# Nostalgia ON:

# Sounds evoking the zeitgeist of the eighties

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### **ABSTRACT**

According to Simon Frith (2001), "good" pop music is authentic because it expresses something, because it means something to a specific group of people within a context in which it represents an idea. Until now, however, little attention has been paid to how its "sound" is constructed, nor to the capacity sounds may have to evoke those thoughts and feelings, those concepts. What does popular music's ability to transport certain meanings depend on? Starting from the conviction that to answer that question we need to pay attention to the sound structures of pop music, this article suggests we explore the realm of nostalgia, a place from which music is created with the specific intention of evoking the recent past. We will see how becoming aware of the resources used to create this music presents an opportunity to gain a deeper understanding of the popular music sound and the way in which it creates meaning. This article therefore lays out a theoretical framework starting with a reflection on the sound composition of pop music, taking in considerations on technological mediation and ending with the construction of the retro sound. From there, and after focusing on music designed to evoke the 1980s, a possible starting point is established for contemplating certain questions that have barely been touched on by the discipline of musicology to date. The creative potential of recording studio processes themselves, the importance of technology in the development of human musical creativity and the implications of the arrival of sound recording on ways of thinking about music are some of the issues on which this research invites reflection.

## Purpose and justification

Despite years of warnings from numerous authors (Théberge, 1989, 1997; Middleton, 1993; Katz, 2010; Tagg, 2012, 2015; Askerøi, 2013) about the need to study the "sound" of popular music, musicology's ability to provide tools capable of analysing the new uses of sound equipment and processes that continuously appear is still being tested. One of these new challenges is the study of "retro" sound: music created to intentionally evoke a recent past from where vintage sound material, as Simon Reynolds (2011) calls it, is extracted. Here I will argue that this material is selected and combined using socially constructed criteria, the examination of which could provide a golden opportunity to rectify the scant attention paid to the processes and technologies used in producing and recording pop music. In order to delimit and clarify the proposed analysis, this project will centre on music designed to evoke the 1980s - an approach largely justified for two reasons. Firstly, I will argue that the 1980s presented a particular set of circumstances in relation to the appearance and/or use of certain music recording and production technologies and equipment. The techniques and devices that conditioned both how the music was written and the way in which the musical sound was consumed and conceptualized, and which are currently used in relation to nostalgia, can help us to better understand the pop sound discourse. Secondly, the point of departure here is an academic interest in a phenomenon that has clearly been peaking since the start of the millennium: the construction of cultural artefacts evoking the zeitgeist of the 1980s. The 20-year cycle noted by Reynolds in 2010 when he spoke of the retro twin<sup>2</sup> concept appears to have been extended in the case of the eighties revival, with the second decade of the 21st century producing products such as *Ping Pong Summer* (2014), Turbo Kid (2015), Stranger Things (2016) and Summer of 1984 (2018), among many others. The suggested perspective connects the discipline of musicology with present popular culture whilst also revealing processes related to the conceptualization of pop music. Several authors (Shumway, 1999; Lapedis, 1999; Frith, 2001; Reynolds, 2011; Drake, 2018) have reflected on the nostalgic power of popular music by analysing the use of pre-existing

George W. F. Hegel designated a *zeitgeist* as "a denominator that is common to the cultural universe of an era" (Pujó, 2013, p. 4), the spirit of a time, which John S. Mill would later call "the characteristic of an era" (Cited in Pujó, 2013, p. 4). As Pujó explains, the admittedly abstract term alludes to "the principles and values of a society situated in time. . . . a sort of tacit cosmovision which translates . . . into the prevailing lifestyle in a given culture. And which we could approach as the historical consciousness each era has of itself, with the explicit restriction that said consciousness is never fully historical nor entirely conscious" (Pujó, 2013, p. 4). Starting from this basis, and taking into account the use of the term by authors such as Simon Frith (2001) and Ron Moy (2007) in relation to analysing the meaning of popular music, this article suggests that certain musical structures may evoke the dominant sound mood of the 1980s, a spirit described here as determined by the use of certain technologies, as well as by the perception that these technologies have preserved this spirit in the present. This idea will be developed in more depth in the following sections.

In his 2010 article for The Guardian entitled The 1980s *Revival That Lasted An Entire Decade*, Reynolds writes: "Every decade seems to have its retro twin. The syndrome started in the 1970s, with the 1950s rock'n'roll revival, and it continued through the 1980s (obsessed with the 1960s) and the 1990s (ditto the 1970s). True to form, and right on cue, the noughties kicked off with a 1980s electropop renaissance". It can therefore be said that Reynolds notices a 20-year cycle between the time a particular style appears and its revival from a retro perspective.

songs in the audiovisual context. They all refer to the existence of a collective memory mediated by music, although they do not mention the specific sound structures that activate this memory. Simon Frith (2001), for example, notes how one of the functions of popular music is "to shape our collective memory, [by organizing] our sense of time" (p. 424) and attributes this functionality to songs' capacity to "intensify our experience of the present" (p. 424), which over time turns them into an exceptional means of evoking our past.<sup>4</sup> In his opinion, all 20th-century popular music has been imbued with a spirit of nostalgia since it was conceived. Reynolds (2011) also refers to pop music's connection to the present and its "unrivalled ability to distil the atmosphere of a historical era" (p. 17). For him, "nothing invokes the vibe of a specific period in the past more effectively than the popular songs of the time" (p. 17).

There therefore appears to be a consensus on the importance of pop music as a mediator of collective memories, and the authors seem to attribute the function songs fulfil to their presence during the era being recalled. So what happens when a new musical artefact is created for the purpose of evoking a specific period in time? Which musical structures have the power to transport a defined time marker in pop music? Before formulating a hypothesis to answer this question and taking into account the element of intentionality present in the sound materials mentioned in this research, certain ideas should be kept in mind. Philip Tagg (2012) notes the possibility of prioritizing the poetic level<sup>5</sup> when examining the semiotic power of sound structures, as when in the hands of those constructing music, "the structural entity materializes an initial idea or intention, and, more importantly, that it's linked to an interpretant" (p. 231). Likewise, he remarks that those sound structures can be of any type: "a turn of melodic phrase, a riff, a sonority, a rhythmic pattern, a harmonic sequence or type of chord, . . . [an] acoustic space" (p. 230).

Considering all of the above, the initial hypothesis for this research is as follows:

<sup>3</sup> All translations are the author's own.

<sup>4</sup> According to Frith, pop songs' ability to connect us with specific moments makes them an unparalleled means of transporting us back to those times.

<sup>5</sup> In his article Análisis musical: De las metodologías de análisis al análisis de las metodologías (2005), Ramón Sobrino discusses the three dimensions of the musical object. He notes that these three dimensions were explained by Jean Molino and systematized by Jean-Jaques Nattiez, who concluded that musical analysis should pay attention to three levels: "The poetic level, or set of elements related to the composer and production of the musical work; the neutral level, from the musical work itself; and the aesthetic level, related to the performance and the perception of the musical work by the listener" (Sobrino, 2005, p. 672).

<sup>6</sup> According to Philip Tagg (2012), "Semiosis is simply the process by which meaning is produced and understood. It includes the totality of, and the connections between, three elements that Peirce called object, sign and interpretant" (p. 156). As Tagg explains, the *object* corresponds to "an entity of an external world... a physical or imagined object, an emotion or sensory perception, an experience, an observed or imagined relation, a remembered event or situation, and so on" (p. 156). The sign is a representation of the object and the *interpretant* is the interpretation of the sign by an agent – their perception of that sign. Of course, the same sign may give rise to different interpretants, as Tagg also mentions.

• Popular music's ability to evoke a specific period is much more related to the processes and technologies employed during its production in the recording studio than to more traditional parameters such as harmony, melody and rhythm.<sup>7</sup>

In summary, this project proposes to reflect on the way in which sound discourse around popular music is constructed when the aim is to transport a meaning related to marking a specific time. It will therefore be necessary to clarify the concept of "sound" in pop, in order to later see which details of the sonic magma are susceptible to transporting meanings that can potentially evoke the atmosphere of the past in the present, and finally to explore how this process can be specifically applied to the particular case of the 1980s. Taking into account this structure and some of the key concepts to be addressed within it, the objectives of this research can be outlined as follows:

- To state some of the key ideas on the conceptualization of sound in pop music.
- To establish a conceptual basis for reflecting on the impact of recording studio technology on the conceptualization of popular music.
- To examine how the musical codes designed to allude to a particular era work. This means seeing which sound details could potentially evoke a particular time in the case of popular music, taking into account the definition of "retro" proposed by Reynolds.
- To initiate a theoretical approach to the sound zeitgeist of the eighties that could serve as the basis for a future search for the sounds used to evoke the era.

In summary, the aim is to examine the phenomenon of nostalgia and revival as a pretext to consider the impact of technology on the conceptualization of music, at the same time as helping to redress the scant attention musicology has paid to sound itself as a vehicle for meaning in popular music. This is an essential task and may be one of the discipline's great challenges.

## Sound and meaning in popular music

In the first phase of this project, it is necessary to explain what "sound" in popular music is in order to understand the elements it comprises: the ingredients that potentially carry meaning. It remains to be seen whether the musical structures generated through recording studio processes themselves constitute the language of pop and may therefore be conceptualized as features of a specific artist, or associated to a specific era, beyond simply being a backdrop for materials considered more appropriate for transporting a particular stylistic fingerprint until now.

<sup>7</sup> The evocative capacity of these parameters is not denied here, but the main objective of this project is to show how popular music, whose existence is entirely linked to recording technologies, contains other types of sound structures – analysis of which has been neglected until now – and that they unequivocally condition its conceptualization and, therefore, potential meanings.

Paul Théberge (1997) notes that an idea of "sound" as a conceptual category was already part of popular culture vocabulary during the early 1960s. Furthermore, he remarks that those involved in the creative processes of pop music talk about the "sound" as the songs' fingerprint; in other words, something that enables songs to be identified ahead of any other musical parameter. The following words from Brian Eno (1989) serve as an example:

One of the interesting things about pop music is that you can quite often identify a record from a fifth of a second of it. You hear the briefest snatch of sound and know, "Oh, that's *Good Vibrations*," or whatever. A fact of almost any successful pop record is that its sound is more of a characteristic than its melody or its chord structure or anything else. The sound is the thing that you recognise. (Eno, cited in Théberge, 1989, p. 99)

Other authors have emphasized that certain sound qualities have had a decisive impact on the way rock stars are perceived by the public since the beginning of rock music. Middleton (cited in Askerøi, 2013) talks about the way in which the echo effect influenced the voice of Elvis Presley on recordings, forever determining the importance of the voice instrument in sound codes and, as noted by Théberge (1989), turning the presence and sensuality of the voice into one of the distinctive characteristics of the genre to date. It is therefore clear that the search for the "correct sound" has been an obsession for producers since the birth of popular music. Such a sound is one which "would capture the ears and the imagination of the consumer" (Théberge, 1989, p. 99), and which over time would end up transporting some of the most important narratives on authenticity for the different popular music genres.

That said, the idea of sound being discussed here is evidently at once both obvious and difficult to describe. Théberge (1989) also acknowledges it is difficult to identify what this "sound material", is made of, whilst clarifying two issues: the first, that the fact that producers, musicians, companies and the audience categorize "sound" as one of music's identifying characteristics indicates a transformation in the way it is constructed and perceived; and the second, "that the concept of 'sound' is not simply a 'technical' phenomenon in the limited sense of the term; recording technology must be understood as a complete 'system' of production involving the organization of musical, social, and technical means" (Théberge, 1997, p. 193).

At this point, it is necessary to try to explain what this "sound" consists of, and why it is essential to mention the processes that take place in a recording studio in order to understand the way in which popular music is conceptualized. In his book, *Capturing Sound: How Technology Has Changed Music*, Mark Katz (2010) uses the concept of the *phonograph effect* to refer to "any change in musical behavior – whether listening, performing, or composing – that has arisen in response to sound-recording technology" (p. 2). Here I will argue that one of the great changes recording has brought about is to provide an array of new sound struc-

tures, which are inherent to the acoustic space implied by recording itself. Théberge (1989) says that multi-track recording – seen as both a new sound-recording technology and a production process – was the main reason for the emergence of new materials to consider in the semiotic processes related to popular music. The new environment created by this technology favoured experimentation by producers and engineers, giving rise to a whole new range of effects that so define the pop aesthetic, just as certain chord arrangements or melodic lines had defined other types of music in the past. In his list of parameters to consider when applying his system of *interobjective* comparison, Philip Tagg (2015) includes all effects resulting from the processes carried out in the recording studio, encompassing them within a category he calls *electromusical and mechanical aspects*.

In short, on the one hand it can be said that authors have for years been cautioning about the need to pay heed to the paradigm shift brought about by recording, and on the other they are all looking for a way to systematize the sound structures/processes that have come out of the environment provided by the type of new musical format. Nevertheless, let us return for a moment to the words of Nicholas Cook (2001). In suggesting that we "apply a model drawn from material culture to the analysis of musical meaning" (p. 179), he explains that Nelson Goodman distinguished between two types of cultural practice: material objects – classified as *autographic* as they can be replicated – and musical objects – classified as *allographic*, in other words, "instanced equally by scores, performances, or sound recordings" (p. 179). To this he adds:

The notational trace represented by the score – or, frequently, by a number of more or less diverging scores – is supplemented or substituted by the multiple acoustic traces of performances and recordings, each of which manifests its own forms of empirical resistance in both the semiotic process and its analysis; what we think of as "a piece" of music should really be conceived as an indefinitely extended series of traces. . . . But this is only part of a larger issue: the extent to which one can usefully draw analogies between the autographic and the performing arts. (Cook, 2001, p. 179)

The question here is to what extent similarities can be found between those acoustic traces and the autographic objects in the case of a recording as described in the context of popular music. However, and to complete this summary of the ideas the article aims to convey, let us look at what Jeremy Orosz (2018) notes in his thoughts about imitation in the linguistic and musical arts:

Sound is forgeable, even if notation is not. True, one cannot forge a score for one of Haydn's London Symphonies, but it is possible to create a counterfeit version of The Clash's London Calling album. Replicating a recorded sonic document is much akin to creating a copy of Botticelli's *The Birth of Venus*, in that a vocalist mimicking the precise timbre of a famous singer and a painter

emulating every brushstroke of an iconic painting face analogous challenges. If we acknowledge this to be the case, then according to Goodman's own definitions recorded sound belongs among the autographic arts, in which every feature is constitutive of a work and "no deviation is insignificant".

According to this way of thinking, what happens in a recording studio is more akin to painting a picture than writing a score, and this evidently entirely conditions the way in which sound recordings should be analysed. The above might lead us to conclude that, just as describing the strokes of a Rembrandt in words cannot be said to be equivalent to analysing the real composition of the colours he used or the processes that enabled him to achieve brushstrokes of the right density or thickness, the notation of harmony, melody and rhythm of a pop song does not constitute the larger part what needs to be analysed. Since its beginnings, popular music has been linked to recording technologies and, if the product of these technologies can be defined as an autographic object, it would seem desirable to be able to analyse the processes involved in this type of sound painting we know as music production.

## Technological mediation: from friction to tradition, from tradition to revival

Everything so far seems to point to the need to analyse the way in which recording studio technologies influence the conception of popular music. Nonetheless, the figure of the producer continues to be controversial (Frith, 2012) and we are often unaware of how the "sound" under discussion is constructed. This second section is therefore structured around two main purposes: firstly, to address the circumstances that have tended to invisibilize both the producer and technicians;<sup>8</sup> and secondly, to explain why the sphere of nostalgia emerges as a space that encourages reflection on these processes of invisibilization, at the same time as being a place in which some of these mediation technologies inevitably come to the fore.

Firstly, let us define the concept of "technological mediation". Ragnhild Brøvig-Hanssen (2010) explains that "When discussing the mediating technology involved in music productions, the term is broadly used to signify the process behind conveying sounds from the source to the receiver, or from one place to another" (p. 160). She establishes four stages of the mediation process in the case of recorded sound, the first two of which serve our purposes:

The initial mediation of aural raw material (the voice/human body, traditional instruments, samplers, software instruments, drum machines, etc.); the mediation used to record and edit or process sounds (microphones, amplifiers, mixing console, editing tools, processing effects, etc.). (p. 160)

<sup>8</sup> Reflection by Jordi Roquer at the conference entitled *La producción musical como paradigma de invisibilidad en los procesos de creación y recepción mediados tecnológicamente*, held on 17 May 2019 at the Institut d'Estudis Catalans in Barcelona.

It is clear then that mediation refers to both musical instruments and the processes used by the producer to generate and edit sound before it becomes part of the final result heard by the listener. Brøvig-Hanssen (2010) takes this point further and distinguishes two types of mediation depending on whether there is a desire to expose the technologies' presence or whether the aesthetic paradigm dictates they should be as invisible as possible. As she explains, the first would be an example of *opaque mediation*, and the second, *transparent mediation*. This systematization provides the opportunity to consider the factors that determine the level of opacity or transparency present or appropriate at any time, at the same time as to reflect on the issue of intentionality in relation to these factors.

Brøvig-Hanssen and other authors have researched the reasons behind the transparency of mediating technologies, and in turn their invisibility. Simon Frith (2012) notes the scant attention musical criticism has paid to recording processes used in rock music, despite being a style rooted in sound recording (p. 207). Frith explains that this neglect is clear in how the figure of the producer is treated and explains what he believes to be the main reasons for the technologies' transparency during the genre's early years. Firstly, recordings were evaluated in relation to the aesthetic ideal of the style – in other words, the "authentic" live sound - whose "rough edges" and imperfections were "smoothed out" by producers with commercial ambitions. Secondly, in rock music there is a close link between the concepts of "authenticity" and creative authority, which brought about the appearance of what Frith labels "the ideology of the self-effacing producer" (p. 214) who "was not simply on the artist's side . . . but worked in general to realize the artist's vision" (p. 213) and who was therefore able to take a back seat around issues of authorship. According to Frith, the situation was slightly different in the case of pop and music of African American origin, whose critics had been arguing about the role of the producer since the late 1960s and early 1970s (Frith, 2012, pp. 209–210). The ideal pop aesthetic was based on the studio rather than the live sound, turning the producer into the key element for differentiating between the genres of rock and pop and being responsible for "what makes good pop good and bad rock bad" (p. 212) at the same time. Nevertheless, he argues that it was during this same crucial era that the narratives around popular music were being constructed, saying that "all pop records were regarded with suspicion" (p. 218) because the studio processes were seen as "gimmicky" (p.218) and designed to standardize and commercialize the musical sound. All in all, ideology can be seen to be one of the main causes for the transparency of mediating technologies. Every musical genre is shaped by its own aesthetic ideals, which not only determine how the technology is used but also the degree to which it is exposed to the listener.

Yet these aesthetic ideas are not the only factors that influence to what extent the instruments and production techniques are discerned by listeners. Askerøi (2013) talks about the "initial shock effect" (p. 2) that certain technologies may cause due to their ability to generate innovative sound structures. These new materials contrast with those created using the techniques previously available, which were covered by "the veil of transparency"

(Brøvig-Hanssen, 2010, p. 163). The boom in new technologies drew back this veil, making elements that had been accepted as natural opaque once again and revealing both previously unseen and older processes (Auner, cited in Brøvig-Hanssen, 2010, p. 163). Brøvig-Hanssen also explains how the initial opacity of innovative techniques can turn into transparency over time:

What is initially perceived as opaque mediation can later be taken for transparent. For instance, when vocalists first started to use the microphone as an instrument, experimenting with different techniques and developing new singing styles (such as the intimate singing style called "crooning"), listeners saw the microphone-staged voice as opaque mediation, whereas today it has become a defining trait of the voice and is thus (more or less) transparent. (p. 163)

In relation to this component of technology's naturalization, it is interesting to review the concept of *sound hyperrealism*, proposed by Daniel Levitin in 2006, with which he qualifies those "sensory impressions we would never really have in the real world" (p. 2). Such sensations, which are only possible thanks to mediating technologies, become seemingly inherent to the sound, and listeners are "bewitched by all this audio production trickery, ignoring the fact that real and reproduced sound are not the same thing" (Roquer, 2018, p. 18). By way of an example, let us consider all the nuances the microphone is able to capture, as mentioned above – details that were impossible to capture with previous technologies and that determine the qualities of presence and sensuality described by Théberge (1989) as defining rock music. The existence of these sound materials constituting the popular genres, which seem to have always been there, reinforces Roquer's suggestion that we understand the effects of *sound hyperreality* as a sort of "fictional pact" between artists and consumers (2018, p. 19), a tacit agreement that may well help corroborate the presence of that layer of invisibility which hides the production mechanisms beneath.

The weight of tradition in the degree of mediating technologies' visibility is thus noted. The combination of the different ideas explored provides a view of the trajectory taken by the techniques involved in creating popular music. This trajectory, which started with friction caused by contrast and the unknown, progressed to the assimilation of processes and instruments that gradually came to represent the values associated with the different musical genres. Moreover, it can be said that the fictional pact between those involved in popular music production and its consumers is usually only broken if the artist/producer wishes to expose the technologies used or during a crisis period after new sound structures have emerged. After noting the main reasons for the invisibility of the instruments and production processes in popular music, we can now reflect on how the appearance of nostalgic affection may give rise to new ways of perceiving technology. The previous section stated that recording turns sound artefacts into autographic objects – in other words, works made up of

characteristics that can be reproduced and are meaningful. But this is not the only consequence of sound recording. For Reynolds (2011), recording was behind the birth of a new sensibility, "rigorously interwoven with the consumer-entertainment complex" (p. 27) and based "on the obsessive repeat-play of particular artefacts in a focused listening concentrated on minute stylistic details" (p. 33). This new way of listening offered the chance to rethink sound artefacts of the past from the present. It can therefore be said that recording, for the first time in history, enabled detailed listening of music from the past in order to analyse and select the most representative elements from each era. By selecting materials designed to evoke different periods in our recent history, this technologically mediated revision of the past thus provided nostalgic genres. Drake (2018) notes how, thanks to their portrayal by the mass media, there is a "recognisable narrative of the past as a succession of definable decades (such as 'the sixties' and 'seventies')" (p. 184), which, like nostalgic film genres, give rise to codes designed to evoke affection for these decades as they are remembered from the present. In his opinion, these codes behave *metonymically* by representing the entire decade.

Transferring this argument to the sphere of music raises two important issues. The first being that sound structures designed to evoke a particular period are chosen for their ability to represent it. This capacity is largely determined by the impact the mediating technologies used to create these structures had at the time. Yet in the present, these technologies are stripped of the contemporary value judgements associated with them in favour of their ability to represent the era. For example, the slap-back echo sound used by Elvis Presley has not become representative of "the abandoning of attempts to reproduce live performance in favour of a specifically studio sound" (Middleton, cited in Askerøi, 2013, p. 2), but is instead a musical structure related to the 1950s (Askerøi, 2013, p. 2) capable of marking that time. As Askerøi mentions (2013), nostalgia is able to displace morality, allowing sound materials to be revealed. The second is that reproducing these culturally codified sound structures is only possible by appropriating the mediating technologies involved in their creation. According to Askerøi (2013), "The quality of authenticity, as a product of the changing affective qualities of pop production, therefore helps to shed light on an intricate relationship between 'human and machine', as well as the gradual cultural appropriation of expressive technological devices" (pp. 10-11).

In regard to all the above, we can speak about the sphere of nostalgia as a special space for reflecting on the importance of mediating technologies and on the processes that determine their level of visibility. Likewise, we shall see that retro sound is a place where certain technologies regain their opacity, as mentioned, implying not only the reproduction of culturally distinctive sound structures but also the recovery of the artefacts that made them possible.

### 'Retro' sound: from vintage sound material to sonic time marker

Having discussed the relevance of the popular music sound and highlighted the importance of mediating technologies, it is appropriate to explain what is meant by "retro" and, specifically, what retro music is made of. According to Reynolds (2011), this type of cultural product, made possible thanks to the emergence of the nostalgic sensibility described in the previous section, is defined by the following characteristics:

- "Retro" always alludes to a relatively recent past, in other words to things that existed within living memory.
- "Retro" implies an element of accurate remembering: archive documents can be easily obtained (photographs, videos, music recordings, on the Internet) so the style of the past can be precisely reproduced, be it a musical genre, image or fashion of the time.
- In general, "retro" style also includes popular culture artefacts.
- A final characteristic of the "retro" sensibility is that it does not usually idealize or sentimentalize the past, it simply aims to be fun and entertaining. Overall, the focus is ironic and eclectic rather than academic and purist. This playful spirit is related to the fact that in reality the "retro" has much more in common with the present than with the past it seems to revere and resurrect. It uses the past as an archive of materials from which it extracts subcultural capital by recycling and recombining different elements in a sort of DIY cultural mishmash. (pp. 27–28)

If we connect this definition with the ideas presented so far, we can see that composing music able to evoke an era from the past means replicating and recombining sound structures coded as representative of that era by appropriating the mediating technologies used in its creation. However, as emphasized, it is difficult to categorize the sonic content of popular music, and this obstacle has a direct impact on the discipline's ability to analyse "retro" sound. As mentioned at the start of this article, Reynolds (2011) uses the term vintage sonic material to refer to the sounds used in the creation of "retro" music. In this way, the term "assumes a link between a style of musical expression (or 'sound') and a given decade" (Reynolds, cited in Askerøi, 2013, p. 42). In other words, it admits the existence of sound structures able to evoke specific decades. Nonetheless, this does not provide a theoretical framework that would enable analysis of such "sound" and a description of its precise stylistic features. Askerøi (2013) goes further and introduces the term retronormativity to refer to the link between sound structures and decades mentioned by Reynolds. Furthermore, she explains how the concept not only refers to the connection between sounds and periods of time but that it also entails a feeling of nostalgia towards the technological equipment involved in the "musical return" to this time.

In her doctoral thesis, *Reading Pop Production. Sonic Markers and Musical Identity* (2013), Askerøi proposes the concept of the sonic marker within "a discursive analytical model based on a textual focus on the audible details of pop production and the contextual implications

of the meanings of these details" (p. 3). The author says that "sonic markers, in short, are musical codes that have been historically grounded through a specific context, and that, through their appropriation, serve a range of narrative purposes in recorded music" (p. 17). As a result, this is a concept that efficiently enables specific and reproducible sonic structures from popular music to be connected with their culturally codified meanings and becomes an analytical category that can be used to study the artefacts within them. Moreover, if we account for the words of Askerøi (2013), who argues that "In pop productions, then, even the subtlest signifiers—the sound of an acoustic guitar, or the virtual space created by digital reverb—connote principal narratives of authenticity and authorship as well as gender, sexuality, space and place" (pp. 2-3), this new category might easily be said to be extremely useful to trace and describe the sounds responsible for conveying those narratives. That being said, it is particularly interesting to note the way in which Askerøi brings together the concepts of sonic marker and retronormativity. Faced with the challenge of analysing sounds codified as representative of past decades, the author replaces Reynolds' (2011) general concept of vintage sonic material with that of sonic marker of time, thus providing an effective tool for analysing "retro" sound. Specifically, Askerøi (2013) proposes three categories for sonic materials linked to specific eras: vocal peculiarities, such as certain singing styles and accompanying effects; instrument "sounds" or instrumental stylings; and "technological aspects of production" (p. 2).

Continuing with the concept of the "sonic marker", we can reflect on the way in which this allows us to rethink some of the sounds mentioned in this article. One example given was *crooning*, a musical style that enjoyed huge popularity at the start of the 1940s and which, according to Askerøi's system, could be catalogued as a sonic marker in the category of vocal peculiarity related to this period. In the same way, the application of the aforementioned slap-back echo used by Elvis can be reconsidered – which Askerøi (2013) in fact does – as a sonic marker linked to the 1950s and classifiable as a technological aspect of the recording studio. Nonetheless, the classification system proposed by Askerøi could be debated. It is Frith's (1996) opinion that "A voice obviously has a sound; it can be described in musical terms like any other instrument, as something with a certain pitch, a certain register, a certain timbral quality, and so forth" (p. 187) – recalling in this context the "aural raw material" mentioned by Brøvig-Hanssen (2010, p. 160). However, he goes on to note how pop singing styles are entirely determined by the technologies used during recording:

The microphone made it possible for singers to make musical sounds – soft sounds, closesounds – that had not really been heard before in terms of public performance (just as the film closeup allowed one to see the bodies and faces of strangers in ways one would normally only see loved ones). The microphone allowed us to hear people in ways that normally implied intimacy – the whisper, the caress, the murmur. (Frith, 1996, p. 187)

We can see, then, that reflection around the vocal element reveals the enormous difficulty of drawing a clear line between the different elements that make up recorded music: the raw sound material, the technologies and processes involved in recording it, and the ways in which the musicians might activate it. Such components influence each other in a fundamental way, making it essential to reconsider the tools used to analyse the constituent musical artefacts. That said, once this difficulty has been taken into account the concept of the "sonic marker" is a good starting point for such a study due to its capacity to bring about careful listening focusing on specific audible details and the agents used to activate them, whether instrumental, technological or stylistic. It likewise allows specific sonic structures to be connected to contextual elements that have influenced their culturally constructed meanings. In the case of "sonic markers of time", it will be argued that these sound structures "function not only as sonic imitations of the past but as representatives of the past's socio-cultural values" (Askerøi, 2013, p. 23), implying the construction of a shared musical subjectivity that is linked to a decade and "related to the aesthetic qualities of studio production" (p. 36). If this subjectivity is connected to the concept of zeitgeist mentioned at the start of this article, then it is possible to reflect on the existence of a musical spirit of the 1980s that can be alluded to through sound.

# The sonic zeitgeist of the eighties

The eighties were an era that saw many important changes in music production and consumption, transformations that we shall see had a huge impact during the decade itself and a vital influence on the contemporary approach to its representative sounds. Théberge (1997) notes what he considers to be the main triggers for these changes and reflects on the consequences deriving from them. Thus, he sees "the advent of a fully computerized studio recording apparatus" (p. 10), the rise of sampling techniques and the development of keyboard instruments as some of the reasons for viewing the 1980s as the peak of the increasing advances in production technologies.

In relation to the first of these causes, it is worth remembering *The History of Music Production* (2014), in which Richard Burgess writes about the impact of computer technology on recording studios at the end of the seventies. Specifically, he explains how the arrival of new consoles created by solid-state logic entailed a decisive leap forward in the way sound processing was seen:

The ergonomics of this innovative new console was unparalleled. Using gates, compressors, and surgical EQ became fast and intuitive for engineers and producers. Along with the user-friendly automation, mixes began to be highly processed with any extraneous noise being gated out or muted. The SSL E series console debuted in 1980 with significant upgrades. The addition of "Total Recall" in 1981 enabled all console settings to be stored at any point in a session, saving setup time and allowing faster and easier changes to previously saved mixes. . . . The capabili-

ties and signal path of the SSL console left its distinct imprint on the sound of the eighties' recordings. (Burgess, 2014, p. 107)

Far from trying to go into technical detail, which could be the subject of future research, Burgess's contribution is relevant here as it is evidence of a shift resulting from raw sonic material undergoing a greater number of processes. This fact, in combination with multitrack technology, which enabled a large number of tracks to be layered on top of each other, had a direct impact on the way in which producers and musicians approached and thought about their work. An example can be seen in the words of Joey Tempest (cited in Yates, 2016), the singer with the band Europe, in which he remembers that "Everything was pushed to the limit in the eighties, . . . a decade of flamboyance and pushing all the faders, a hundred per cent". Chris Tsangarides, who produced bands such as Thin Lizzy and Judas Priest, recalls the shift these new recording studio technologies brought about compared to recording methods from the preceding era:

In the seventies, you had a tape recorder, ... a microphone, a guitar with an amplifier, and a drum set. Maybe a few compressors, some reverberation plates, a bit of delay. Back then it centred on how good the band was. Then we hit the eighties and there was all this technology thrown at us. It went from tape to digital in about three seconds, and it was a bit of the emperor's new clothes. In the eighties it was all about the production. (Tsangarides, cited in Yates, 2016)

Keith Olsen, who produced Fleetwood Mac, Ozzy Osbourne and Whitesnake remembers: "If you had a drummer that could keep time, life was good, . . . If you had a great guitar player, it was wonderful. If the songs were there, it was even better. Y'know, it was songs, performance and sound, in that order" (Olsen, cited in Yates, 2016). Here, Olsen also mentions the modus operandi of the seventies, in which you had to be ingenious so that your work stood out from what everyone else was doing.

These reminiscences highlight some important issues. Firstly, they reveal the dominant paradigm of authenticity that was present in rock at the end of the seventies and the way in which the new technologies clashed with it. Secondly, they testify to the existence of the aforementioned shared musical subjectivity and its relationship with the techniques and processes that belonged to the recording studio. A sort of collective consciousness which, after reviewing the sonic materials from the present, comes to the fore as if to say, "that's how we made music in our day". In this way, the early eighties appeared to be trying to escape the world of the analogue, shaping up as the decade that Rolling Stone magazine, described by Théberge as a regressive gesture, called "the era of 'push-button rock'" (Rolling Stone, cited in Théberge, 1997, p. 1).

With respect to sampling, Théberge (1997) states that some of the most innovative popular music genres of the time – such as hip-hop, which is significantly self-referential – ob-

tained their sound materials through these techniques. These processes, he says, were entirely related to the appearance of "a particular type of memory and subjectivity... that is the result of experiencing technology and everyday life within the matrix of mass media and consumer culture" (p. 205). In an age when digital musical instruments and recording techniques were no longer independent technologies (Théberge, 1997), creators threw themselves into experimenting, creating mixes in which acoustic instruments coexisted with sounds previously considered noise (Burgess, cited in Moy, 2007, p. 78, explains how Kate Bush used the sound of a rifle hammer on one of her tracks) and samples from older records. If we recall some of the ideas explored in previous sections, we can well understand that the friction caused by the boom in these technologies, together with the mass dissemination of their sounds brought about by channels such as MTV, turned some of these materials into sonic markers of the era.

Lastly, it is crucial to acknowledge the development of keyboard instruments. According to Théberge (1997), incorporating microprocessor technologies into the design of electronic keyboards during the 1970s and 1980s, as well as the arrival and subsequent implementation of the MIDI Specification between 1983 and 1988, brought about a shift in the evolution of popular music in terms of its creation, production and consumption. Synthesizers with a simpler interface led to an improvement in users' skills, whilst their perception of sonic material was fundamentally altered by using the wide range of ready-made sounds stored in the instrument itself. The new synthesizers blurred the line between the processes/effects which were previously exclusive to the recording studio and the raw musical material to which they were traditionally applied. Effects became embedded within sounds as if they were one and the same, determining the end result of the recording right from the time it was written. In this respect, Théberge (1997) says that:

The *precise* de-tuning of the oscillators (calculated in hundredths of a semitone) had to be determined in advance, programmed, and stored as part of the synthesizer sound [...]. Equally important, the "chorus-like" effect produced in this manner is no longer seen as a separated operation applied to a sound, rather, the effect becomes an inherent characteristic of the sound itself. This movement has become increasingly prevalent in the design and use of synthesizers throughout the 1980s. "Effects" such as delays, flangers, reverbs, and the like have become thought of as inherent properties of a sound, and virtually all contemporary keyboards now contain sophisticated digital effects units built directly into the instrument. (p. 210)

Not only were sounds subjected to more procedures in the studio, but musicians now had pre-processed sonic structures available to them during composition, which influenced their creations. We can also see how these ready-made mechanisms affected more than just timbre, extending to ordering and pitch and promoting the construction of specific arrangements that also went on to be categorized as sonic markers. For now, let us consider how musicians perceived these new technologies. Joey Tempest explains:

All these new toys came into play. Europe used to be a guitar-based band, but all of a sudden, in the guitar shop, there was another room full of synths. So it was like, "Whoa, what's this?" *The Final Countdown* had more keyboards because that's what I was writing on. But some bands really did put on a lot of keyboards, and then the guitars sort of disappeared in the mix. I remember John Norum [Europe's lead guitarist] was frustrated with how the guitars were pushed back. (Tempest, cited in Yates, 2016)

The "authentic" sound of the guitarist – the symbol of rock music – was still there, but synthesizers took a noticeable leading role and offered new opportunities for composition which were exploited by musicians and had a critical influence on the sound of the decade. Tsangarides (cited in Yates, 2016) recalls: "You'd have these huge banks of keyboards hooked up together by MIDI – one playing strings, one playing organ, whatever you wanted – and get this absolutely massive sound".

In 2007, Ron Moy wrote that "all these moves were helping to construct the new sonic zeit-geist that moved production away from mythologies of the organic, 'real time and space' and the acoustic" (p. 77). The ideas explored in this article align with his words and emphasize that sonic structures capable of alluding to this spirit can only be created by appropriating the devices and processes born out of the recording studio environment described. To put it another way, it is only by recovering the mediating technologies of the time that we can create sounds evoking the zeitgeist of the eighties.

### **Conclusions**

The beginning of the article argued that it would be possible to define works created in the recording studio as autographic objects. More can be written on the profound implications of this. A pop song is a reproducible object because each of the audible details it comprises is an essential part of its existence. We have also seen that in popular music these sonic structures are constructed using recording studio technologies, and although it may seem obvious to say so, this type of music did not exist before the advent of recording. Sonic characteristics, which may stem from the creative use of any of the processes described - equalization, the use of artificial reverberation, stereo audio distribution, etc. - can define the sonic pop object as well as or better than the parameters traditionally analysed in "classical" music (harmony, melody and rhythm). It is therefore apparent that, in order to understand popular music, new tools have to be found that enable these processes to be analysed, research results to be systematized, and relationships established between the sonic structures deriving from them and the culturally constructed meanings associated with them. In summary, it is impossible to form sound knowledge of popular music without analysing the technologies involved in its creation and the techniques that stem from them. Even more importantly, having the tools to facilitate this analysis without the conceptual basis necessary to interpret the data obtained will continue to lead towards a discourse alienated from reality. What is being analysed when pop songs are said to have a supposed homogeneity and simplicity? Are all the small audible details mentioned being taken into account? What is the conceptual basis of these arguments? These questions, which it would be highly desirable for the discipline to respond to, cannot be answered without addressing the creative potential of the instruments and techniques used in the recording studio. We have also reflected on technology's role in the creation and conceptualization of music. We have discussed how mediating technologies, in the form of instruments and processes, have shaped the development of popular music, precipitating a crisis whenever they go against tradition and, over time, becoming new ways of working. The 1980s has been presented as "a decade of extravagance" (Tempest, cited in Yates, 2016) and a time of technological boom in which producers relied on the available resources more than ever before to bring their imagination to life. But were they already thinking in this way before the arrival of the technology? Or did technology free their imaginations? Would Beethoven have composed in the same way if different instruments had been available to him? These questions are extremely difficult to answer. It does, however, seem essential to ask them, as they bring to mind a fundamental idea. Technology has determined the way in which music is created and conceptualized during every period of history. The violin bow is technology, the harp is technology, the mechanism that operates the hammers in a piano is, of course, technology. So what is the difference that makes us perceive a recording studio as a place where technology takes the lead? If we consider some of the processes used to create pop music, we can see that whilst creators of other kinds of music stayed within the realm of what was possible for their instruments, pop music producers started to use recording techniques to mould the sound and discovered a new world of creative possibilities. We have thus seen how the 1980s took a step further on the road that began with the desire to produce recordings of instruments that were as faithful as possible to their live sound - such as the aforementioned authenticity paradigm of rock, in which the concert sound is the aesthetic ideal - and which led to the creation of sounds that are impossible to recreate in the real world. We now know that these changes in the ways of composing and thinking about music cannot be separated from the devices and processes involved in its production.

Lastly, we have discussed the sphere of nostalgia and the "retro", defining it as a space that lends itself to reflecting on technological mediation. The birth of nostalgic sensibility mentioned by Reynolds (2011) can help advance our understanding of what recording implies. Before sound recording, a piece of music was heard once in a lifetime, at most. Hearing it again relied on it being performed, and as no two performances are the same, the same sonic structures were heard only once. Recording has made it possible to hear the same audible characteristics innumerable times. What is more, we know that these details can transport meaning related to past personal experiences, shared cultural constructs and information relating to issues of authenticity, genre and also thinking: the elements that make

up the spirit of an era. Recording itself is the key to faithfully reproducing sounds from the past, whether pop or any other kind of music, as it is by listening to recordings that we have become aware of the importance of recovering the mediating technologies used in each era. Did the desire to perform music from the past using contemporary instruments exist before the advent of recording? This is another controversial question.

In the end, perhaps this way of thinking was born out of repeated listening, which led to the desire to reconstruct popular music from past decades, allowing us to experience some of the feelings we had at the time and which imbued the sonic structures that we heard. Nowadays we can reproduce these sonic markers using the mediating technologies used to create them, we can incorporate them into new songs and for a moment believe that human beings in fact invented the time machine years ago, we just did not know it.

### References

Askerøi, E. (2013). Reading Pop Production. Sonic Markers and Musical Identity (Doctoral dissertation). Universidad de Adger, Kristiansand.

Brøvig-Hanssen, R. (2010). Opaque mediation: The cut-and-paste groove in DJ Food's 'Break'. In A. Dannielsen (Ed.), *Musical rhythm in the age of digital reproduction* (pp. 159–175). New York: Routledge.

Burgess, R. J. (2014). The history of music production. New York: Oxford University Press.

Cook, N. (2001). Theorising musical meaning. Music Theory Spectrum, 23(2), 170–195. Retrieved from https://www.jstor.org/stable/10.1525/mts.2001.23.2.170?origin=JSTOR-pdf&seq=1#metadata\_info\_tab\_contents [Accessed on 15/05/2019]

Drake, P. (2018). 'Mortgaged to Music': New 'retro' movies in 1990s Hollywood cinema. Memory and Popular Film. 9, 183–201. Retrieved from https://www.manchesteropenhive.com/view/9781526137531/9781526137531.00017. xml [Accessed on 20/03/2019]

Frith, S. (1996). Performing rites. On the value of popular music. Cambridge, MA: Harvard University Press.

Frith, S. (2001). Hacia una estética de la música popular. In F. Cruces et al. (Eds.), Las culturas populares. Lecturas de etnomusicología (pp. 413–436). Madrid: Editorial Trotta.

Frith, S. (2012). The place of the producer in the discourse of rock. In S. Zagorsky-Thomas & S. Frith (Eds), *The art of record production: An introductory reader for a new academic field* (pp. 207–218). Surrey, UK: Routledge.

Katz, M. (2010). Capturing sound: How technology has changed music. Berkeley and Los Angeles: University of California Press, Ltd.

Lapedis, H. (1999). Popping the question: The function and effect of popular music in cinema. Popular Music, 18(3), 367–379. Retrieved from https://www.jstor.org/stable/853613?Search=yes&resultItemClick=true&search Text=popping&searchText=the&searchText=question&searchUri=%2Faction%2FdoBasicSearch%3Ffilter%3D% 26amp%3BQuery%3Dpopping%2Bthe%2Bquestion&ab\_segments=0%2Fdefault-2%2Fcontrol&refreqid=search %3A2528070ee31398dd0f5b4bdf8386f7f3&seq=1#metadata\_info\_tab\_contents [Accessed on 26/10/2018]

Levitin, D. J. (2006). This is your brain in music: The science of a human obsession. New York: Dutton.

Middleton, R. (1993). Popular music analysis and musicology: Bridging the gap. *Popular Music*, 12(2), 177–190. Moy, R. (2007). *Kate Bush and Hounds of Love*. Hampshire, UK: Ashgate.

Orosz, J. (2018). Autographic and allographic imitation: Revisiting counterfeit in linguistic and musical arts. Contemporary Aesthetics. Retrieved from https://contempaesthetics.org/newvolume/pages/article. php?articleID=838#FN3\_link [Accessed on 18/05/2019]

Pujó, M. (2013). Zeitgeist – El espíritu de la época. *Leitura Flutuante. Revista do Centro de Estudos em Semiótica e Psicanálise*, 5(1), 3–29. Retrieved from https://revistas.pucsp.br/leituraflutuante/article/view/16106 [Accessed on 15/06/2019]

Reynolds, S. (2010, January). The 1980s revival that lasted an entire decade. *The Guardian*. Retrieved from https://www.theguardian.com/music/musicblog/2010/jan/22/eighties-revival-decade [Accessed on 12/05/2019]

Reynolds, S. (2011). Retromanía. La adicción del pop a su propio pasado. Buenos Aires: Caja Negra Editora.

Roquer, J. (2018). Sound hyperreality in popular music: On the influence of audio production in our sound expectations. In E. Encabo (Ed.), Sound in motion. Cinema, videogames, technology and audiences (pp. 17–39).

- Newcastle, UK: Cambridge Scholars Publishing.
- Shumway, D. R. (1999). Rock 'n' roll soundtrack and the production of nostalgia. Cinema Journal, 38(2), 36–51. Retrieved from https://www.jstor.org/stable/1225623?seq=1#metadata\_info\_tab\_contents [Accessed on 20/03/2019]
- Sobrino, R. (2005). Análisis musical: De las metodologías de análisis al análisis de las metodologías. *Revista de Musicología*, 28(1), 667–696.
- Tagg, P. (2012). Music's meanings: A modern musicology for non-musos. New York & Huddersfield, UK: The Mass Media Music Scholar's Press.
- Tagg, P. (2015). Analysing popular music: Theory, method and practice. Popular Music, 2, 37-65.
- Théberge, P. (1989). The 'sound' of music: Technological rationalization and the production of popular music.
- New Formations. Retrieved from https://www.lwbooks.co.uk/new-formations/8/the-sound-of-music-technological-rationalization-and-the-production-of-popular-music [Accessed on 7/02/2019]
- Théberge, P. (1997). Any sound you can imagine. Making music/consuming technology. Hanover: University Press of New England.
- Yates, H. (2016, December). Synths & Simmons: The sound of the 80s. Classic Rock. Retrieved from https://www.loudersound.com/features/synths-simmons-the-sound-of-the-80s [Accessed on 02/05/2019]