THE SOUND AND THE FRAGMENT IN ARTISTIC PRACTICES

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Figure 1. Image of «Un Chien Andalou», by Luís Bunuel and Salvador Dali, 1929.

«The nineteenth century is a long preparation for the echoes and overlaps of dialogue in the twentieth century. Photos of departed loved ones, letters that may never arrive, disembodied voices that cannot reply – these and many other facts of everyday life add to the haunting of communication». (John Durham Peters, Speaking Into the Air, 1999, p.176)

Hearing The Media

The voluntary muting fostered by literacy in the Modern age, be it through the State's devices or the increase in the level of education longed for by some social classes, transformed the *inner voice* into the subject's most important aspect from the mid-18th century to the 20th century. This voice was indicative

and an identifier of an inner resonance which directly opposed a relation of a thought born within the context of the community. The subject becomes him/her-self in the unfolding of his/her own thinking reflecting him/herself towards an outside world where other forms abound.

On the one hand, this voluntary deafness has come to allow one to feel the forms of reception of those who naturally suffer from such disability, and on the other hand it has shed light on the emergence of communication forms in which orality represented merely the remains of community affection, albeit no longer evidence of the value of truth. The book and the printed document were the new «stone» upon which the history of human acts was imprinted, as so well described by Victor Hugo in a chapter of his work *Notre Dâme de Paris* (Ceci Tuera Cela, 1831).

However, already at that time something was changing. The works on acoustics by Chladni and the experiments on the tachygraph¹ and the telegraph would increase the segment brought from that ancient oral community. Rescuing sound from its invisibility and silence was a task, that held different functions and purposes. It was undertaken by the laboratories where technical objects, such as Martinville's, Cros's, Bell's, Edison's, Marconi's and others were invented, and by the 19th century as a whole. These sound media called into question the concept of «resonant ego» (Erlmann, 2010, p.311) which had been defined since the beginning of the Modern Age. Erlmann finds in the works published from the 1920s, especially by Adorno, Heidegger and Gunther Anders, the effect of the

«decline of resonance as the centerpiece of modern theories of hearing» (2010, p.312). On another level, but while referring to the same age, Martin Jay (1993) recognises the constitution of knowledge the artistic practices contaminated by surrealism and the avant-gardes of the early 20th century as one of the reasons for the decline of vision. The eyes were ceasing to be «the organic prototype of philosophy» since it is in them that part of the structure of our thinking is located (Sloterdijk, 1987, p.145)

Paul Virilio, in his work *La Machine de la Vision* (1988) (*The Vision Machine*, 1994), focuses the loss of a belief in the sense of vision at the beginning of the First World War:

The year 1914 not only saw the physical deportation of millions of men to the battlefields. With the apocalypse created by the deregulation of perception came a different kind of diaspora, the moment of panic when the mass of Americans and Europeans could no longer believe their eyes, when their faith in perception became slave to the faith in the technical sightline [line of faith]: in other words, the visual field was reduced to the line of a sightling device. (1994, p.12)

Indeed, between the First and the Second World Wars, the discourse and artistic practices suffered a twist that was easily mediated by the new media and distribution processes, but which also fell under the effect of a new orality and new ways of hearing. The oral product which always rested on the notion of voice and which is extinguished after interpretation or dialogue, found with the recording and reproduction technology

new ways of rearranging itself and forming new oral narratives. In the circle of the subject in contact with the reproducer the «death penalty» of the sound wave ceases deceptively. If a trans-linearity of the times that were immersed in the oral tales already existed and were then transported to writing, this would be the moment to emphasise the classic distinctions between the sense of hearing and the sense of sight, resorting to emerging media, such as the radio and the cinema.

On the other hand, as we have witnessed since the beginning of the 19th century, acoustics and the «sound figures» on Chladni's plates or on Martinville's and Edison's cylinders, forced the eyes to *see sound*, both senses converging towards the same support. This convergence will continue to be very important up to the rise of the optical reading of the CD, without losing, now in fewer numbers and less distribution, ocularity coupled with *phonocentrism*, which is central to the new apps, platforms and social media.

While the phonograph and its by-products, such as the gramophone, brought into the homes what only took place in concert halls, the multiplicity of recordings in each single house and the construction of a new hermeneutics before the presence, including diversity here, has enabled substantial changes in the manner of composing the daily hearing. Granted, only the gramophone wouldn't have been capable of such a dramatic change in the modes of hearing, if the sonorous media, the cinema and especially the radio, had not arisen. These media allowed what was domestic to be extended to almost all the places in the world. Whereas, first one moved from the laboratory to the home, then it was the path from the home to the public space that was taken.

The device known as the radio became an element of globalisation and also of the miscegenation of music genres, by the time fragment and by the diversity, basic qualities of the gramophone and the radio, which Adorno will criticize regarding their effects, namely, the fetishization of music as commodity and the «regression of listening» which finds its support in popularisation and distraction (*On the Fetish-Character in Music and the Regression of Music*, 1938).



Figure 2. "The phonograph at home reading out a novel." From "The Papa of the Phonograph," Daily Graphic (New York), April 2, 1878, 1 (The Western Reserve Historical Society, Cleveland, Ohio).

¹⁾ The first successful experiment was conducted by the Chappe brothers (Claude and René) in 1791 and the first line, between Paris and Lille, was inaugurated in 1794.

The phonographic industry coupled its production of popular music to the radio and the record, also keeping under reserve what was known as erudite music. With the advent of the radio and the production of new contents (soap operas, radio drama, etc.) there was a reconstruction of the «oral genres» which were being lost with the increase in literacy since the mid-Modern Age. Furthermore, in these oral genres we also find popular music which will derive, in its composition and hybridity of genres, to other forms. The new sound media focused their production on the fragmentation of the listening time and, in it, on the interaction of different music genres and different origins, thereby fostering a decomposition of the classical patterns. Listening became an integral part of an action of re-composition of an oral tradition which seemed buried by the literary alluvium. That which, at the beginning, was identified as a time of duration of a certain tune or soundtrack turned into an artistic fragment capable of integrating new sound units which could be heard, paying closer attention especially from 1945, in POP and Rock Music as well as in synthesised and electronic music.

The sound fragment became part of the artistic creations, including the literary ones, and constituted the «anatomy», together with colour, of the first sound films and, fully, of recorded music, born from the street and daily living.

Time, The Sound Fragment And Its Effects

Some of the most important literary works of the 1920s used a flux of language in their construction which can only be understood by the rise of sound media and the cinema. The exhaustion of drawing and mimetisms in the 19th century

painting also makes its appearance in the literature of the early 20th century. Linear space and time, so important in the classical construction of the narrative, had long been imploded by technology and artistic practices. This was done in a double sense of mediation and alteration: from the medium to the human and from the latter to the medium. Some literary works which marked the 20th century novel, such as *The Steppenwolf*, by Hermann Hesse (1927) and *The Magic Mountain*, by Thomas Mann (1924), even take the radio and the gramophone, respectively, as talking pieces of furniture which will change the room and the ways of communicating and socialising.

Listening to the radio was no longer the same as being in the theatre or in a concert hall, but rather being before a medium which at any time was turned off to allow daily life to emerge (unique quality of every sound). This distraction, or the ability we have to do several things as we listen to a sound medium, is regressive in the listening modes, as Adorno understood them. This is because it fosters distraction, and there is no interaction with the energy and the interpretation which only takes place before the musicians in the full performance of a piece: "immediacy dictates that the medium should disappear and leave us in the presence of the thing represented: sitting in a race car or standing on a mountaintop" (Bolter and Grusin, 1999, p. 6).

This vanishing of the medium, a dematerialisation, fosters a partial *deterritorialisation* which re-establishes the notion of space and time. Historically, if we take from this relation the material components, the media have always been invented for unique functionalities. Each device had, at birth, so to speak, a primary function which, as we know, was gradually



Figure 3. Motion Picture Film

adapted to multiple functions constituted as deviations. Only the radio arose in its assemblage as a device or a composite of various previous objects, like the phonograph and the telephone. The relation between this device and those which were then invented for image did not denote the possibility of a synchronisation for over than two decades. Only with the advent of the medium of radio and an ideology which framed reality was it possible to consider a dual technology, which immersed the senses of hearing and vision.

Silent cinema originates from the representation of the moving technical image intercepted by a referential movement which gives meaning to the object. For this meaning to be thorough, the scene should be full, not by the background noise or by the lines, technical impossibility, but rather by a tune which, custom-made or not, supported the visual narrative and the actors' interpretation. The space was being filled up, left without silence, which was now taken by music, removing the notion of cleft which marks an interruption built

in two movements: of respite from a previous sense, and the intertwined birth of the next one. This means that the first cinema was filled with phantasmagoria and representation, removed from daily life, although the first films took an interest in, such precisely, mundane scenes.

It was the radio which again brought to the domestic contexts a new «point of view» on space, and with it on time. Hearing became part of a daily obligation, fostering a unique movement from everyday life to the mediated listening. «The spatial distance between the living room and the studio or the concert hall is never fully bridged, thus lending radio sound a "new and very specific space relation", removing music even further from the direct experience of the *hinc et nunc*» (Erlmann, 2010, p. 320).

The "here and now" of listening cannot be conceived in terms of time but rather of space. However, this is not as pure exteriorities but as «strips» which accompany the becoming life. Thus it is maybe for this reason, supported by our perception modes, that in the 1920s (with small attempts in previous years, even in the 19th century) cinema developed the desire not to fill silences with music, but rather to incorporate in the moving image that «audio strip» of daily life. Just like radio listening, listening derived from a *Hörstreifen*, according to Adorno, so, too, should cinema, with sound, move towards a normative illusion starting from the use of language: the duplication of reality.

In this sense, life should be full of sounds and silences which deepen space, hyphenate time, and place the viewer in the event: they divide it.

The audio strip of our life has incorporated cinema via the radio effects in the first auditoriums. Distance communication, phantasmagoria and deterritorialisation, was the foundation of sound reproduced by the medium, becoming, by illusion, close and intimate «things», as if part of the family circle (as is visible and audible in family scenes where a sound reproducer is in action).

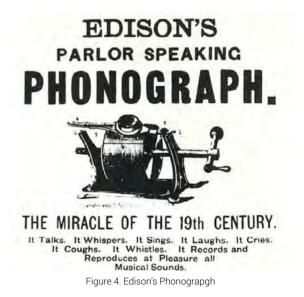
Nevertheless, radio was only partially the medium of that fragmentation in the listening time derived from contents. Being an effective transmitter of popular music led to a habit of bringing to the ear the different music sounds, and the voice in all its possible expressions. The natural and the human sound sources were now being masked, even in conformity, by the device that was a composite of different elements included in other entertainment and communication objects invented a few years before, and which in radio reached their maturity and a general purpose. It goes without saying that these objects continued to evolve and improved their ancestral and new functions. However, it is only with radio that the system of rules and laws of physics become, in their unfamiliarity for most users, part of an affliction within arm's reach in the tuning movement. An interaction which brings distances and sounds closer.

We have in our power a mighty metaphor of the outside, faraway world. Interspersing in it the great energy that flows from life, the silence which gives it the sense of an ending and a ghost image. This medium could only be accepted in its generality because this is what the *homo sapiens* had developed since they rose, biped, from the ground. Sound films continued this proposal of the «talking machines» now that the energy filled the streets and the houses. What was individual becoming collective from these mediated contents. In this, dreams became more shareable and therefore closer to language and interpretation as Freud desired. Turning us into "prosthetic gods", as this author stated in «Civilization and Its Discontents» (Das Unbehagen in der Kultur, 1930). We gradually extended our sensorium in all directions in an enervation of the individual and the very mediated world, to which electricity added more energy and range.

The optimisation of the microphone and the advent of electric recording are two important elements in the change of the way sound, particularly music, was recorded and heard. Now it is possible to record faster and with higher quality. It is possible to record different types of music and bring them together in the same record. Thus, it is possible to look at recording and its technology as a mode of composition and monitoring. Before the record reaches the stores, it is possible to anticipate its reception.

With this recording modality, there is a change in the way we heard the instruments at the time of composition, for a musician, or how they sound at the time of recording, before their live performance. Listening to a studio recording has become a part of the creation process, as Aaron Copland (1937, pp. 27-37) said in his text on the gramophone. However, if a place and its technology in function became part of a creative process, then the ear, too, was aroused to the search for sounds other, than those coming from known or popular instruments, or from orchestras.

The phonograph and its derivatives brought to listening the possibility of a larger number of audible frequencies and new tones to the voice. Now, if this change took place at the start, as Edison quite accurately pointed out in his "The Phonograph and its Futures" (*The North American Review*, May/Jun 1878, pp. 527-536) and in the advertising from Edison Company, and if phonographic companies claimed there was no difference between listening to a live singer or from the cylinder or record, then it was also possible to proceed to the creation of new instruments and new sounds determined by the artistic desire to build new realities for which a sound had to be invented. Amplified by the microphone and the loudspeaker, these new sounds started arising in popular and erudite music, and in film soundtracks.



The Instruments

Starting at the end of the 19th century, the advent of new instruments has become important in expanding the innovative dimension of the phonograph, to keep up with the musical diversity and innovation, and also to distribute these new sounds. Since the 1920s we have witnessed musical composition for phonographs and gramophones, a desire shared by many musicians even those with an erudite and classical training, such as Stravinsky. Moreover, we have also witnessed the invention of «strange objects» which, from substitutes, have become original and unique. We are referring to the set of instruments (see Trevor Pinch and Frank Trocco, *Analog Days*, 2004) where the Theremin, the Ondes Martenot and the Trautonium stand out, anticipating, in form and sound nature, the synthesis but also the notion of representation of the 1950s and 1960s (Mark Katz, 2004, p. 112).

As mentioned above, many musicians accepted this introduction of technology in the processes of creating, interpreting and distributing music. It is clear that the young musicians accepted the new objects as musical instruments, updating a new music genre that existed in their imagination only in potential. With the «Grammophonmusik» project, Paul Hindemith and Ernst Toch contributed decisively to put technology to the service of creation and, indirectly, to make many instruments and their sound nature obsolete. The materialities, too, were changing in their representation and presence, a problem which has become topical in the 21st century.

These strange objects and the studio with its technology have enabled the abilities of the classical range of instruments to be overcome. It can be imagined that, like today, every new microphone, the beginning of the segment of recorded sound, brought with it a new powerful function of creation. The microphone became a microscope which transcended beyond the sound epidermis of reality. The modes of presence were changing rapidly and sound, due to its intrinsic qualities, had allowed these changes to be fostered: without knowing it at the time, we were walking towards a fracturing dimension of what we then understood as existence. By the personification of the sound medium (as we had already seen with ventriloguism and in the first technical objects of the 19th century) and by the dissolution of the listening equipment, the ear takes on the quality of a technical object which immerses the subject in the event:

Sound turned into a visible and tangible object, a plastic entity, accessible to technical operations and transformations [...] On the other hand, the tape abduction of sound and voice, as practiced in musique concrète, for example, inevitably turned these phenomena into technical objects to edit and manipulate. Consequently, the apparently real was threatened by artifice, virtuality, and deception—the document was also, so to speak, a construct.²

Cinema

The expression used by Sergei Eisenstein in his paper «The Montage of Filmed Attractions» (1924) «basic material»³, where he connected the cinematic device to the theatre from the relations established between the drama contents and spatial contents and the viewers, already gives us a dimension of the features represented by materialities in the cinematic creation and their dislocating effects of a reality constituted by objects and their contingent limits. The same «material», although resolved here from another perspective, also echoes in Dziga Vertov: "the material – the elements of the art of movement – is composed of the intervals (the transitions from one movement to another) and by no means the movements themselves. It is they (the intervals) which draw the movement to a kinetic conclusion" (Michelson, 1984, p. 8).

In the early days of cinema, it was important to understand the possibility of the deviations inserted by reproduction and, especially, to reveal similarities with other artistic processes and devices. The characterisation of *pathos*, as symptom of the auditorium, was a means of understanding the deviation of a mimetic art towards a creation which, albeit still continuing in the same material path, was recreating itself in a detachment from the real which should include *sensorium*.

The eyes and the ears had to become used to a split produced by technology between the domains of nature and of the human. In the case of sound, Murray Schafer labelled this split as a «cut», a *schizophonia*, which immersed the listener in a sound temporally and spatially distant from its natural source. In the case of image, the splitting process, which is a division, accelerated this process, generating a new way of «looking». This was nothing all that new, since the extra-nature of these objects could already be found in the first paintings in Palaeolithic caves, constituting an emphasis, a context, of how man makes and feels the world. This was not enough, and it isn't enough, a conformity to the nature of what, from the animal, was made human. Rather, this is a reaction to adversities or deficiencies, and this was always the role of technology, well into the 20th century.

The idea that the device had better sense than the human is not present merely in the filmmakers of the second and third decades of the 20th century, like Vertov⁴. Edison always thought, and wrote, that the phonograph was superior to the ear in the reproduction of the sounds of the world and of the human voice itself. We thus have the senses of hearing and vision being overcome, in deficiencies that are just the result of a long sensorial evolution, by the technical objects of recording and reproduction. What the camera does with the landscape is destroy or incorporate linearities or ruptures,

²⁾ Olsson, Jesper, (2011), «The Audiographic Impulse – Doing literature with the tape recorder», in Rubery, M. (ed), *Audiobooks, Literature, and Sound Studies*, New York and London: Routledge, p. 64.

³⁾ Eisenstein, S.M. (1988), Writings, 1922–34, ed. and trans. Richard Taylor, vol. 1, S. M. Eisenstein: Selected Works, London: BFI Publishing, p. 39.

^{4) «}Vertov's camera has a life of its own, it "gropes in the chaos of visual events for a path for its own movement or oscillation and experiments, stretches time, dismembers movements, or it does the opposite, absorbing time unto itself, swallowing the years and thus schematising the lengthy processes that are inaccessible to the normal eye."» Robertson, Robert, (2009), Eisenstein on the Audiovisual: The Montage of Music, Image and Sound in Cinema, New York: Tauris Academic Studies, p.6.

non-continuous spaces or non-natural movements which cannot be «seen» by the eyes, since this organ has a biological tradition that shaped it. The eye will never be a reproducer, since there is no natural reproducer of images other than a water mirror, but rather an element of the natural medium of reproduction. Only the camera asserts itself as the technical and artificial, reproducer of reality. Therefore, they are right, Edison and Vertov, when they say that the potential of senses cannot only be actualised by technology and its devices.

The mechanical ear and eye bring to the surface new confrontations with principles which we considered untouchable: dazzled by technology which had already assumed the preservation of the human, it could no longer be caught in the laws that had always conditioned matter and dislocation, the movements of light and sound.

The Vertovian notion of "kino-eye" is, above all, a desire for detachment but feasible:

The mechanical eye, the camera, rejecting the human eye as crib sheet, gropes its way through the chaos of visual events, letting itself be drawn or repelled by movement, probing, as it goes, the path of its own movement. (Michelson, 1984, p. 19).

Unchained from some natural laws, technology allowed us to question the regular motion of light and sound, as well as their effects on materialities, including the body. We thus have a technology able to «create a man more perfect than Adam» (Michelson, 1984, p. 17). Still, going back some decades before these manifestos were written, Edison already assumed

that the different devices, where sound recordings and reproduction could be installed. He assumed that they would have a tectonic effect on human life: first, the deflection from literacy to a new orality; second, the reproduction of the human voice in inanimate objects. Even working in his Menlo Park laboratory, with the problems of image and sound synchrony, he was always interested in the dilution of archaic dichotomies, in particular, man-machine or nature-human.

Then, placing a phonograph in a doll or a toy meant «denaturalising» the uniquely human, spraying artifice with the qualities that have always been part of the subject and its identity. With this move, the process of diluting the materialities, of unleashing what at the time still was the cause of ontological disruption, began. The being is now, simultaneously, multiple and unique since an «Indefinite multiplication and preservation of such sounds, without regard to the existence or non-existence of the original source» was created (Edison, 1878). Severed from the primary, natural, source, sounds, just like images and man himself, the «kino-eye» like the «phono-ear» may thus conceive, give birth to, «creatures» that conquer other dimensions of time and space removed from the human linearity, or to which we only had access in individual, voluntary or reactive dreams or fictions. With the camera and the phonograph (archetype of all sound recorders and reproducers) we are well placed to make visible and audible what belongs to the subject's and the objects' intimacy. There is, on the one hand, a dilution of the pose of materialities and, on the other, the contamination, by its performance, of the space and time of its manifestation. It was this line of segments that was never lost throughout the 20th century, and which proved to be paradoxical, since that is the paradox of all media. By diluting space or time, they bring us closer to and remove us from the *Other*. In order for this paradox to resolve itself, it will also be necessary for us to forget that one day we had a body or, in the most probable stage, that this is merely an impression.

Since then this time or space line is made not by continuity, even in the process of invention and manifestation, but by segments that move and reveal themselves. This fragmentation, essential to the process, is witnessed and managed by the «artist» whether in the visual or the sound phenomenon. Here is born, as the two Russian filmmakers well understood, the notion of studio and, in it, the editing which gives expression to that mechanical eye and ear, breaking away from matter and time. The editing room has become a neuronal network, outside the organic, and therefore more capable of erasing the constraints imposed by nature on man, on biology and on the objects, that constitute the film strip or excrescence of nature itself and of the human.

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