

SoundEffects



An Interdisciplinary Journal of Sound and Sound Experience

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Interpenetration of Vibrating Thresholds

– eroticism, sound and sensorial intimacy

www.soundeffects.dk



SoundEffects | vol. 8 | no. 1 | 2019

issn 1904-500X

Abstract

Sound allows for multiple crossings between the sensorial and the sensual. To auscultate ('to listen attentively') resonates with the near homophonous osculate (from the Latin osculatus, meaning 'to kiss', and osculum, 'little mouth'). Each ear, a hole surrounded by a textured chalice of skin and cartilage, leading through to a thin, taut and highly sensitive piece of skin – the tympanic membrane. Beyond that, a tunnel, a bony labyrinth leading to a fluid-filled spiral, the cochlea where vibration becomes neural transmission. Every sound, a thread of Ariadne.

When 19th-century sonic technology focussed upon the ear, the erotic was duly invoked. The stethoscope, the telegraph and the telephone, all manifested different potentialities in engaging with the aural dynamics of eroticism.

In 2018, the siren's call is an ASMR binaural murmur. Immersive sound meant to be experienced as pleasurable touch, a wave of tingling joy radiating from the scalp, down the neck and into the upper spine, activating the envelope of the skin. Pornography has likewise updated its tools. VR sound has reconfigured the potential of the first-person view subgenre, introducing variations of proximity and acoustic field envelopment in the old orgasmic tropes.

This article aims to explore some of the contemporary erotic uses of mediated sound, not only in terms of their technological genealogy, but trying to sketch a conceptual map in order to investigate their nature and impact on everyday embodied experiences of sonic immersion. It focusses on the kinaesthetic dynamics of sound experienced as tactility and operating radical permeability, penetrating bodies and redefining interpersonal territories.

Introduction

Assuming the musical connotation of the term, this article develops in three distinct 'movements'. As a whole, the route of enquiry presented in this article is exploratory instead of argument-driven, moving away from the strict academic conventions of what a research article is expected to be, into a freer flowing essayistic form. Identifying as an instance of artistic research, the intention driving this work is mainly the concern with transparently presenting a process of enquiry, rather than ascertaining the validity of a particular claim.

Hence, the inaugural movement, titled 'The ear: Synecdoche of desire', seeks to find a constellation of nodes of meaning where sound, the ear, the sensual and the sensorial, as well as an expanded notion of the body as nexus of aurally activated desire, might intersect. This constellation draws its patterns from different sources, such as visual arts, film, literature, popular culture, anthropology and psychoanalytic theory. The purpose of this initial movement is to map out a symbolic territory

of associations and analogies in which to plant the flag of our curiosity, before pursuing a narrower path of enquiry.

The following movement, titled ‘Sonic technologies and intimacy’, probes a pioneering phase of the history of sonic technology – which gave us the stethoscope, the telegraph and the telephone – in order to localise key implications concerning their impact on notions of privacy and practices of intimacy. This section concerns itself primarily with the kinds of aural spaces and the permeability of interpersonal territories these technologies engendered.

The final movement, named ‘Sonic games of our times’, looks at how certain contemporary manifestations of aural technology and immersive media engage with the territories of eroticism and pornography. It discusses ASMR, binaural and VR/3D sound, and how the specific sonic strategies they deploy resonate with issues of intimacy, sonic embodiment and the interpersonal and relational dynamics at play in these highly technologically mediated performances of desire.

The ear: Synecdoche of desire

Understood as the gateway to the sound world enveloping our lives and vibrating our bodies, the visible outer ear is the most iconic illustration of the sense of hearing. Its anatomy unfolds between morphology and etymology: The cartilaginous pinna (Latin for ‘wing’ or ‘fin’) includes the helix (Greek for ‘spiral’) and the anti-helix, respectively, the inner and outer rims of the ear; the small bulbous part covering the entrance to the ear canal is the tragus (Greek for ‘goat’), paired with its opposite, the anti-tragus; and note the earlobe (Greek for ‘pod’), ancestral bearer of jewellery¹ and reputed for its prominence in erotic matters. The list continues, revealing a complex landscape of organic structures and a vigorous desire to map them extensively: auricular sulcus, concha, cymba conchae, fossa triangularis, incisura anterior auris, scapha and so on.

Stating the obvious, one might well observe that ears usually come in pairs, two per head, facing opposite directions along an axis perpendicular to the erect human body. Looking at one ear in the mirror, the other, like the moon, slips into the dark side of our head. Symmetrical, but not identical – their biometric uniqueness qualifies them to supplement fingerprinting² for full proof individual identification. They have also been read prophetically, in order to classify personality and predict outcome. The deciphering of the meaning behind ear shapes has been a staple of physiognomy since its earliest traditions.³ Looking closely at an ear, one might see a hole, a seashell, a flower. Privileging form over function one expands morphology into metaphor, finding unexpected connections.

The geometry of the ear might resonate strongly with the botanical encounters revealed in American painter Georgia O’Keeffe’s (1887-1986) intense, unblink-

ing perscrutation into the chalices and the folds of lilies and orchids, made fleshy and monumental. Or, in its depersonalised and mutilated presence, it might open a tunnel into the uncanny and the grotesque, as in the iconic beginning of David Lynch's film *Blue Velvet* (1986), where a missing person's investigation starts with the main character's discovery of a severed, decaying human ear in an abandoned grass field.

On the way to Eros one often meets Thanatos;⁴ thus, it is also worth noticing that the violent detaching of the ears has a special place in human history, often in the context of punishment and/or as trophies or tokens of property and ownership.⁵ Matador bullfighters are awarded these in honour of excellence in arena performance; dog breeders often promote ear cropping, particularly in reputedly combative pedigrees such as Pit Bull, American Bulldog or Doberman; soldiers and warriors, traumatised, deranged or otherwise, have been known to collect them.⁶

Before the lopping of the ear became 'copyrighted' in art as a Van Goghian meme, the organ made an unsettling and strangely humorous appearance in the Dutch painter Hieronymus Bosch's (1450-1516) triptych known as *The Garden of Earthly Delights* (1490-1510).⁷ On the right panel, the one representing Hell, a bizarre chimaera is found. Two giant human ears pierced together by an arrow, holding a knife blade between them, apparently crushing a group of human bodies, some already partly mutilated and even decapitated. This gruesome composition subverts the cropped ears trope by presenting the auricles as the wielders of the cutting tool – a striking proto-surrealist amalgam of reverse symbolism.

When considering the ear in relation to inwardness and intimacy, it is relevant to ponder the mutual fascination between surrealism and psychoanalysis, which has been thoroughly explored, especially by those on the artistic side of the equation (Esman, 2011, p. 173). The impact of Freud's 1899 opus 'The Interpretation of Dreams'⁸ and the enticing concept of 'dream work' (*Traumwerk*)⁹ have been explicitly acknowledged by some of the leading figures of the early 20th-century artistic movement and championed by French poet and surrealist 'high priest' André Breton (1896-1966).

Psychoanalysis, known colloquially as the 'talking cure',¹⁰ relates to our investigation of the symbolic layers gathered around the ear, mainly in two ways. On the one hand, the strategies of excavation of meaning which it has inaugurated resonate particularly with the act of listening, understood not as a passive, but as an intensely active engagement between self and other. If those occupied in dialogue can be understood to participate in an exchange at the level of inwardness, in other words, performing permeable in-betweenness, then to listen and be heard is literally to be open to consensual mutual penetration.

On the other hand, embodied in the Freudian tradition and its heirs, psychoanalysis has redefined the modern lexicon of desire. There is sexuality and eroti-

cism before and after Freud. In the aftermath of this conceptual tectonic shift, the awareness of the role played by both, not only in the multiple intersecting levels of everyday interactions, but also in the individual construction of identity in Western society, has become undeniable. The prominence given to the libido, or sexual drive, as a defining factor of individuation already in the developmental stages of a human; the narration of the internal conflicts of deep-seated desires and social and intersubjective constraints via the trinity of Id, Ego and Super-Ego; the polemically gendered models of the Oedipus complex, penis envy and many others – all these were absorbed into everyday language as near-mythological archetypes.

And what about the ear? The relationship between body, voice and psychoanalysis is deep and tangled. Though the psychoanalyst's voice has acquired a reputation of hypnotic power in popular culture, the 'well-trained ear' (Ogden & Ogden, 2013, p. 17) is the higher praised asset for practitioners of the 'talking cure'. Even if Freud himself seemed to have had a complicated relationship to musical performance (Lehtonen & Shaughnessy, 2015), and to some degree suffered from 'acoustic atrophy' (Cheshire, 1996), the sonic link between patient and analyst is the main medium where knotted intimacy and its examination play out.

The embodied quality of this sonic link should be emphasised. Before tapering our enquiry into the nuanced erotic implications of the aural play between voice and ear, one foundational way in which the body whole comes into play is the fact that hearing a sound implies being haptically sensitive to the percussive quality of the vibrations transmissible via an elastic medium (air, in this case). That the ear is the specialised body organ when it comes to the reception of vibrations belonging to the auditory spectrum¹¹ should not obscure the fact that sonic vibrations reach skin first, penetrating further into muscle, connective tissue, fluid-filled cavities and bone, dynamically resonating and being absorbed – sonorously impacting and shaking the embodied self. For example, anyone who has ever experienced the thundering amplification of bass sounds in a live concert is familiar with the displacement of the crux of sonic awareness from the ears to the diaphragm and solar plexus.

French psychoanalyst Didier Anzieu (1923-1999) has drawn particular attention to the issue of the skin, not only as the epithelial container that fully covers our internal organs, muscles and bones – the skin that the dermatologist deals with, and that which we touch when we touch one another – but also 'skin' as a notion resting on an analogy that refers to the psychic apparatus at work in the individuation of the Self, from the earliest stages of development in intrauterine space onwards. This Self in the continuous process of individuation is what Anzieu calls the 'Skin Ego' (Anzieu, 1989).

According to Anzieu, even in the womb, sound is one of the primary activators of the proto-self-awareness that instigates individuation. Thus, he conceptualises

the skin ego primarily forming ‘even earlier (than birth, in intrauterine life) [...] as a sound envelope through the experience of a bath of sounds’ (Anzieu, 1989, p. 167). The expanded notion of listening implied in these remarks – as a full body immersive experience sensorially grounded in touch as vibrational contact, an ‘audio-phonetic skin’ (Anzieu, 1989, p. 178) – will be particularly relevant in the next sections of our enquiry, but let us bear it in mind as we turn our focus again to the particular situation of intimate aural engagement in the context of the ‘talking cure’.

Researcher and composer Clara Hunter Latham argues that ‘the sonic exchange of voices that constituted the talking cure functioned as a form of touch for the doctors and patients who practiced this therapy’ (Latham, 2015, p. 125). While referring to the historical shift in the prescribed treatment for ‘hysteria’ – psychoanalysis developed in this late 19th-century context as an alternative to invasive body-centred approaches¹² – Latham contends that ‘the movement of the imagined cure for hysteria from the patient’s body to her psyche and her voice renders psychoanalysis into an aural technology’ (Latham, 2015, p. 126) and ‘the voice in psychotherapy into a site of intimate touch’ (Latham, 2015, p. 126).

Latham concludes her analysis of the erotic-haptic qualities of the voice by pointing to the morphological similarities between the vocal folds and the vagina. Particularly, their mutual connection, via the tradition of mechanical stimulation in the case of the latter, to vibration as a main ingredient for occurrence and manifestation of affect (Latham, 2015, p. 131). Additionally – with voicing and ejaculating arguably sharing the same ‘motion’ – the transference of therapeutic focus, from induced orgasm to vocal enunciation (Latham, 2015, p. 131) achieved via ‘aural technology’, was a step forward in securing the agency of the patient. From the genitals to the ear, towards an erogenous aural experience.

This idea of the latent erotic analogies between ear and voice – their connatural compatibility, in terms of emitting and receiving – to processes of penetration and conception pre-exists psychoanalytical tradition by a wide historical margin. One of the earliest explicit references to this connection is found in biblical tradition. The Virgin Mary is traditionally represented as having conceived not through her womb, but through her ear (*conceptio per aurem*), upon hearing, accepting and, literally, embodying the divine message during her visitation by the archangel Gabriel (Salvador-González, 2016). There are also strong examples of it being a multicultural understanding. The Japanese writer Yukio Mishima (1925-1970), in his 1965 book *Ongaku* (‘The Music’), reportedly based on a real case told to him by a psychoanalyst friend, quotes the expression ‘hearing the music’ as meaning the ability to achieve an orgasm.

The aural is near unrivalled in its superlative status as a portal into intimacy. Beyond conceptual and symbolic constellations, the attention paid to the ear in the choreography of eroticism speaks resoundingly for itself. The ear is a privileged site

for amorous play. Depending on the cultural and situational context, it might even rank higher in the erogenous hierarchy than genitals, nipples or lips.

In the willingly aroused body, the ear has often been portrayed as an embassy for whispers and love bites. The latter, especially in relation to the earlobe, have aroused a broad spectre of interest – from tantra to the anthropological imagination.

In the Kama Sutra, out of eight kinds of love bites (Vātsyāyana, 2011, p. 42), two are particularly effective when targeting the ear: *uchhunaka* ('swollen'), which is meant to leave a faint visible welt, and *bindu* ('point'), a nibble using two teeth only. English zoologist Desmond Morris has also paid special attention to love bites in human mating rituals. In his 1967 controversial classic *The Naked Ape*, he notes how the human earlobes 'are a unique feature, not found elsewhere in the primates' (Morris, 1999, pp. 67-68), which 'under the influence of sexual arousal [...] become engorged with blood, swollen and hyper-sensitive, [so that] there can be little doubt that their evolution has been exclusively concerned with the production of yet another erogenous zone' (Morris, 1999, p. 66).

The intersections between the ear and Eros are numerous and multi-layered – that the two words are near homonyms seems more than uncanny coincidence, but instead an undeniable beacon in the navigation of the vast and craggy cliffed shores of desire. We have described the ear as both symbol and locus for the erotic interpenetration of sounding bodies. We will now shift our attention to the aural dynamics of erotic entanglement, and how sonic technologies have played a crucial role in revealing and modulating the vibrant interpersonal territories of human intimacy.

Sonic technologies and intimacy

Imagine a youth with her eyes blindfolded and another youth playfully whispering, sometimes near her left, sometimes near her right ear. The blindfolded youth turns her head, first one way, now the other, trying to match the sounds to the warm breath spiralling around her. Her responsiveness aroused by the near touch, the swirl of close air motion and the tingle of sounds sprinkled here and there. Their two embodied selves, vibrating with the increasing friction of proximity, are permeable thresholds. This game deserves a name – we will call it Cupid's Vertigo.

Multiple variations of this fantasy of blindfolded seduction are often found in media and in mythology, both ancient and contemporary. That Cupid¹³ is habitually represented as a blindfolded, winged cherub with bow and arrow should maybe point not to the haphazard nature of love, but to its aural acuity. Love might be blind, but it need not be deaf.

Another aural game from our childhood: the Telephone Game¹⁴ and the birth of rumours. Funny, exciting, in afterthought a little bit troubling, undermining the belief in the possibility of unadulterated transmission of truths, making one aware of the insidious ingenuity of lies, even those merely generated by faulty overhearing. These and other auditory games depend on our stereo perception of the surrounding sound world, its range and its limitations – implying tacit mastery of a sophisticated repertoire¹⁵ of embodied sonic skills. For example, whispering into one ear splits and tilts the stereo field. Tightly focussed on one ear, still vaguely tuned to the background on the other.

The early telegraph systems, developed from the 1830s onwards, often supplied their operators with a stereo headset – not so much because the input information¹⁶ required two channels, but to provide better isolation and avoid distraction. It is worth noting that the stereo headset, as well as the private acoustic space it provides, was brought about by the need to access one of the most radically intimate sites: the interior of the human body. ”

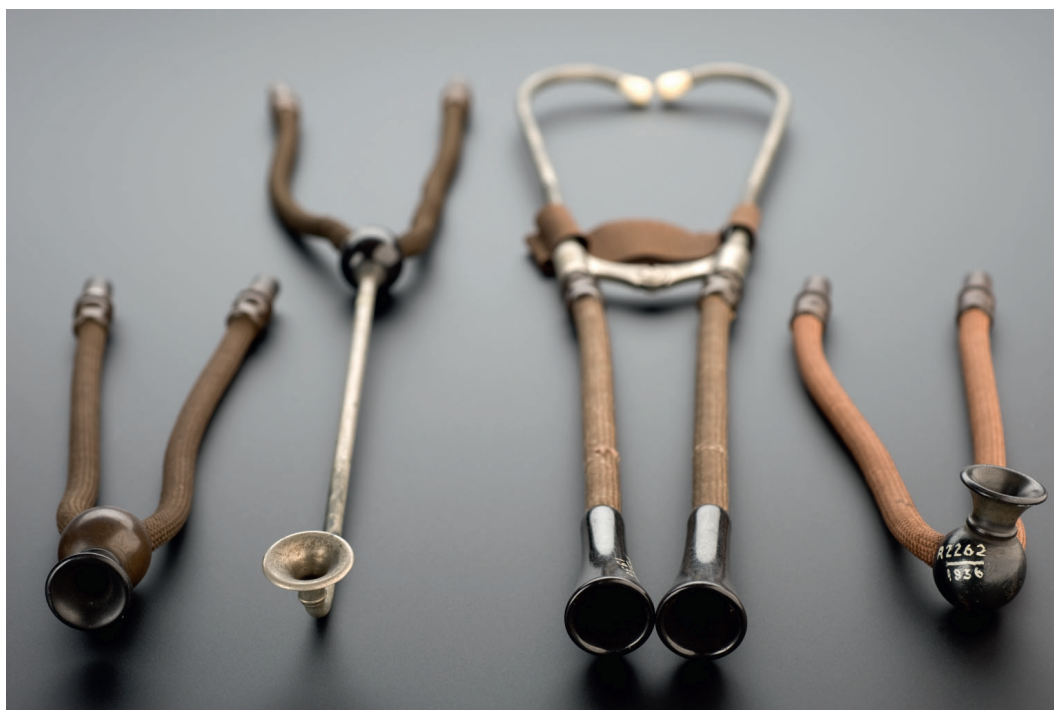


Figure 1: Allison's differential binaural stethoscope by Weiss and Son with interchangeable chest pieces, London. C.1858, Science Museum Group Collection. Creative Commons Image.

The differential stethoscope¹⁷ (Figure 1) (from the Greek *stēthos*, ‘breast’, and *sko-pein*, ‘look at’), developed in 1859 by Scottish physician Scott Allison (1813-1877), was ‘a binaural instrument with two chest pieces connected to two tubes, one for each

ear [and] made it possible to listen to two separate points on the patient's body and compare the sounds' (Sterne, 2003, p. 155). This invention, with its discerning stereophony, revolutionised medical diagnosis. It historically marks medicine's motion towards 'allow[ing] the body to be constructed as a dynamic acoustic space' (Rice, 2012, p. 304), requiring training the physician in highly sophisticated active listening skills.

A new lexicon of bodily sounds converted diagnosis into an aural technology. The rumours of blood flow, the gurgle of bowel movements, the percussive pattern of heartbeats, the swelling echoes of breath – the living body revealed in its choral complexity. The use of the stethoscope also begat new codes for modesty, particularly in relation to bodily contact between physician and patient, and especially in the archetypically heterosexual combination male physician-female patient. Less intrusive and shame-inducing than the doctor's ear directly pressed against the patient's body, it nevertheless allowed for increased penetrative access into its inner workings. Neither depersonalised as a corpse under autopsy nor flat and abstract as an x-ray, but immediate as rhythmic participation in the living body.

The two early technologies – mediated auscultation (using the stethoscope) and telegraphy (from the Greek *tele*, 'distant', and *graphe*, 'writing') – were bridged by their specialised listening skills requirement. Their operators were trained in quickly perceiving and accurately decoding, respectively, the 'emphasis on the minutiae of rhythms and the slight shift in timbre emanating from the chest, or the staccato of the Morse sounder' (Sterne, 2003, p. 157) in order to access invisible realms within and beyond. However, this specialised listener was no longer relevant for the next radically impactful sound technology development, spawned from the common genealogy of auscultation and telegraphy: the advent of telephony (from the Greek *tele*, 'distant', and *phone*, 'voice') in 1876.¹⁸

Both auscultation and telegraphy implied listening mediated by touch. Auscultation because the physician needed to touch the patient, pressing the head of the stethoscope to the thorax and the abdomen – the cold metal object gradually warmed up by transfer of body heat. Telegraphy because it was the mediated transference from rhythmic touch into sound via electricity. Travelling great distances, but immediate in its rhythmic imprint of a distant body's percussive movements. Another tapping on one's ear, and being tapped in turn – alone together, like prisoners in contiguous cells communicating through the shared wall.

The telephone inaugurated new forms of intimacy, still grounded in the dichotomy between radical closeness and radical distance, but weaved together with the dynamics of entangled privacy, bodily detachment, intensified aural fantasy and their erotic potential. Picture someone speaking on the phone. The wandering gaze, the attention turned inwards, the mimicry of facial expressions, transported as voice modulation. A phone call can be construed as a ritual of possession¹⁹ – recipro-

cal, each speaker becoming possessed while possessing. The telephone user is thoroughly in-between, extended beyond her immediate situation, trans-embodied in the sonic exchange, effectively part of a sonic chimera of telephonic acoustics and hybrid presence, performing aural intersubjectivity.

Possession is ownership, even if temporary, even if potential. If the headset inaugurated a particular kind of private acoustic space, the telephone link subverted the geographic, temporal and spatial limitations of privacy. Trespassing became overhearing, anonymity became weaponised. Consider extramarital affairs in the age of instant long-distance communication – the silent breathy call, the quick hang-up after the wrong voice is heard, the karmic sting of denunciation – new rules for new erotic games. In commercial terms, ‘sound-reproduction technologies were portrayed as providing intimacy (erotic, familial, personal) as well as immediacy’ (Sterne, 2003, p. 171). Acoustic intimacy was the product, commodified by telephony. An intimacy qualified by the harnessing of presence in absence, as well as by reciprocal transference and interpenetration, where “interiors commune with interiors”; [and] speech sounds out our interiority to deliver it to another, and deeper, into the interior private space of their hearing’ (LaBelle, 2014, p. 3).

Telephonic eroticism is grounded in fetishized²⁰ mediation, a removal that instigates and creates possibilities of re-joining via a third ‘body’ – an acoustic chimera of intersecting voices, focal point for the intensified in-betweenness of desire. This third body was made literal, as both threat of disclosure and audio-voyeuristic excess, when telephone calls were established via switchboard operators. These, often young women, ‘were under constant suspicion of eavesdropping and entering into all sorts of “intimacies” with middle-class men’ (Sterne, 2003, p. 153). They supplied a vocal flesh of sorts to the abstract web of wires interconnecting immaterial spaces.

This sexualisation of telephony as the ‘female other’ became evident in the newspaper ads, where ‘eroticized images of headphone listening were about eroticizing physical distance and suggesting the depth of interconnection made possible by bodily absence’ (Sterne, 2003, p. 226). Of such nature is the illustration pertaining to the cover of the July 1913 Telephone Review and titled ‘Her Voice Alluring Draws Him On’ (Sterne, 2003, p. 172), representing three young women posing suggestively, the middle one enticingly breaking the fourth wall while talking on the phone. Variations on the siren myth, a promise of erotic fulfilment by aural link. In this portrait of ‘telephonic erotics’, ‘the possibility of telephonic audition is itself rendered as a kind of excess, both sexual and sensual in nature – an intensification, supplementation, and possible supersession of the immediacy of unaided hearing’ (Sterne, 2003, p. 172).

The excessive is so in reference to a measure, which it saturates and causes to overflow. To speak of sonic excess points to notions of containment and perme-

ability, the body presence itself as a sonic territory – negotiating borders, crossings, frictions and all the liminal categories of the tangible. In-between us, in our immersive everyday, sound is ‘a type of restlessness’ (LaBelle, 2014, p. x) that ‘agitates the boundaries of things, as a force of continual departure and propagation’ (LaBelle, 2014, p. viii). This restlessness stimulates intimacy – sound activates erotic exchanges because sound is promiscuous. It ‘creates a relational geography that is most often emotional, contentious, fluid, and which stimulates a form of knowledge that moves in and out of the body’ (LaBelle, 2010, p. xxv). Likewise, the erotic is that which constantly mixes, shakes and unsettles.

Thus, to experience sound is to experience oneself as a nexus of vibrations, constantly intermingling with other nexuses in varied constellations, constantly crossing over from private to public, in ways unfathomable and unpredictable. In our age of foretold unsustainability, favouring individuality, self-containment and impermeability, not only as criteria of success, but as requisites for survival, a heightened awareness of sonic phenomena can make daily life quite intimidating.

Telephony and headphone culture have developed ‘ear-in-ear’, as two parallel sine curves, sometimes closer, sometimes drifting apart. In our present landscape of technology-assisted communication they seem slightly out of sync. ‘Uncle jokes’ aplenty delve on how hard it is to tell nowadays if someone is talking to herself or on the phone, due to the increasingly discreet earphones with integrated microphones. Moreover, social media are overwhelmingly driven by text and images – even in embedded videos, automated subtitling bypasses the need to listen. In our exhaustively interconnected and mediated world, the need to talk on the phone often produces social anxiety.²¹

A sense of exposure is unavoidable when sharing an intimate acoustic space. In the absence of physical co-presence, the embodied continuum of sound, gesture, facial expression and situational cues (location, clothing etc.) is stunted, the vocal exchange bearing the full weight of agency. A release, like a quick hang-up and a text message follow-up, can be an often-sought relief. However, if direct telephony has become weighted by stress and avoidance strategies, where have ‘telephonic erotics’ been sublimated into?

Sonic games of our times

In so much as it is present in the contemporary mediascape, the erotic is elusive, disputable, hard to qualify and much less define. The pornographic, however, is ubiquitous, boisterous, obsessively categorised and expertly packaged. As terms, they do not belong to the same conceptual category. If the pornographic²² refers to the mode, function and strategies of representation, then the erotic fulfils the content. Consequently, the pornographic can be defined in legal terms,²³ but not the

erotic, since it is beyond legislation. Hence, the notions of erotic and pornographic as they are colloquially used can be misleading.

For commercial purposes, when we speak of the difference between an erotic and a pornographic film, we are actually discussing codes of representation, not content, concretely degree of explicitness – we are already discussing pornography, not eroticism. The same erotic content can be or not be pornographic in relation to how it is represented – porn if explicitly filmed or photographed, but not if retold orally, for example. Traditionally, for legal purposes the distinction is visual.²⁴ When the genitals and penetration in a sexual context are clearly visible, we are in the presence of pornography; otherwise, we are not. When the image is omitted or obstructed and the sexual act is only heard, things get more complicated, legally and otherwise. The erotics of overhearing have a fascinating history,²⁵ both in terms of technology being interfered with and notions of privacy, but ‘that is another story and shall be told at another time’.²⁶

In this final section, we will discuss two closely related contemporary uses of sonic technology and their relationship to eroticism and pornography: ASMR relaxation, as is found for example on the YouTube platform, and binaural sound in VR (virtual reality) porn. The former is closely tied with the erotic²⁷ in its experiential context, the phenomena it triggers and the conventions limiting the themes and explicitness of its mainstream representation, while the later sits squarely within the immersive, simulation-bound, utopian territory of the pornographic.

The sonic technologies involved in both ASMR and VR porn have more in common than otherwise. Binaural sound, surround sound or 3D audio/Ambisonics, though different in terms of capture and production workflow, all focus on approximating the primary spatial immersion characteristic of the ‘natural’ sonic experience: the spherical quality of the embodied acoustic field, with the listener as its central reference point.

The sphere is a non-Euclidean geometric shape, manifested imperfectly in our material world in countless overlapping dimensions, scales and scopes. From the planet to the human skull, from the eye to the conventional representation of the atom, the sphere stands as the materialised definition of ‘surrounding’. It implies a centre and the possibility of space as definable in relation to that centre. Expressed mathematically as the infinite set of points that are found to be equidistant to a given point, it is manifested in our encounters with quasi-spherical things, such as oranges, cherries and cannonballs. The mathematical sphere is a pure surface, absolutely thin and hollow – a taut skin, a pure container, dividing inside from outside.

It is, nevertheless, more accurate to define the acoustic field each human perceives and manifests as spherically volumetric. The volume of the sphere is what makes it navigable in terms of variable depth, density and gradation of relative distance – in other words, thickness, a defining characteristic of the auditory field,

the very medium in which soundwaves travel. If the volume of the sphere is analogue to the auditory field, then the shape/surface of the sphere is analogue to the auditory horizon – the limit of listening. Philosophically considered, the pursuit for immersive surround sound experience is not only about fulfilling an ever-increasing need for entertainment, a more encompassing simulation of spatial agency or a more engaging sensorial play. It has deep implications in terms of mirroring and expanding our phenomenological understanding of subjectivity as an embodied being-in-the-world. Acoustic fidelity has not only aesthetic, but also existential repercussions; in a sense, at its most ambitious, it is about potentially bridging the gap between both.

Binaural sound is one of the most realistic technologically mediated representations of the embodied listener's perspective. It starts as a stereo capture technique, using two identical microphones and producing two simultaneous audio channels. What sets it apart is that both microphones are positioned at a distance similar to the average space between the ears, their capsules usually inserted in an artificial²⁸ ear auricle or small enough to be worn in-ear, therefore producing realistic²⁹ ear reverb and acoustic shadow.³⁰ The product of this recording, meant to be experienced by a listener wearing headphones, is a stereo sound field that is convincingly lifelike, in that sounds are perceived as moving around the head, along the axes of three-dimensional space. In other words, it is like borrowing someone's ears. Sonic phenomena recorded binaurally can be experienced close up or far away, moving across the virtual space created by the stereo field, in a direct reference to the body position of the listener – they provide very convincing aural embodiment, paradoxically enabling vicarious proprioceptive agency, in a context of pre-recorded sonic surroundings.

Binaural sound is the type most often used in triggering ASMR, which stands for autonomous sensory meridian response and refers to the 'tingling, static-like sensation across the scalp, back of the neck and at times further areas in response to specific triggering audio and visual stimuli' (Barratt & Davis, 2015, p. 1). A bodily response analogue to 'getting goose bumps' or 'having the hairs stand up on the back of one's neck', but in a positive, soothing way. Those who experience ASMR as a positive euphoric response have been known to compare it to the benefits of orgasm, more concretely to the relaxation and well-being connected to the post-orgasmic state. Ongoing evidence-based research into the physiological and neurological processes underlining ASMR strongly indicates that this analogy is not unfounded (Poerio et al., 2018).

On YouTube, the ASMR community has thrived since the mid-2000s both in numbers and economic success.³¹ The typical ASMR video will consist of the simulation of a haptic ritual, such as ear cleaning, shaving, massage (facial, scalp, head and neck) or merely gentle whispering. Some are quite elaborate, durational role-play

performances of hospitality – receiving a ‘client’, welcoming her, whispering her through the aural manipulation, concluding and sending her home. Object manipulation is often included, particularly wrapping paper, bubble wrap, fur and wool, high-friction surfaces and viscous fluids. One of the most effective and most explicitly erotic is the sub-category of mouth sounds: chewing, sucking, slurping, licking and so on. The most efficient ASMR-triggering sounds are micro-rhythms with random variation, either natural³² or due to human handling, such as scratching, picking, brushing, tapping etc. Most sounds are produced in close proximity or via direct friction on the microphones, which become haptic and acoustic stand-ins for the listener’s own ears.

Even though the user is often encouraged to keep her eyes closed and enjoy the experience, the visual element of the videos is a ‘selling point’, often presenting an aesthetics of self-care, sensuality and borderline eroticism. Warm lights, minimal background to avoid distraction, private intimate settings such as bedrooms and domestic spaces and frequently the clearly lit close-up of the face, bare neck and shoulders of the ‘host’ in full make-up, who moves slowly, smiles, eye-gazes, or whose eyes are cropped above the frame, her glossy lips occupying the visual focus of the video. Though there is diverse gender representation in the hosts and implicit roles in the enacted situations, a cursory browsing of the most recommended ASMR YouTube channels shows that they lean heavily towards catering to the conventional male gaze.

Those responsive to ASMR experience a multi-modal transference of sensations, akin to synaesthesia (Barratt & Davis, 2015, pp. 12-13), known as ‘the tingles’ in popular jargon. Sounds triggering touch sensitivity, a pleasurable tickling where the acoustic is converted into haptic. This is an autonomous, involuntary process – just like sexual arousal. The actual euphoric response to the triggering stimuli occurs in its own terms, according to the listener’s embodied nervous system. Although individually manifested, recent evidence has pointed to the ASMR experience’s strong neurological affiliation to the positive effects of relational behaviours. This refers to the so-called ‘affiliative behaviours’, which include the broad set of interaction between parents, friends and lovers ‘that involve close interpersonal bonds and can include grooming behaviours along with a wider array of care-giving and care-receiving’ (Lochte et al., 2018, p. 302). Appropriately, this refers especially to haptically performed intimacy such as hugging, petting or kissing.

ASMR is heir to the genealogy of headset stereo techniques and their relationship to intimacy – ‘the tingle’ is an embodied response that occurs in an extremely private acoustic space, a cross-modal event with the skin as the site of sensation. ASMR relies on the haptic activation of the body as a vibrant threshold via sonic stimulation. Once more, the locus of erotic transference is the ear, which is acoustically

penetrated via the headphone setup, in an extremely close sound field designed to spark a sensual response.

Binaural sound is also often used in the contemporary trend of VR porn. This usually does not mean what one expects VR to mean – an artificial digital world that we can freely navigate with our transported sensorial apparatus. Instead, VR porn frequently means a passive first-person point of view of a variety of explicit sexual situations and acts. Actual 3D audio or Ambisonics, which is surround sound capture with an integrated array of microphones that can, after processing, create the impression of a dynamic listener position, is still not widespread in porn. However, technology once available commercially tends to become more and more accessible, and the user's matching expectations will no doubt move the market in that direction. What is already easily found is porn meant to be experienced using VR goggles, which provide a stereoscopic image (one small screen for each eye of the wearer) mimicking depth of field – old school 3D effect. Some also incorporate head-motion tracking sensors, and this is where the coupling with 3D Audio is possible, allowing the user not only to 'look around', but to 'listen around', having his stereo field adapt dynamically to the movement of his head, providing a more realistic and immersive acoustic field.

For now, the majority of available 'VR porn' is stereoscopy combined with binaural sound. The first-person perspective relies on the porn actors directly engaging with the user, following scripts that provide the illusion of participation via eye contact and dialogue cues, which attempt to mimic direct exchange. A common example of this type of 'immersive' porn is the 'girlfriend experience' – a porn video completely shot in first-person perspective at eye level, with an episodic story such as a weekend trip to a tropical paradise. Here, the actual explicit porn scenes are integrated in a full visual narrative that might include shopping (the 'girlfriend' models clothes for the 'user' in changing booths, requesting his opinion), romantic meals together, hangouts in the pool, beach sunset picnics etc.

The level of simulation in this porn category ticks multiple criteria of intimacy, and the binaural sound, in situations like whispered sexy conversation while having a meal in a public place, introduces voyeuristic fetish into the role play – by creating acoustic territories of shared intimacy that are weaved into the surrounding depersonalised territories of everyday public spaces. Here, aural desire is nurtured by the sonic exclusion of other potential listeners. On the other hand, details like the rustle of crisp bedsheets during morning sex or shampooing in the shower intersect strongly with ASMR and its sonic strategies of embodiment.

Binaural sound is adapted to headset listening, which is also a near requirement for the consumption of porn – they protect the privacy of the user, while providing a deeper level of anonymity even in private spaces. If headphones allow us to be 'alone together' when used in public spaces, by allowing us to control the territo-

rial dynamics of our aural spaces,³³ they might also do so when worn for the enjoyment of pornography and masturbation. Yet, despite all their potential, as far as ASMR and VR porn can be framed as forms of sonic engagement intersecting with the erotic, they might point to the reverse of what they seem to offer – a radically unmet need for intimate connection, in which a constellation of technical possibilities can only go so far, if the basic removed nature of mediation is not recognised, understood and, when necessary, challenged. Nevertheless, our everyday is increasingly defined by mediated sound phenomena, with their own dynamics of interpersonal exchange and mutuality, still free range for experiment and discovery, readily available for willing listeners.

References

- Anzieu, D. (1989). *The Skin Ego* (C. Turner, Trans.). New Haven and London: Yale University Press.
- Barratt, E.L., & Davis, N.J. (2015). Autonomous Sensory Meridian Response (ASMR): a flow-like mental state. *PeerJ*, 3, e851-e851.
- Cheshire, N.M. (1996). The empire of the ear: Freud's problem with music. *International Journal of Psychoanalysis*, 77(6), 1127-1168.
- Coe, L. (1995). *The Telephone and It's Several Inventors: A History*. Jefferson, NC: McFarland & Company.
- Esman, A.H. (2011). Psychoanalysis and Surrealism: André Breton and Sigmund Freud. *Journal of the American Psychoanalytic Association*, 59(1), 173-181.
- Fielding, R.G. (1990). *Telephone apprehension: a study of individual differences in attitudes to, and usage of the telephone*. Doctoral, Sheffield City Polytechnic.
- Harrison, S. (2012). *Dark Trophies: Hunting and the Enemy Body in Modern War*. New York: Berghahn.
- Hinrichs, T., & Barnes, L.L. (2013). *Chinese Medicine and Healing: An Illustrated History*. Cambridge, MA: Belknap Press.
- LaBelle, B. (2010). *Acoustic Territories: Sound Culture and Everyday Life*. New York: Continuum.
- LaBelle, B. (2014). *Lexicon of the mouth: poetics and politics of voice and the oral imaginary*. New York: Bloomsbury Academic.
- Latham, C.H. (2015). Rethinking the Intimacy of Voice and Ear: Psychoanalysis and Genital Massage as Treatments for Hysteria. *Women and Music: A Journal of Gender and Culture*, 19(1), 125-132.
- Lehtonen, K., & Shaughnessy, M.F. (2015). Sigmund Freud's Enigmatic Relationship to Music. *International Journal for Advances in Psychology*, 4, 1-14.
- Lochte, B.C., Guillory, S.A., Richard, C.A.H., & Kelley, W.M. (2018). An fMRI investigation of the neural correlates underlying the autonomous sensory meridian response (ASMR). *BioImpacts: BI*, 8(4), 295-304. doi:10.15171/bi.2018.32
- Maines, R.P. (1999). *The Technology of Orgasm: 'Hysteria', the Vibrator, and Women's Sexual Satisfaction*. London: The Johns Hopkins University Press.
- Morris, D. (1999). *The Naked Ape*. New York: Delta.
- Ogden, B.H., & Ogden, T.H. (2013). *The Analyst's Ear and the Critic's Eye: Rethinking psychoanalysis and literature*. London: Routledge.
- Pitts-Taylor, V. (Ed.). (2008). *Cultural Encyclopedia of the Body*. Westport: Greenwood Press.
- Poerio G.L., Blakey E., Hostler T.J., & Veltri T. (2018). More than a feeling: Autonomous sensory meridian response (ASMR) is characterized by reliable changes in affect and physiology. *PLoS ONE*, 13(6), e0196645.

- Rice, T. (2012). Sounding Bodies: Medical Students and the Acquisition of Stethoscopic Perspectives. In: Pinch, T.J., & Bijsterveld, K. (Eds.), *The Oxford Handbook of Sound Studies* (pp. 298-319). New York: Oxford University Press.
- Richardson, M.E.J. (Ed.). (2005). *Hammurabi's Laws: Text, Translation and Glossary*. London: T & T Clark International.
- Salvador-González, J. (2016). Per aurem intrat Christus in Mariam. An iconographic approach to the conceptio per aurem in Italian Trecento painting from patristic and theological sources. *De Medio Aevo*, 9(1), 83-123.
- Sharma, A., & Glick, H. (2016). Cross-Modal Re-Organization in Clinical Populations with Hearing Loss. *Brain Sciences*, 6(1), 4.
- Sterne, J. (2003). *The audible past: cultural origins of sound reproduction*. Durham: Duke University Press.
- Vātsyāyana. (2011). *The Kama sutra of Vatsyayana: the art of making love* (R.F. Burton, Trans.). Phoenix, AZ: Heritage Publishers.
- Ward, R. (Ed.). (2015). *A Global History of Execution and the Modern Corpse*. New York: Palgrave Macmillan.

Notes

- 1 Ear-piercing and the use of earrings has been traced to prehistoric times (Pitts-Taylor, 2008).
- 2 See: www.wired.com/2010/11/ears-biometric-identification.
- 3 E.g., in ancestral Chinese medicine (Hinrichs & Barnes, 2013, p. 374) and in early Greece, whose development was ascribed, among others, to Pythagoras and Aristotle.
- 4 The most frequently quoted analysis of the constant opposition between the sexual instinct (Eros) and the several destructive behaviours classified as 'death drives' (Thanatos) is that present in Freud's essay 'Beyond the Pleasure Principle' from 1920.
- 5 E.g., being mentioned already as judicial punishment in the Code of Hammurabi (circa 1700 BC) in ancient Mesopotamia. This punishment was reserved for slaves that either struck the cheek of a free man (Richardson, 2005, p. 105) or denied belonging to their own master (Richardson, 2005, p. 119).
- 6 For a thorough, and often terrifying, overview of the matter see e.g.: Harrison, 2012; Ward, 2015.
- 7 An image of the whole work can be viewed online at: www.museodelprado.es/en/the-collection. A detail referring to the image discussed can be found at: commons.wikimedia.org/wiki/File:Bosch_Jardin_des_delices_detail.jpg#/media/File:Bosch_Jardin_des_delices_detail.jpg.
- 8 First translated into English in 1913 (by A. Brill) and into French in 1926 (by I. Meyerson).
- 9 This denotes the complex processes by which dream formation occurs, and how a trained psychoanalyst might try to reverse engineer the explicitly stated narration of dream logic into the underlying components ('dream thoughts'). These are understood to be the bearers of meaning, brought to the surface from the unconscious via the private, distorted and often fantastic language of dreams.
- 10 A term originally coined by the patient known as Anna O., and sometimes humorously substituted by 'chimney-sweeping', as found in Freud and Joseph Breuer's *Studies on Hysteria* (from 1895).
- 11 In average the interval between 20 Hz and 20 kHz.
- 12 Which up to that point included genital massage as well as 'bloodletting by leeches on the uterus, injections, cauterization of the womb, hydrotherapy, and electrotherapy' (Latham, 2015, p. 126). For a painstaking description of further kinds of treatment targeting female patients see also: Maines, 1999.
- 13 Cupid is the Roman counterpart of the Greek god Eros.

- 14 Players must sit in a circle or in a straight line, close enough that whispering is possible, but not so close that they can hear what is whispered before their turn comes. The first player whispers something to the next player, who then passes on the message to the next to the best of her ability, and so on, until the last player shares out loud what she was told. The message quickly becomes distorted in often amusing and unpredictable ways.
- 15 This refers not only to those within normal hearing range. People with impaired hearing are often experts at positioning their bodies in a given everyday situation in order to minimise background noise, not to mention the instinctive technique of hand cupping behind the ear. Recent research has also pointed to how hearing loss triggers adaptive resources at the level of neuro-plasticity. For more info see e.g.: Sharma & Glick, 2016.
- 16 Morse code is the dominant *lingua franca* of telegraphy, a rhythmic series of dots (short pulses), dashes (long pulses) and silences. It was developed together with the electrical telegraph system and patented in 1840 by American artist and inventor Samuel Morse (1791-1872).
- 17 The very first stethoscope (monaural) was invented in 1816 by French physician René Laennec (1781-1826). For an engaging podcast-form short history of the stethoscope see: www.99percentinvisible.org/episode/the-stethoscope.
- 18 Date of the patenting by Scottish-born inventor Alexander Graham Bell (1847-1922), though the question of who deserves credit for the invention of the telephone is still highly polemic. For more info see e.g.: Coe, 1995.
- 19 We are reminded of the ancient Greek notion of *divine mania* (see Plato's dialogue *Ion*) as describing the state of being possessed by musical sounds, enchained by their magnetic power of confounding the mind and the senses.
- 20 Also in the original sense of the etymology of the word, as coined by French psychologist Alfred Binet (1857-1911): 'magical', from the Portuguese *feitiço*, meaning 'spell', 'enchantment'.
- 21 See e.g.: www.verywellmind.com/afraid-making-phone-calls-tips-3024317. For an earlier study consult: Fielding, 1990.
- 22 Etymologically meaning 'the representation of prostitution', from the Greek *porne* (prostitute) plus *graphe* (drawing).
- 23 In the case of US law e.g.: 'The representation in books, magazines, photographs, films, and other media of scenes of sexual behavior that are erotic or lewd and are designed to arouse sexual interest'. West's *Encyclopedia of American Law*, 2nd edition. (2008). Retrieved December 8, 2018 from <https://legal-dictionary.thefreedictionary.com/pornography>
- 24 There is often a legal reference to the limitations in terms of content, since pornography falls under the wider umbrella of *obscenity*. E.g., US law, whether the content of pornographic material is deemed obscene or not, defines if it is protected by the 1st Amendment (freedom of speech) or otherwise, meaning if it is indeed legal or can be criminalised obscenity, according to West's *Encyclopedia of American Law*, 2nd edition (2008).
- 25 See e.g.: www.drmarkgriffiths.wordpress.com/2012/09/28/aural-sex-a-brief-overview-of-ecoutourism-and-acousticophilia.
- 26 Quoting German author Michael Ende (1929-1995), honorary patron saint of writers and researchers (!).
- 27 On a pragmatic level, this is also understood to be due to the content restrictions of YouTube space, the platform where it is most pervasive.
- 28 Typically used is the so-called 'dummy head', a wooden or plastic realistically sized human head with ear moulds that house two small omnidirectional microphones.
- 29 And personalised, in the case of being worn, since the recordings will be body-specific, including the particular acoustic quality of the unique geometry of the ears of the one wearing them while sound was captured.

- 30 The particular and recognisable sonic quality of sound that is obstructed or absorbed by an interposed solid object or surface; in this case, the cartilaginous auricle of the outer ear creates a distinction between sound coming from the front or behind the listener's head.
- 31 See: www.smartasset.com/insights/the-economics-of-asmr.
- 32 A popular example of 'natural' sonic randomness can be achieved by dissolving effervescent antacid pills in a glass of water.
- 33 Think of the intimate implications of, e.g., offering to share one of your headphones with a stranger during commute, as opposed to using the same headphones to exclude yourself from a conversation happening just beside you in public space.