology in search for a place at home

As the central location for new sound reproduction technologies the modern living room constitutes an important precondition for solitary listening. In other words, a private and

5 A typical example is that of baron Fredrik von Steijern, showing 'a pleasant comfort, especially when [...] Wagner is soulfully interpreted at the grand piano. The great Richard is namely one of the never neglected idols of the house' (December 1914, 259) ['en behaglig trefnad, i synnerhet när [...] Wagner själfullt tolkas på flygeln. Den store Richard är nämligen en af husets aldrig försummade idoler'].

secluded area was exactly what was needed in order for the practice of solitary listening to emerge. However, even though the modern living room could thus be described as a central precondition for solitary listening it was not in itself *sufficient* for this kind of listening to appear. Changes also had to occur with regard to the attitudes people displayed toward technological innovations such as the radio and the gramophone. As evident from many advertisements in the press during the first decades of the twentieth century, the gramophone was long regarded as a mechanical instrument, if not outright discarded as a mere toy (Morgan, 2010, p. 141; Symes, 2005, p. 196).[6] Stores exclusively dedicated to selling gramophones and records were virtually non-existent in smaller cities, leaving the commerce to instrument retailers who regularly marketed the gramophones as just that: another instrument with a big brass horn (Chew, 1967, p. 29). Likewise one can see from early accounts that the machine was frequently used for dancing, as a mechanical substitute for musicians (Fleischer, 2012, pp. 139-141, pp. 192-194; Katz, 2012, p. 19; Volgsten, forthcoming).[7] As such the gramophone was used both at bigger assemblies and privately, at home. Of course, the gramophone was also used for sedentary listening to music, especially as background music for smaller gatherings. In private settings, such as at home in one's living room, music listening was still a collective activity.

The social and collective character of domestic music listening is evidenced also by the fact that early marketing of the phonograph and the new gramophone was intentionally targeted towards the salons and parlours of the upper classes (Gauß, 2009).[8] The strategy was well chosen, to the extent that such domestic spaces were arenas of display for what counted as culturally accepted signs of taste and *Bildung* during the first decades of the twentieth century. However, the strategy was less successful given that, in Europe at least, a technical device such as the gramophone, with its big metal horn resembling a noisy brass instrument, was as far from a sign of class as could be. (With a single exception before 1932, it is never shown in *Svenska hem i ord och bilder*; see also Chapin [1932] for an early American sociological survey disqualifying the gramophone as a marker of status). In cultivated bourgeois quarters modern machines were rather a

6 In the Swedish daily paper *Svenska Dagbladet* on December 27, 1904, in a report on the Royal family's Christmas celebration, the reader is told that the young Prince Erik (five years at the time), and his two younger cousins, princesses Margaretha and Märtha, each received a gramophone from the King and the Queen, whereas the older members of the family (with the exception of the Dowager Duchess of Dalecarlia Teresia, who also got a gramophone), got electric lights. Though luxurious, the gramophone was obviously regarded as a toy by the cream of society.

7 That records were frequently used for dance is emphatically pronounced in *Svenska Dagbladet* in September 1940, when the head of the Swedish copyright agency warns against 'giant gramophone cabinets' that will 'kill all dance orchestras' in the country. But already in 1916, also in *Svenska Dagbladet*, the label *Pathéfon* advertises records perfect for the summer's dance occasions, without mention of either artists or tunes.

8 Collections of reproduced advertisements can be found in, for instance, Dybeck (2008), Fabrizio and Paul (2002), and Weber (1997).

sign of decadence and decline (Horn, 2009, p. 18; Volgsten, forthcoming). Wooden cabinets of exclusive design tried desperately to hide the mechanical apparatus from sight (Barnett, 2006). But it was the smaller portable devices that sold in big numbers (Frith, 1987; Morgan, 2010), small gramophones that could be stashed away when not used, and which could be brought along outdoors when needed (Björnberg, 2012). Although the horns of smaller machines were soon built into boxes too, in line with the more luxurious cabinets, these continued to be a device of the less affluent. Downgraded as a mechanical music machine producing *canned music* it was regarded as culturally and aesthetically inferior to the *live* music that could be performed on the grand pianos in the salons and parlours of the true *Kenner* and *Liebhaber* of music (cf. footnote 5).[9]

This attitude towards sound reproduction technology began to change as the acoustic gramophones were succeeded by record players with electronically amplified loudspeakers and magnetic pick-up in the 1920s (Gronow and Saunio, 1998, p. 55). Luxurious players were frequently advertised in specialised journals and periodicals devoted to commercial entertainment, although the main commerce comprised simpler equipment. However, sales were not increasing linearly. In Europe an economic recession followed after the First World War, and although the effects were not felt to the same extent in the United States, the introduction of the radio at the beginning of the 1920s and regular broadcasting caused severe slumps in sales of both gramophones and records for a few years, on both sides of the Atlantic. By the second half of the decade, sales were pointing upwards again, reaching an all time high in 1929, which was followed already in October the same year by the Great Crash (Gronow and Saunio, 1998, pp. 36-38, p. 57, p. 69).

The economic depression that followed lasted for most of the following decade. The rescue for the recording industry (although it was hardly regarded as a rescue at the time) was the radio, which had started to broadcast recorded music at the beginning of the 1930s (McCracken, 1999, p. 374; Lockheart, 2003, p. 373; Taylor, 2002, p. 436). Whereas the broadcasting of recorded music required no records on the part of the listener (a circumstance that led to demands for copyright from the record companies, resulting in the founding of IFPI in 1933; see Fleischer, 2012, pp. 225-227), at least it kept alive and nurtured a domestic audience. By the 1940s, record sales had recovered from the depression and in the 1950s stereo equipment became available, although initially a stereophonic recording could cost three times the price of a mono LP (introduced by 1948). Not surprisingly, the music on record that sold in bigger quantities was of a popular kind.

9 It should be noted that the pejorative expression 'canned music' referred not to the type of music recorded, but to the fact that it was listened to passively, without those gathered around the gramophone taking active part in the production of the music (Sousa, 1906).

With music technology becoming an ever-more established part of domestic space in the 1940s and 1950s, the attitude towards this technology gradually transformed from a mixture of curiosity and suspicion to a widespread acceptance of it as a natural and taken-for-granted inventory of everyone's home (epitomised in Sweden by IKEA's launching towards the end of the 1960s of mass produced stereo furniture on a large scale; see Agdler, 1970). Through this process of naturalisation the most important preconditions for a genuinely solitary listening also began to fall into place. Already in the late 1940s this phenomenon was, in contrast to the hospitable *salonière* of earlier centuries, increasingly associated with the male audiophile and his search for the perfect 'home audio sound reproduction equipment' (Keightley, 1996, p. 150). With innovations such as the acoustic suspension loudspeaker (invented in 1954), stereo recording and stereo headphones (both of which became commercially available in 1958; see Burgess, 2014, p. 63) it became possible, for the first time, to listen to recorded music at home in one's living room while enjoying a sound quality that could be experienced as matching that of a live concert, to be encapsulated in and mentally transported through musical space by the latest technology. As Keightley writes:

> [H]i-fi was predominantly tied to musical recordings, whose value was also judged based on an aesthetic of audio realism, sonic immersion and mental transportation. The listening experience was to be enhanced by the approximation of aural 'reality', an illusion of presence ideally indistinguishable from the 'live' real thing. (Keightley, 1996, p. 152)

The consolidation of music technology as an integrated part of the modern living room and the ensuing naturalisation of domestic solitary listening in the presence of such technology is also demonstrated, albeit indirectly, by cinematic representations of musical listening. In the Swedish cinema of the 1940s and 1950s, for instance, there is a growing amount of scenes depicting domestic solitary listening to technologically reproduced music. Towards the end of the 1950s, and especially during the 1960s, such scenes appear with increasing regularity in Swedish fiction films. And in the majority of these scenes the setting is a modern living room (Pontara, 2018, forthcoming).

During the 1940s and 1950s the modern living room, the development of new and more sophisticated technologies for reproducing music, and the changing uses of and attitudes toward these technologies, all coalesce to form the basic precondition for a new kind of listening – what we have described as solitary listening.[10] If this solitary

10 A lesser-known factor that should also be taken into account is the emergence of the professional record reviewer in the wake of electronic recording already in the 1920s (Gauß, 2009, p. 314; Volgsten, forthcoming). Initially modelled on the concert critic, the record reviewer adds an important aura of seriousness to the medium, as well as an implicit reference to the solitary listening in a shielded space – a reference that becomes successively more explicit during the 1940s and 1950s.

listening was virtually non-existent, or at least had to be explicitly justified, at the beginning of the 1920s, attitudes started to change towards the turn of the decade, and at the end of the 1950s it had become a perfectly normal thing to listen to music alone from a gramophone in one's living room. Yet, the emergence of this solitary listening cannot be fully understood without taking broader changes in society and musical culture and aesthetics into account.

Popular music, individualism and the emergence of solitary listening

The *Gramophone* article mentioned above refers to music by Mozart, Beethoven and Mendelsohn, all members of the Western classical Pantheon, to which the magazine was explicitly devoted. It is well known how the aesthetics of Western classical music since the beginning of the 19th century propagated a certain type of contemplative and absorbed listening, whereby the listener is supposed to focus exclusively on the music for its own sake (Dahlhaus, 1989, pp. 78-80; Johnson, 1995). But although there has been different conceptualisations as regards the proper outcome of this concentrated listening to music – e.g. the mysterious realm that awaits the listener beyond the gates of Orcus, as propagated by E.T.A. Hoffmann, or (later) the pure aesthetic pleasure obtained by focussing on the specifically musical beauty inherent in the syntactical specifics of the musical work, as according to Eduard Hanslick – it is crucial that while the musical work demands of each singular listener undivided attention (meticulously described by Karl Philipp Moritz already in 1785), musical beauty does not pretend to reveal any personal secrets for consideration; beauty, like truth, is universal, although it may be individually expressed in each work (Volgsten, 2012). Thus the classical canon does not obviously afford any idiosyncratic reflections about personality traits on the part of the listener (Berlioz's *Symphonie fantastique* being an oft criticised anomaly; see Lippman, 1999, p. 162). To the extent that the listener may mirror him- or herself in the beauty of the music, it is by way of forming one's own character in accordance with universally valid spiritual qualities. And this works quite well without solitary listening, as the concert hall tradition of the last two hundred years testifies. Although the aesthetics of contemplative and concentrated listening stresses the individual experience, listening in public is in accordance with this aesthetics to the extent that the universal spiritual qualities that one is supposed to identify with is something one is likely to also want to display to others in public. What happens during the twentieth century is that the idealised individual experience of universal musical beauty is successively overshadowed by a likewise individual experience, albeit one focusing on a more personal relationship with and experience of music. And this new way of listening is above all associated with developments in popular

music culture as well as with an emerging individualism, an individualism reflected most clearly in the new mass media.

'Personality was never an issue until the sense of identity was called into question', writes Jib Fowles with reference to what can be described as mass media's 'star system' (Fowles, 1999, p. 198). And even though celebrities have probably been around since the beginning of history, the focus on their 'private' and 'authentic' personalities did not become an issue until the twentieth century's far-reaching urbanisation (Fornäs, 1995; Giddens, 1991; Susman, 1984). Fowles primarily discusses the role of the movie star in offering the spectator 'various models of the well-integrated self, at a time of excruciating need' (Fowles, 1999, p. 198). Whereas dramatic action provided cues for behaviour in new situations, the close-up shot 'eradicated the distance between viewer and actor [...] disclos[ing] the fundamentals of affect, [providing] the avenue to the soul, the inner personality of the star' (Fowles, 1999, p. 200). This intimate relationship with the individualised and 'affectivised' star in turn enabled the viewer to construct a corresponding 'inner personality' with regard to his or her own sense of self.

This dialectic or relation between viewer and star persona accords in many ways with what has been said about music's role as identity-reinforcer in late modern society. Assuming that the feelings aroused by music in the listener correspond to or resemble feelings normally associated with different types of identity, or ways of identifying with different types of identity, it has been suggested that music enables a testing of these same identities (Frith, 1996). In particular, research on adolescents has shown that music can function as strong emotional 'rooms' or 'images', in or around which temporary self-images and self-conceptions can be balanced and attuned (Larson, 1995; McRobbie and Garber, 1976; Werner, 2009; Danielsson, 2012). Likewise it has been shown how music may function as a sort of emotional memory – a 'soundtrack of our life' – that we can recall in critical situations, or when our identities need boosting in more everyday situations (DeNora, 1999; Bossius and Lilliestam, 2011; van Goethem and Sloboda, 2011; see also articles in Bonde et al., 2013).

In addition to its emotional impact, music's role in these accounts involves a privatising impulse and a relation of intimacy that is hard to attain in a concert hall and other public settings. In many ways it is the mirror phenomenon of feeling transported to the actual place of the musical performance. To see this, one may consider the way many mid-century popular music stars used their voices to convey their emotive performances of their songs on record. The introduction of the electric microphone in the mid-1920s did not only enable qualitative improvements on sound recording; more significant in this case is how it enabled the particular soft singing style called *crooning*, and its cognates in different parts of the world (e.g. the 'velvet voices' of the 'sentimental schlager'

in Sweden from 1927 on; see Strand, 2003, p. 108, *et passim*). By singing close to the microphone in a relaxed manner, vocalists such as Bing Crosby, Billie Holiday and Frank Sinatra made the impression of coming spatially close to the listener in an intimate context (Taylor, 2002, pp. 437-439; McCracken, 1999, p. 380).

Although to some extent the same effect could be achieved also in a concert situation (this is where the technique originated: in the radio recordings of live bands; see McCracken 1999, p. 380), or on jukeboxes at diners and cafés (though less favourably; Gronow and Saunio, 1998, p. 69), it is in the living room that this personal aesthetics – this emotionalised audile technique (to paraphrase Jonathan Sterne) – finds its true locus of resonance and growth. Whereas recordings of orchestral music drew their effect from the use of artificial echo and reverb techniques to create a feeling of concert hall ambience (Burlin, 2008), popular music of the 1930s and 1940s achieved its effect through an opposite 'dry', limited space approach to sound production. Thus 'the relatively depthless quality of the popular product [...] afforded potentials for more intimate listener engagement' (Doyle, 2004, p. 34). Once listeners had adopted this attitude, it could easily be transferred to musical genres with different aesthetics of sound, such as the Rock 'n' Roll of the 1950s. The 'intimate listener engagement' initially afforded by a sound production simulating a small and private room ambience could then manifest itself through various modes of listening, such as engaging in a quasi dialogic relationship with the singer's persona, an identification by the listener with this persona, or a total immersion with the particular soundscape of the recording (Fornäs, 1995, p. 231; Strand, 2003, pp. 54-56, p. 133).

As popular music rises beyond its previous national borders after the First World War (Gronow and Englund, 2007, p. 300), this particular mode of listening is diffused on an international scale. And it is hardly a coincidence that it happens at about the same time as the living room is turned into a space for leisure and recreation. Thus, even though the aesthetic ideals and listening practices associated with Western classical music played a part in the process we are tracing here,[11] it is above all the popular music of the time that eventually fosters the kind of solitary listening that in its turn served as an important precondition for the solipsistic sound culture of our digital age. And as we have suggested, this aesthetics of individualism, intimacy and emotional immersion was closely connected to the emergence of the modern living room and the development of new technology for recording and transmitting music.

11 On different vocal techniques, see Miller (1977); on a nineteenth-century media persona, see Tägil (2013).

Digitisation and contemporary sound bubbles: the radicalisation of solitary listening and the return of the social

No doubt, the kind of solitary listening described here could be applied to other genres such as classical music as well, just as the contemplative work-centred aesthetics would be applied to popular music from the 1960s on (Horn, 2000; Björnberg, 2009). A different objection to our argument would be that solitary listening, understood as an integral part of activities such as singing, humming or whistling to oneself, is likely to have been present since the dawn of mankind (Jordania, 2008). The same objection could also be made with reference to more recent phenomena in history, like the solitary practicing that reportedly brought many players of the clavichord, piano or violin to tears during the eighteenth and nineteenth centuries (Lund, 2009, p. 205), as well as the sentimental character pieces of the later nineteenth century, more or less intentionally inviting the assumedly female players into daydreaming (Ballstaedt and Widmaier, 1989, pp. 315-317). All this might seem to imply that the solitary listening we highlight here is not at all the modern or late modern phenomenon that we suggest, namely one principally afforded by the emergence of sound reproduction technology and the modern living room in a twentieth century marked by an increasing individualism.

However, our point concerns listening to music performed by someone else than the listener – the seductive power of the other's voice, as heard in the story of Odysseus – not humming or whistling to oneself or practicing one's own instrument in solitude, nor slipping into daydreams when playing for others. It is a process of change in musical listening practices in which music consumption is transformed not only from a public to a private and an intimate affair, but in which the intimate sphere is further divided into exclusive individual spheres, wherein the 'pleasures of solipsism' that Bull talks about (2007, p. 32) can be lived out in ways that simply were not accessible during previous centuries. It is also a process inextricably bound up with the development and dissemination of music technology and technologically mediated music in the 20th century, a long-term media-related process that profoundly transformed broad parts of culture and society.[12] Beginning in the 1920s and having become firmly consolidated by the 1950s, this solitary listening was the result of several historically specific preconditions. In this article we have identified three such preconditions: the modern living room as a 'closed' space increasingly used for recreational and private purposes, the technological innovations that made private listening to music in the living room possible, and what we have described as a new 'aesthetics of individualism and intimacy,' an aesthetics that was in

12 This is what Ekström et al. (2016, p. 4), among others, would describe as a process of 'mediatization' (cf. also Fornäs, 1995, p. 210, *et passim*).

particular connected to new forms of popular music allowing for novel affective relationships with sound.

Solitary listening has, however, taken on new dimensions in the digital age. To begin with, and as we indicated at the outset of this article, the continuous arrival of new and progressively more sophisticated technological devices and solutions has enabled a portability of ever-larger quantities of music.[13] The possibility of instantly accessing and downloading offline the virtually unlimited 'music libraries' of streaming sites like Spotify, Apple Music, and Deezer that modern smart phones offer has created a situation where a steadily growing part of the world's population can carry the whole universe of music in their pocket and bring it along to whatever location on the planet they prefer. Furthermore, modern digital technology has opened up previously unimaginable possibilities to create unique, highly personalised and potentially endless music- and soundscapes in the form of carefully compiled playlists. To this should be added a greatly improved sound reproduction technology (in particular modern noise-cancelling headphones that effectively block out all kinds of external and unwelcome sounds), a technology that makes the modern digital sound bubbles far more cloistered and monadic than the more porous sound bubbles of the mid-twentieth century.

In conjunction with a steadily growing individualism in Western and westernised societies during the last decades the digitisation of musical listening and the on-going development and refinement of sound reproduction technology have thus given rise to what can be described as a highly personalised DJ-ing or soundtracking of modern everyday life. However, while clearly functioning as a way of constructing and delineating an interiorised personal zone, this DJ-ing or soundtrackning also constitutes an *expansion* of the listener's subjectivity in the form of a musical and emotional appropriation of the external world. For although today's digitalised and hermetically sealed-off sound bubbles afford a radical withdrawal into a private sonic world in the midst of public spaces, they may at the same time be understood as extensions of interior life 'that work to subjectivize such spaces and transform them into arenas of personal experience' (Pontara and Volgsten, 2017, p. 263). Thus, just as the DJ creates a sonic envelope for a particular occasion at a specific place, the modern digital and infinitely portable sound bubble enables a constant soundtracking of the surrounding world through which one can structure and 'colour' that world in accord with one's musically regimented subjectivity. This musical soundtracking of everyday life is a central aspect of what we have elsewhere described as a *musicalization* of culture and everyday life (Pontara and Volgsten, 2017). At its broadest, musicalization may be defined as:

13 On the concept of portability, see Katz (2010, pp. 17-19).

> a long-term historical process [...] characterized by an ever-increasing presence of music in culture and everyday life. As such, musicalization is intimately connected with changing technological conditions and with transformations in how music is mediated and communicated as well as with broader socio-cultural processes at work in a given historical period. [Thus] the concept of musicalization captures the gradually altered position of music in social life from unmediated forms of music making (i.e. singing and dancing) in pre-modern societies to the ubiquity of music of all kinds in today's digitalized and globalized world. (Pontara and Volgsten, 2017, p. 248)

The central aspect we refer to here, however, pertains to a quite recent development *within* this musicalization process, the most recent manifestation of which is the digitally conditioned musical DJ-ing or soundtracking described above.[14] This central aspect of musicalization, as it has affected Western culture in the twentieth century, concerns the way music technology has afforded increasing possibilities to stage everyday life in accord with a personally designed musical dramaturgy. As we have argued, through the use of technological devices such as the radio and, especially, the gramophone it became possible for the individual listener to stage his or her personal musicalized environment in secluded spaces like the living room (and later the teenage room). With the subsequent appearance of smaller portable devices such as the Walkman this private, musicalized dimension became detached from domestic settings and eventually migrated into the streets of the cities and into other public spaces such as classrooms, shopping malls and public transport. (See also Wall and Webber, 2015, pp. 542-543) In our contemporary digital age the musical dramatisation of everyday life has developed into a full-blown solipsistic sound culture as people of all ages increasingly choose to live their lives in musicalized and hermetically sealed-off sound bubbles. With the Internet, digital technology and modern noise-cancelling headphones the journey from social to solitary listening seems to have reached its ultimate destination.

And yet, in the age of the digital sound bubble, social listening has made a curious comeback. For while it seems plausible to claim that our personal sound bubbles have become ever more privatised, individualised and sealed off, it is also the case that contemporary digital listening is increasingly connected to social media. The playlists that constitute our private sound bubbles are themselves often made public through sharing functions on platforms like Facebook and Spotify. Perhaps there is a limit where solitary

14 These are aspects of DJ-ing that differ from the distracted (and ultimately punished) listening of Mozart's Don Juan – the archetypal DJ – as described by Peter Szendy (Szendy, 2008, pp. 105-107). Although by no means contradictory to Szendy's concern, ours is with the private and shielded vs. the publicly exposed listening, with the personal vs. the universal, and with the emotional and affective vs. the cognitive listening (especially the latter should not be conflated with the rather different but no doubt related distinction between the distracted and the focussed).

listening becomes so solipsistic that it is experienced more as a painful alienation from others than as an emancipating and pleasurable withdrawal into a secluded and precious interiority. So as both listeners and DJs we strike a balance between the solitary and the social by keeping our cherished sound bubbles to ourselves while sharing our playlists with others. We want to be alone in our digitalised sound bubbles, but not too alone, so we make sure that others know what happens in there. Like Odysseus, we don't want to be tied to the mast for too long; the desire to share our listening experiences eventually vanquishes the privatizing impulse.

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Abstract

Domestic space, music technology and the emergence of solitary listening: tracing the roots of solipsistic sound culture in the digital age

In the first half-century of sound reproduction technology, various forms of social listening were the norm when it came to recorded music. In our digital age, however, a very common form of music listening is to listen to music on your own. We call this practice solitary listening. In this article we discuss what we see as the most important preconditions for solitary listening as it developed in the course of the twentieth century. More specifically, we argue that solitary listening became the dominant form of listening toward the middle of the century as a result of three different, but interrelated, developments in modern society: (1) the emergence of the modern living room; (2) the arrival of new and ever more sophisticated technologies for sound reproduction; and (3) a continuously growing individualism in society at large, fostering an aesthetic individualism in which solitary listening found its natural place. With the Internet, digital technology and modern noise-cancelling headphones the journey from social to solitary listening has reached its ultimate destination, giving rise to what can perhaps best be described as a contemporary solipsistic sound culture. At the same time, through the sharing of music and musical playlists on social media the social aspects of musical listening seem to have returned in a new form.

Keywords
Solitary listening; living room; sound reproduction technology; individualism; popular music.

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