Research Article

Jim Igor Kallenberg*, Hannah L. M. Eßler

Odyssey Towards a Sirenic Thinking: An Attempt at a Self-Criticism of the Listening Paradigm Within Sound Studies

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Abstract: This text departs from a contradictory claim in deaf studies and sound studies: both disciplines describe a hierarchical regime of the sensible – visuocentrism and audiocentrism – which they try to counter with conceptualisations as "acoustemology" or "deaf gain." However, as we argue, they both thereby erect what they claim to overcome: a sensual regime that privileges one sense over another and a restricted conception of subjectivity deriving from it. First, we draw a philosophical line in the critique of sensual regimes. Then we propose a figure for the transcendence of the separation of the sensible: in rereading of the myth of Odysseus and the sirens, we engage various examples from literature, art, and acoustics to describe sirens as a mythological and technical archetype of the transcendence of the sensual regime, as well as reified subjectivity. The question, then, is not how to escape the sirens, but how they can be approached. It is necessary, we argue, for sound studies to develop a critical self-consciousness of its own restricted concepts in order to move from sonic thinking towards a sirenic thinking.

Keywords: visuocentrism, audiocentrism, sirens, Odysseus, acoustic instrument, sonic thinking, acoustemology, sound studies, critical theory, sensory regime

1 Visuocentrism vs audiocentrism

Sound studies and deaf studies take as their respective starting points two apparently opposing assumptions: while sound studies postulate that visuocentrism is prevalent in Western history and culture, the concepts and theories of deaf studies, by contrast, claim that the Western world and society is deeply audiocentric.¹

The notion of visuocentrism assumes a hierarchical distribution of the sensible in favour of the visual. It has also been referred to as "visualist ocularcentrism," "supremacy of the eye," "hegemony of vision," or a "visual regime." Sound studies scholars detected visuocentric thought already in Plato's philosophy of the eye, "supremacy of the eye," "supremacy of

¹ See also Friedner and Helmreich, "Sound Studies Meets Deaf Studies," 164.

² Feld, "Acoustemology," 15.

³ Herzogenrath, "Sonic Thinking," 4.

⁴ Sterne, "Hearing," 66.

⁵ Herzogenrath, "Sonic Thinking," 3.

⁶ Voegelin, Political Possibility, 155.

^{*} Corresponding author: Jim Igor Kallenberg, ARS:Art-Research-Sound, School of Music Mainz, Johannes Gutenberg-University of Mainz, Mainz 60316, Germany, e-mail: jikallenberg@uni-mainz.de

Hannah L. M. Eßler: Institute of Theatre Studies, Department of Philosophy and Humanities, Freie Universität Berlin, Berlin 12165, Germany

and, as Jonathan Sterne has observed, visuocentrism is assumed to be at the heart of Western culture throughout history: scholars "claimed that the hallmarks of the modern era – reason, rationalism, the subject/object split, science, and capitalism - all emerged from the privilege of sight over audition." In sound studies, the main problem with visuocentrism is, as posed by Salomé Voegelin, that vision "by its very nature assumes a distance from the object."8 Therefore, it constitutes the separation of subject and object. By contrast, hearing is considered to question the subject-object division, in that subject as well as object is immersed in the emanation of sound.9 Bernd Herzogenrath argues that "the metaphysics of being, representation, and identity" as well as "central categories like '(in)finity,' 'distance,' 'abstraction,' and 'objectivity'" are "rooted in the ubiquity of a 'visual regime."¹⁰ Voegelin thus claims that any "dualism" is the result of "the devocalization of thought by the logos" and "a mere symptom, albeit with consequences, of a visuocentric philosophy."11

A quite different perspective is offered by deaf studies scholars. They have coined the term "audism" to describe a system of privilege based on audiocentrism. ¹² Referring to Derrida's writings on phonocentrism. H-Dirksen L. Bauman criticises the hegemony of "voice as presence" and the confusion of language and (auditive/verbal) speech, which has been employed to discredit sign language as merely an aid for communication and, as a consequence, deaf people as languageless and therefore sub- or unhuman.¹⁴ This "metaphysical audism" is, according to Bauman, the "root" of diverse discriminatory practices of all kinds. Oral educationists banned sign languages, forced deaf children to use their voices and to sit on their hands in class. These individual pedagogical approaches, differing in their actual implementation and theory – despite being contested by contemporaries - were mainstreamed and institutionalised by the Second International Congress on Education of the Deaf in Milan in 1880, where sign language, according to an eyewitness, was presented "as a defunct relic of past darkness, as an exploded theory, unsuited to the present age of enlightenment and progress."15 As a consequence of the Congress, this purely visual language was banned from most schools for the deaf in Europe and the US. Deaf people were subjected to humiliating, painful, and in nearly all cases senseless methods of "healing" them¹⁶ and for a very long time were denied basic rights, such as the right to bear witness or to inherit feudal property. 7 Some scholars see evidence for a continuation of these practices in the growing number of cochlear implantations in deaf infants. 18 Deafness is still mostly regarded as a tragic loss of hearing in need of cure. Possible gains from deafness, like having access to a rich visual culture and language, are widely ignored.¹⁹

Hence, the deaf artist Christine Sun Kim's claim that "we live in a very audio-centric world!"20 is not an academic one, but a conclusion drawn from everyday experience. Deaf studies as an academic discipline

⁷ Sterne, "Hearing," 67.

⁸ Voegelin, Listening, xi.

⁹ Ibid., xii.

¹⁰ Herzogenrath, "Sonic Thinking," 3.

¹¹ Voegelin, Political Possibility, 155.

¹² See e.g. Humphries, Communicating Across Cultures; Eckert and Rowley, "Audism;" Bauman, "Audism," "Listening to Phonocentrism;" and Gertz, "Dysconscious Audism" for a rough chronology of the discussion.

¹³ Bauman, "Listening to Phonocentrism," 50.

¹⁴ Bauman, "Audism," 242.

¹⁵ Elliot, "The Milan Congress," 149.

¹⁶ See i.e. Virdi, Happy Hearingness; Lane, The Mask of Benevolence. Here is just one of the curious interferences of sound studies and Deaf studies: After having heard of the "wonders of galvanism" (letter to Wegeler, reproduced in Rolland, Beethoven, 79), Beethoven tried the then common galvanotherapy against his hearing loss and found it unbearable. If he would have asked the Berlin-based teacher of the deaf Ernst Adolf Eschke, he probably would not have tried it - Eschke concludes already in 1803: "I have been confirmed in my disbelief in galvanism; for it was [...] of no use at all." (Eschke, Galvanische Versuche, 72).

¹⁷ This is known e.g. for Spain, dating back in the thirteenth century. See Plann, A Silent Minority, 18.

¹⁸ Bauman, "Audism," 241.

¹⁹ Bauman and Murray, Deaf Gain. However, the concept of "Deaf Gain" can be regarded more as a shift in tactics in attacking what Bauman calls the "metaphysical audism" in Western society, than describing an actual shift in deaf-hearing power structures and in discriminatory practices against D/deaf individuals.

²⁰ Sun Kim, "Enchanting Music of Sign Language," min. 14:09.

can provide a theoretical framework for understanding these experiences, and thereby offer a tool to address and to overcome the discriminatory structures at their root. Both disciplines, deaf studies and sound studies, share a common struggle for funding, jobs, and self-justification in the academic landscape, which may also explain their claims of offering an alternative to the "audiocentric" or "visuocentric" mainstream.

Both disciplines thus assume a hierarchical regime of the senses that they attempt to challenge. For sound studies scholars, the visual regime is intertwined with a specific kind of Western subjectivity. Listening practices and the figure of the listener are erected against the dominant visual regime of the sensible.²¹ Acoustemology, sonic thinking, and sonic epistemologies conceptualise epistemic subjectivities of listening in such a way as to offer an alternative to visuocentric subjectivity. These conceptualisations propose a "real" listener in opposition to a product of traditional musicology, the ideal listener. Accordingly, for Salomé Voegelin, the "subject in sound is an empirical not a transcendental subject."²² Albeit, the (transcendental) ideal listener itself was already aimed to overcome reified subjectivities in transcending given empirical subjectivities of listening. Ewa Schreiber argues that there are "two axes of compositional thought: the ideal audience imagined by a composer versus the actual, physical audience of a given piece."²³ Between ideal and empirical listeners, the role of art was to challenge the reification of this opposition through artistic transformation of the sensual experience and thus subjectivity. Schreiber draws "the conclusion that we stand here midway between the real and the imagined audience. Thoughts on the physical audience coincide with the vision of ideal (future) listeners, and social projects seem close to a utopia."24

In order to sustain the critical and transformative tension towards "utopia," the following text develops two critical figures: the first is the figure of the deaf non-listener, which emerges from a philosophical engagement with the division of the sensual and embodies a figure of self-criticism (Sections 2 and 3). The second figure is that of the sirens, transcending the conventional division of the sensual both as mythological and as technical-acoustic objects (Sections 4 and 5). Both figures together project a critical selfconsciousness of the sirens, which can freely relate to the object as self-consciousness of the object. Following the term "sonic thinking" shaped by Bernd Herzogenrath,²⁵ this self-consciousness is suggested as "sirenic thinking."

2 Odysseus as a listener

For Horkheimer and Adorno, the prototype of both the restricted Western subjectivity and of a listener is Odysseus passing the sirens. In Homer's story he not only seals his comrade's ears with wax - thereby becoming the one and only, individual listener – but, because he has "a will to listen," orders them to tie him to the mast – thereby preventing himself from becoming anything but a listener. Out of those who are literally "in the same boat," Odysseus thereby makes a distinction between the deafened rowers and the contemplative listener, whose limbs are bound.

Horkheimer and Adorno describe this situation:

The bonds by which he has irrevocably fettered himself to praxis at the same time keep the Sirens at a distance from praxis: their lure is neutralized as a mere object of contemplation, as art. The fettered man listens to a concert, as immobilized as audiences later, and his enthusiastic call for liberation goes unheard as applause.27

²¹ With a critical impact, Sterne outlined these attributions in the "audiovisual litany." (Sterne, Audible Past, 15).

²² Voegelin, Listening, 15.

²³ Schreiber, "Face of the Other," 233.

²⁴ Ibid. 237.

²⁵ Herzogenrath, "Sonic Thinking."

²⁶ Homer, *Odyssey*, 12: 39–55 and 153–201.

²⁷ Horkheimer and Adorno, "Dialectic of Enlightenment," 27.

The ropes that he had agreed to be tied with function as the ticket to the sirenic concert and keep him away from the desired object. It is in his inability to reach the sirens that he feels his unfreedom through his self-made chains (Figure 1).

But what is Odysseus longing for so desperately? Reducing what the sirens represent to deadly danger, seduction, and dubious promises, distracting Odysseus and leading him off his path, is too simplified. In Plato's *Republic*, sirens appear in a quite complex cosmo-mechanical setup. While the spindle of necessity is setting the cosmic spheres in motion, the eight sirens sit on the spindle's circles and sing. Their voices sound together in one cosmic harmony.²⁸ In Homer, they promise knowledge of "all things that come to pass upon the fruitful earth."²⁹ In other words, a state in which the "past has become citable in all its moments"³⁰ – which for Walter Benjamin is the definition of a mankind redeemed through and from history.

But Odysseus bans this promise of redemption to save his live. He degrades the sirens' song to mere contemplative art by excluding from life that which is more than the preservation of life. Odysseus constitutes his identity as a subject by reducing the sirens to objects that threaten this identity and he excludes thereby the experience of what is beyond self-identity. With Odysseus, the reified Western subjectivity was erected: "the unity of his own life, the identity of the person, have been hardened." Ropes and wax, meant to protect the self, constitute Western subjectivity as a restricted sensual regime: they divide physical and mental labour, (desiring male) subject and (desired female) object, wisdom and love, contemplation and action. They exclude from life that which life is about, by calling it nature. For Horkheimer and Adorno, this turns both the life of Odysseus as master, and that of the rowers as workers, into the sacrifice of life; it turns the rejection of nature into the subordination to nature; and freedom into a chain: "Humanity had to inflict terrible injuries on itself before the self – the identical, purpose-directed, masculine character of human beings – was created." **32**

Here, the listener is not composed in opposition to Western subjectivity, but in Odysseus, the listener himself becomes its prototype. The subject-object split as well as the division of contemplation and action is not dissolved by the listener but invented by it.³³

3 The distribution of the sensible

The tension within the concept of subjectivity between self-preservation and free encounter with the object was employed philosophically through the figures of the empirical real and the transcendental ideal listener. The ideal listener is not bound to self-preservation and is thus, in the Kantian sense, disinterested. It was conceptualised philosophically as a utopian addressee of sonic production to overcome the condition of reified subjectivity.³⁴ Because the ideal listener consists in the negation of subjective biographical or biological determinations, the ideal listener's experience of art is not limited by education, personal interest, race, gender, hearing status, or position in society, which bind the aesthetic experience to the self-preservation of the individual conditions. In other words, the ideal listener has no personal stakes in the experience of the work of art and thus transcends the divisions that separate empirical listeners and

²⁸ Plato, *Republic X*, 617b (334). See also Welsh, "Sirene," 211f.

²⁹ Homer, Odyssey, 12: 191.

³⁰ Benjamin, "Concept of History," 390.

³¹ Horkheimer and Adorno, "Dialectic of Enlightenment," 25.

³² Ibid., 26.

³³ In this sense, Sterne pointed out that "[s]ound studies has a creeping normalism to it – that is, an epistemological and political bias toward an idealized, normal, nondisabled hearing subject." (Sterne, "Hearing," 73). Likewise David Novak and Matt Sakakeeny note that "[s]ound studies has often reinforced Western ideals of a normative subject, placed within a common context of hearing and listening." (Novak and Sakakeeny, "Introduction," 7). Already Horkheimer and Adorno connected Odysseus' status of a "listener [Hörender]" to his "bondage [Hörigkeit]." (Horkheimer and Adorno, "Dialectic of Enlightenment," 46).

³⁴ Schreiber, "Face of the Other."



Figure 1: A typical concert situation painted by Alexander Bruckmann in 1829. Original painting held at Staatsgalerie Stuttgart, digital copy from Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Alexander_Bruckmann_Odysseus_und_die_ Sirenen_1829.jpg).

social conditions of subjectivities. The form of this transcendence of the separations between the individuals was the regulative concept of the Kantian sensus communis.35

Jacques Rancière further employed Kant's concept of the sensus communis, referring to it as the aesthetic regime to be considered as the paradoxical form of a "common sense, a 'sense of community,' which is political to the extent that it is the seat of a radical indifference."36 The aesthetic experience corresponds to political freedom precisely insofar as it frees itself through an indifference to political interest. The disinterested indifference is therefore the source of the universal character of the sensus communis and its potential of free transformation of subjectivity by emancipating it from the limitations of the selfpreserving and thus interested self. The aesthetic regime constitutes itself through the negation of all subjective (biographical, social, biological) differences and thus the divisions that separate the listeners from each other and from the artwork. Insofar as an event is perceived in its autonomous singularity, it suspends all given criteria of difference among the community that is formed around and by it, as well as the criteria for the sensual modes of its perception:

³⁵ Kant, Critique of Judgement, e.g. §6 (p. 42f).

^{36 &}quot;Das herauszuarbeitende Paradox besteht darin, dass es einen gemeinsamen Sinn, einen 'Gemeinsinn' gibt, der in dem Maße politisch ist, in dem er Sitz einer radikalen Gleichgültigkeit ist." (Rancière, "Paradoxien," 79). First published in German. Here and in the following, when we cite from non-English texts, the translations are our own.

The aesthetic regime asserts the absolute singularity of art and, at the same time, destroys any pragmatic criterion for isolating this singularity. It simultaneously establishes the autonomy of art and the identity of its forms with the forms that life uses to shape itself. [...] The aesthetic state is a pure instance of suspension, a moment when form is experienced for itself. Moreover, it is the moment of the formation and education of a specific type of humanity.³⁷

This specific type of humanity is characterised threefold. First, it overcomes the Odyssean division of life and art, action and contemplation. Second, it overcomes the separations of the sensible, the modes of perception by rejecting every pre-given rule of its sensual determination. Third, it overcomes the divisions between individuals by a paradoxically political form of indifference in the face of an emergent new *sensus communis*, which is realised in the formation of a new type of humanity. The event of the artwork is thus a momentary instantiation of a utopian community in the actual present.

The modern idea of politically overcoming the distribution of the sensible as a limitation to the entire richness of the sensual was met by the early Karl Marx. In a quite cryptic and unemployed section of his early *Paris Manuscripts* of 1844, Marx offers a reading of the human sensual condition that does not naturalise its restricted distribution. For Marx, the sensual condition is limited by its use in alienating capitalist society, which at the same time offers the potential and means to overcome these limitations:

Private property has made us so stupid and one-sided that an object is only *ours* when we have it – when it exists for us as capital, or when it is directly possessed, eaten, drunk, worn, inhabited, etc., – in short, when it is *used* by us. Although private property itself again conceives all these direct realizations of possession as *means of life*, and the life which they serve as means is the *life of private property* – labour and conversion into capital. In the place of *all* physical and mental senses there has therefore come the sheer estrangement of *all* these senses, the sense of *having*. [...] The transcendence of private property is therefore the complete *emancipation* of all human *senses* and qualities.³⁸

For Marx, our specific distribution of the sensible is thus not naturalised. He claims that "a musical ear, an eye for the beauty of form, in short, senses capable of human gratification" must "be either cultivated or brought into being."³⁹ The sensual condition thus is assumed to be a social product, not a natural condition and "for this reason the *senses* of the social man *differ* from those of the non-social man. [...] For not only the five senses, but also the so-called spiritual senses, the practical senses (will, love, etc.), [...] all these come into being only through the existence of their objects, through *humanised* nature"⁴⁰ – that is (self-) transformative action in history. To declare a metaphysical audism or, respectively, a visuocentric philosophy to be the root of the Western distribution of the sensible is a confusion of cause and effect. In contrast, history and social relations produce a specific kind of subjectivity and sensual regime, which is then reified in metaphysical assumptions. Thus, Marx continues:

The *forming* of the five senses is a labor of the entire history of the world down to the present. The *sense* caught up in crude practical need has only a *restricted* sense. For the starving man, it is not the human form of food that exists, but only its abstract existence as food. [...] The care-burdened, poverty-stricken man has no *sense* for the finest play; the dealer in minerals sees only the commercial value but not the beauty and the curious nature of the mineral: he has no mineralogical sense.⁴¹

In other words, the dealer is not disinterested and cannot see the mineral as mineral in its beauty, but only insofar it can be sold as a commodity.⁴²

For Marx, the senses can be subject to a transformation by which they, first, "become directly in their practice *theoreticians*" – a formulation of sensual epistemologies *avant la lettre* – and, second, "relate themselves to the thing for the sake of the thing, but the thing itself is an *objective human* relation to itself

³⁷ Rancière, Distribution of the Sensible, 19.

³⁸ Marx, "Paris Manuscripts of 1844," 87.

³⁹ Ibid. 89.

⁴⁰ Ibid. 88f.

⁴¹ Ibid. 89.

⁴² Yet, commodification and private property are not simply opposed to the "complete emancipation of all human senses and qualities" (Marx, "Paris Manuscripts of 1844," 87), but are at the same time the very means of it.

and to man, and vice versa."43 Thus the senses are a product of free (self-)transformation. The transcendence of private property, of course, is not the task of sound studies. Yet, regarding how we relate through our senses to ourselves, to each other, and to the world, sound studies can fail the task of critically engaging the present condition of the distribution of the sensible and its respective subjectivity, and thus obscure the potential of its transformability and transcendence.

This utopia is also present today mutatis mutandis, for example when Holger Schulze calls for a sensual "economy of plenty":

The whole of sensory percepts is potentially of an epistemic quality. The materialization of the senses [...] is yet to be completed in actual research practices [...] and critique, operating in these areas of the sensory [...]. From the scarcity economy of the meek characters and signals, it is time to move on to an economy of plenty and multiplying diversity of the senses, of experience and performativity, of all materialities accessible and not accessible to humanoid aliens. From identity to generativity: let the corporeal sensorium unravel.44

In sound studies though, this potential is broadly cut off from the utopian framing of a sensus communis, as the transcendent concept of the ideal listener is replaced with the real listener. Voegelin highlights "listening as an actual practice"45 and Holger Schulze considers the "truly idiosyncratic obsession" of the "listening body of the individual researcher [...] pivotal in acoustemology, as well as in other sonic epistemologies."46 He locates the transformative potential in "the individuality [...] of the individual researcher - and hence in her or his personal traits of gender, body, age, cultural and social backgrounds."47 Here, "real" listeners are, like Odysseus, tied to the status quo of reified subjectivity. They are privatised and tied to the present "community, as contingency, in the playful chance of exchange," 48 as Voegelin envisions. Accordingly, the distribution of the sensible as well as the divisions of knowledge and love, master and worker, subject and object, contemplation and action are not engaged in their potential for historical and social transformation: "As sonic subjectivities we meet not in reason but in affection, and that meeting is not dialectical, it does not progress towards an ideal community."49

Here, the alternative of the personal real and the impersonal ideal listener seems to be a dead end. The ideal listener transcends the current distribution of the sensible but seems to be pushed back to the realm of ideas as a regulative concept that, as such, regulates nothing. In other words, while the ideal listener represented the utopian addressee of sonic production, the ideal listener does not exist and thus actually does not listen at all. In order to solve this substantial limitation, the "real listener" jumps in. The erection of the real listener, in turn, is tied to and re-instantiates, again and again, that which is to be overcome – the reified subjective condition of the distribution of the sensible – by rejecting the transcendent notion of the disinterested universality of the sensus communis. Listeners are either non-existent or they are reduced to their contingent empirical properties and, as Ewa Schreiber claims with regard to individualisation and differentiation of recipients, "the audience becomes a very obscure category." 50

For locating the potential of transforming the sensible between ideal and real listeners, Nietzsche brings clarification on how to approach both of them. He points to a very specific constellation within the reified opposition of personal real and impersonal ideal subjectivities in art. In his Birth of Tragedy, the work of art starts from a personal subjective stance. But it does not stop there – "since to us the subjective artist is simply the bad artist." The artwork through its course becomes "triumph over subjectivity, deliverance from the self, the silencing of every personal will and desire" towards "disinterested contemplation."51

⁴³ Marx, "Paris Manuscripts of 1844," 87f.

⁴⁴ Schulze, Sonic Persona, 153.

⁴⁵ Voegelin, Listening, xiii.

⁴⁶ Schulze, Sonic Persona, 153f.

⁴⁷ Ibid. 153.

⁴⁸ Voegelin, Listening, 190.

⁴⁹ Ibid. 189f.

⁵⁰ Schreiber, "Face of the Other," 239.

⁵¹ Nietzsche, "Birth of Tragedy," 37.

Nietzsche proposes the work of art to be a process starting from, but working through and against, subjectivity. Like what Nietzsche calls the "mystical process of un-selving,"52 the work of art can be a transformation of subjectivity – not affirmation of the self, but self-criticism. Self-criticism is not naively "impersonal," but it is not "personal" either. It is anti-personal. What Schulze excludes in his notion of the "truly idiosyncratic obsession,"53 is this "truly idiosyncratic obsession" with truth. Subjectivity, deprived from this potential of self-transformation, is tied to the production and reproduction of its reified, identical, biographical, biological, and social form and reinstates metaphysics and ontology, instead of overcoming all of that. The critique of listening, as Bernd Herzogenrath notes, must be committed "to the liberation from human subjectivity towards a realm of the experience of sound itself."54

Here, the individuality of the listener is not to be excluded. In fact, the Apollonian principium individuationis is a profound and necessary instrument of sonic thinking. But neither is the individuality of the listener to be naturalised and reified by given subjectivities. "Apollo found it impossible to live without Dionysus" and "[w]herever the Dionysian voice was heard, the Apollonian norm seemed suspended or destroyed."55 Instead, the ideal and the real listener should be joined by one of their type: the deaf non-listener. Following Mara Mills's definition, deafness is not something just outside or opposed to hearing, but deafness is itself a variety of hearing. 56 The deaf non-listener's specific listening condition is to not hear. So, the individual listening of a deaf non-listener is specified by the indifference towards the heard. The deaf non-listener is thus disinterested. And the deaf non-listener is a real, existing person, not a Kantian regulative concept. The deaf non-listener is thus disinterested not only in concept, but in fact. While the ideal listener does not experience anything, the emphasis on the real listener narrows down experience by limiting the object of sonic thinking and the sonic to reified subjective dimensions, to the audible and the human audible range.⁵⁷ Both are obstacles to the transformative potential of sound, as they determine sound within the expectable and thus exclude exactly the potential of experience: the encounter with what is beyond the expectable. The deaf non-listener is not a proposition for a positive concept of (sonic or any) subjectivity. In the context of sound studies, it serves as a figure for self-criticism of the discipline's own ears, which are sealed with wax (not to be confused with deafness, which is a sensual condition and not the absence of it). In this sense, the deaf non-listener opens up the horizon for a notion of sound beyond the auditory field of the restricted human ear.

4 Sirenic sinking

Beyond Odysseus are the sirens. After Odysseus has passed them, they have not just disappeared from the stage of history – on the contrary, they have a quite vivid and transformational afterlife: early representations show sirens as a mix of bird and human, some of them angel-like winged figures. In many paintings, but also in literary figures such as Brentano's Loreley or Wagner's Rhine daughters, they become rather amphibian creatures, women living between water and land, often imagined as mermaids with fish tales (Figures 2 and 3). Their name is used for a biological classification of two families of sea cows as well as for an "acoustics machine designed to measure the vibrations of the air that constitute sound."58 Today they indicate a device "producing a penetrating warning sound." 59 Very recently, a threatening creature called

⁵² Ibid. 39.

⁵³ Schulze, Sonic Persona, 154.

⁵⁴ Herzogenrath, "Sonic Thinking," 8.

⁵⁵ Nietzsche, "Birth of Tragedy," 34f.

⁵⁶ Mills, "Deafness," 53.

⁵⁷ This is also addressed among others by Mills, "Deafness;" Sterne, "Hearing;" and Friedner and Helmreich, "Sound and Deaf." And it implies a materialist conceptualisation of sound as proposed prominently in Goodman, Sonic Warfare.

^{58 &}quot;nouvelle machine d'acoustique destinée à mesurer les vibrations de l'air qui constituent le son." (Cagniard de la Tour, "Sur la sirène," 167).

⁵⁹ Entry "Siren" in Merriam-Webster Dictionary.



Figure 2: There are countless illustrations of Odysseus' encounter with the sirens. In most of them, Odysseus' depiction does not change so much – the sirens', on the other hand, changes a lot. Here shown as creatures of the sea, they appear as birdwomen in Figure 3. Painting by Herbert James Draper, ca. 1909, held at Ferens Art Gallery, Kingston upon Hill. Digital copy from Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Draper_Herbert_James_Ulysses_and_the_Sirens.jpg).

"Siren Head" haunts science fiction and gaming communities in the internet.⁶⁰ These quite different variations of the siren throw up questions: is the siren machine or myth, human or animal, fish or fowl?⁶¹ Is it their visible beauty (as in the case of the Loreley), their wisdom, or their singing that seduces the sailors? A possible answer lies in the questions themselves: What if the "or" in each of them is replaced by an "and"? In each of the cases, sirens, with their physical ambiguity, embody that which transcends traditionally separated sensible features, given definitions, species, and limits.

In the field of acoustics, Cagniard de la Tour in 1819 named a new "acoustics machine" siren, "because of this property to be sonorous in water [like in air]." From this amphibian position, sirens soon called into question definitions of sound itself. Ernst Florens Friedrich Chladni in 1826 claims sirens produce a "sound without sounding body, only through shocks directly communicated to the surrounding air." These

⁶⁰ Styler, "Investigating the Mysterious Siren Head."

⁶¹ Shakespeare exposes the unsettling effect of that physical ambiguity in a joke – as usual with Shakespeare, a sexual one: Falstaff says in *Henry IV* of the hostess Mistress Quickly: "Why, she's neither fish nor flesh; a man knows not where to have her." (Shakespeare, *Henry IV* 1, 3.3.127–8 (p. 69)).

^{62 &}quot;C'est à cause de cette propriété d'être sonore dans l'eau, que j'ai cru pouvoir lui donner le nom sous lequel elle est designee." (Cagniard de la Tour, "Sur la Sirène," 171).

^{63 &}quot;Tönen ohne klingenden Körper, bloss durch unmittelbar der umher befindlichen Luft mitgetheilte Stösse." (Chladni, "Ueber Töne," 456f).



Figure 3: Sirens as a mix of human and bird in a painting by William Waterhouse, 1891, held at the National Gallery of Victoria, Melbourne. Digital copy from Wikimedia Commons (https://commons.wikimedia.org/wiki/File:John_William_Waterhouse_-_ Ulysses_and_the_Sirens_(1891).jpg?uselang=de).

"chocs" ⁶⁴ also shook the common understanding of sound: according to Chladni, sound, until then understood as the alternating vibration of a body, had now to be defined as intermittent knocks, beats, or shocks on a medium. ⁶⁵

Only a few years later, Félix Savart followed up on much earlier experiments by Robert Hooke and developed a siren-like wheel (Figure 4) to detach sound not only from the body of the sounding object, but also from the listener's body: in experimenting on the human hearing range, Savart needed an instrument capable of producing "the highest sounds of the musical scale, without the intensity of the sound decreasing." Using the principle of the siren to detect the limits of the human hearing spectrum implies that what sirens produce beyond this spectrum is also sound. In this experiment, (human) hearing does not define what sound is, but sound defines hearing by determining its limits.

Sirens not only touch on the external limits of human hearing but show its internal fragile constitution. The sirens constructed and used by Friedrich Wilhelm Opelt, August Seebeck, Heinrich Wilhelm Dove, Hermann von Helmholtz, or Cagniard de la Tour are metal or card discs with regular rows of holes (Figure 5). Like a punch card, they consist of a succession of interruptions, which brings Alexander Rehding to call them "digital' *avant la lettre*." If this disc is turned and a stream of air is led through the holes, from the moment we hear more than around 20 impulses per second, the rhythm merges into a pitch, which is rising with the speed of the wheel. To hear the sound, therefore, can be called the effect of an acoustical illusion:

⁶⁴ Cagniard de la Tour, "Sur la Sirène," 168.

⁶⁵ Chladni, "Ueber Töne," 455.

⁶⁶ "produire les sons les plus élevés de l'échelle musicale, sans que pour cela l'intensité même du son diminuât." (Savart, "Notes Sur la Sensibilité," 341). For Savart's experiments on the human hearing range, see McKusick and Wiskind, "Félix Savart," 417; Jackson, "From Scientific Instruments," 206. Savart of course was not the first trying to define the human hearing range, and his results were not uncontested (see e.g. Mühlhans, "Low Frequency and Infrasound"). But Savart was the one referring explicitly to the potential of the siren for these experiments. Seebeck, who later questioned Savart's findings, used a new siren himself.

⁶⁷ There are even some cautious speculations that Savart's wheel was the first man-made ultrasonic sound generator (Graff, "History of Ultrasonics," 5).

⁶⁸ Rehding, "Of Sirens Old and New," 83.

⁶⁹ A demonstration of this working principle with a disc siren by Opelt was produced by the Fondazione Scienza e Tecnica and can be accessed through the database *Sound and Science: Digital Histories*: https://soundandscience.de/node/348.

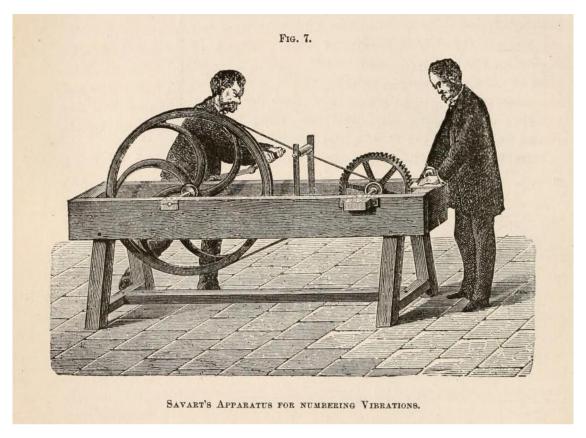


Figure 4: Félix Savart in 1830 determining pitch with his siren-like wheel to prove that what humans do not hear can also be called sound. Illustration from "Wave-Action in Nature," *The Popular Science Monthly* 3 (1873), 8.



Figure 5: Cardboard disc siren by Friedrich Wilhelm Opelt, made by Rudolph Koenig in Paris (ca. 1865). Harvard Museums of Science & Culture, Collection of Historical Scientific Instruments, Inventory Number 1997-1-1018 (http://waywiser.fas.harvard.edu/objects/1697/opelt-siren?ctx=d8d75dd6-7d4d-4406-a312-014f837360ab&idx=0).

we start hearing sounds where we stop hearing the silence between the beats. The siren is the visual proof of that: once the disc stops turning, we can see what sound consists of – a series of beats or shocks, and the breaks in between them.

This potential of transcending our human subjective concept of sound was also inspiring for the music scholar Richard Pohl. In his "acoustical letters" from 1852, Pohl described "the siren of our century, which

can well compete in peculiarity of effect with the one that once lured Odysseus. Even if it is less rich in poetry – for it is only a machine – it does not thereby appear any less magical."⁷⁰ Pohl's siren is a rod, placed in the middle of a dark room and set to gradually increase vibration. In his description of the effect of this "ideal experiment,"⁷¹ Pohl follows Dove: the siren, vibrating faster and faster, performs a glissando through the whole spectrum of human perception. At first, "I feel its vibrations, as the hand senses its strokes when touching it."72 Then, as the vibration becomes faster, "I hear a noise. There are individual strikes or shocks that I distinguish with my ear, small explosions whose succession I am able to separate."73 When these strikes or shocks are too fast to be distinguished by the ear, it starts to hear a low bass tone, passing through all registers up to the highest shrill pitch, then turning into a temperature, finally traversing the whole spectrum of light before "sinking back into night." 74 Yet, as Pohl concludes, the "gap between sound and light is too wide to be bridged with one of our inadequate means."⁷⁵ In other words, the ideal siren is yet to be invented, while the idea of the siren traversing various sensory modalities is already there.

Another man, well-known to Richard Pohl, at the same time had a quite similar project in mind. "As the spirit of *Community* split itself along a thousand lines of egoistic cleavage, so was the great united work of Tragedy disintegrated into its individual factors, "76 with the opera becoming "a chaos of sensuous impressions."77 This condition, in which "man has not one only Sense but separate Senses,"78 should be mediated by the "Art-work of the Future," of which the artist is not Wagner himself, but "the Folk." In the division of these senses also lies the potential for artistic transformation: "The boundaries of the separate senses are also their joint meeting-points, those points at which they melt in one another and each agrees with each."80 This project for Wagner can only be achieved through the "revolution of mankind."81

There is a striking resemblance between Wagner's early writings, Marx' politics of the sensual, and the siren experiment Pohl describes. Siren figures also reappear throughout Wagner's work, and a siren-like glissando through the whole orchestra even opens Wagner's Rheingold and thus the whole Ring-cycle (Figure 6).82 Here, wherever the established order and separation of disciplines, senses or individuals, the principium individuationis, is challenged, sirens are involved. Both, the mythological and the technical sirens challenge and transcend conceptions of the division of the sensible.

^{70 &}quot;Das ist die Sirene unseres Jahrhunderts, welche an Eigenthümlichkeit der Wirkung sich wohl mit jener messen kann, die einst Odysseus lockte. Ist sie auch weniger poesiereich - den sie ist ja nur eine 'Maschine,' - erscheint sie darum nicht weniger zaubervoll." (Pohl, Akustische Briefe, 62).

^{71 &}quot;ideale[r] Versuch." (Pohl, Akustische Briefe, 62).

^{72 &}quot;ich fühle seine [des Stabes] Schwingungen, denn die Hand empfindet seine Schläge, wenn sie ihn berührt." (Pohl, Akustische Briefe, 61).

^{73 &}quot;nun vernehme ich ein Geräusch. Es sind einzelne Schläge oder Stöße, die ich mit dem Ohr unterscheide; kleine Explosionen, deren Aufeinanderfolge ich zu trennen vermag." (Pohl, Akustische Briefe, 61).

^{74 &}quot;bis [...] Alles wieder in Nacht versinkt." (Pohl, Akustische Briefe, 62). A full translation of the passage can be found in Rehding, "Of Sirens Old and New," 86.

^{75 &}quot;Die Kluft zwischen Ton und Licht ist zu groß, um sie mit einem unserer unzureichenden Mittel zu überbrücken." (Pohl, Akustische Briefe, 62–3).

⁷⁶ Wagner, "Art and Revolution," 35.

⁷⁷ Ibid. 44.

⁷⁸ Wagner, "Art-Work of the Future," 97.

⁷⁹ Ibid. 204-5. The early Wagner approaches the "Folk" negatively, not as being but becoming; not as substantial essence, but as future outcome of the process of revolutionary self-transformation: "However, neither you [bourgeois intellectuals] nor this rabble do we understand by the term, the Folk: only when neither Ye nor It shall exist any longer, can we conceive the presence of the Folk." (Wagner, "Art-Work of the Future," 87).

⁸⁰ Wagner, "Art-Work of the Future," 97.

⁸¹ Wagner, "Art and Revolution," 53 and 64. When this revolution failed in 1848 and its aftermath, Wagner turned to mysticism.

⁸² Not only can the Rhine daughters be interpreted as sirens, and, as Rehding has mentioned, the glissando opening of the Rheingold seems to be a musical transcription of Pohl's experiment (Rehding, "Of Sirens Old and New," 101 note 26).

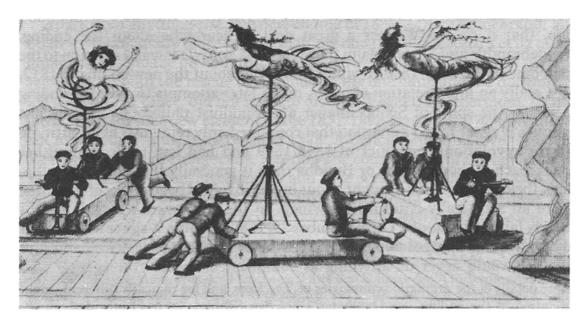


Figure 6: In Wagner's *Rheingold*, the sirens are not only audible but also visible. Stage machinery and manpower make them float around, as depicted in this backstage view of the first performance in Bayreuth, 1876. Nicholas John, ed, *English National Opera/The Royal Opera Guide* 35: *The Rhinegold/Das Rheingold*. London: John Calder, 1985, 14.

5 From myth to fairy tale

Since the time of Pohl and Wagner, sirens have become increasingly popular. Due to the rise of electricity⁸³ and their mass production, they soon were employed as regulators of the workday, on ambulances, steamers, fire brigades, and police cars, or in World War I and II. According to Adorno and Horkheimer, "the development of the machine has become that of the machinery of control."⁸⁴

It was not their special beauty that made them replace other acoustic regulative signals, such as church bells, but their sheer loudness. They were able to drown out the noise of machines – and reach a large number of people. From 1900 on, sirens did not howl to individual researchers in the lab, but addressed people collectively and in public – they became sound for the (regulated) masses. In a strange reshaping of the *sensus communis*, they suspend individual difference, interrupt routines, and announce, like in Odysseus, an existential thread (Figure 7).

This thread, of course, is usually perceived as anything but luring. Franz Kafka wrote in his diary on August 8, 1917:

"No, let me go! No, let me go!" I shouted incessantly along the streets, and again and again she touched me, again and again the siren's clawed hands struck my chest from the side or over my shoulders.⁸⁵

Only a few months later, in October, to the sound of World War I sirens warning of air raids, and the Russian revolution seriously challenging the traditional separation between the proletarian rowers and the contemplative ruling class, Kafka rewrites the myth. In his short story "Das Schweigen der Sirenen" ("The Silence of the Sirens"), the listener and the rowers collapse into each other, but only in combining their (self-)limitations. Odysseus neither hears the sirens, nor can he move – the "or" separation between action

⁸³ Sirens had become electric in 1885 (Rehding, "Of Sirens Old and New," 91).

⁸⁴ Horkheimer and Adorno, "Dialectic of Enlightenment," 28.

⁸⁵ "'Nein, laß mich! nein, laß mich!' so rief ich unaufhörlich die Gassen entlang und immer wieder faßte sie mich an, immer wieder schlugen von der Seite oder über meine Schultern hinweg die Krallenhände der Sirene in meine Brust." (Kafka, *Tagebücher*, 385).



Figure 7: Sirens as a strange reshaping of the *sensus communis:* victory siren and siren suit (see Figure 8) spread in the twentieth century, establishing and accommodating to the condition of the bunker. Men testing the Crysler-Bell Victory Siren during the Cold War in RCA, New York. Photo credit: Marie Hansen/The LIFE Picture Collection (https://www.amusingplanet.com/2019/08/the-chrysler-air-raid-siren-was-so.html).

or contemplation in Homer has become a "nor." In a one-man-show, he gets completely caught up in his "inadequate, even childish means" of wax and chains, even if it was known that the song of the sirens went through everything, and the passion of the seduced would definitely have broken chains and mast. But Odysseus does not even think about the possibility of anything being stronger than his cleverness and his means. This subjects him to another of the sirens' temptations: the temptation to defeat them by his own manpower. "Nothing earthly can resist the feeling of having defeated them by one's own strength and the resulting all-consuming exaltation." Proud and self-affirmative, in "innocent joy" about his erected subjectivity, he does not realise that the sirens are actually silent. That's why "just when Odysseus was closest to the sirens, he no longer knew anything about them." He is thereby trapped in a dialectic figure: He only feels capable of steering if he not only binds his hands but seals his ears – which makes him incapable of even noticing what he has lost and that in fact, he cannot steer at all. When being closer to the sirenic promise than everyone before him, he no longer knows anything about it. Odysseus saves his skin (Figure 8 shows the "bunker-fit" fashion), which, in the face of world war, is already something. But it comes at a price: "The fear of losing the self, and suspending with it the boundary between oneself and other life, the aversion to death and destruction, is twinned with a promise of joy which has

⁸⁶ This corresponds to some point to Wagner when he writes: "the slave has not become a freeman, but the freeman a slave" (Wagner, "Art and Revolution," 50). Who in Homer is actually the freeman and who the slave, as well as the question who in Kafka's text is actually rowing, is of course left open.

⁸⁷ "unzulängliche, ja kindische Mittel" (Kafka, "Das Schweigen der Sirenen," 39). In Richard Pohl, our "inadequate means" fail to fulfil the promise of the sirens to bridge the gap between sound and light, while Odysseus's "inadequate means" fail to protect himself from them. Despite the difference, it is in both cases our means which are inadequate to meet the sirens.

⁸⁸ Kafka, "Das Schweigen der Sirenen," 39.

⁸⁹ "Dem Gefühl, aus eigener Kraft sie besiegt zu haben, der daraus folgenden alles fortreißenden Überhebung kann nichts Irdisches widerstehen." (Kafka, "Das Schweigen der Sirenen," 39f).

^{90 &}quot;in unschuldiger Freude." (Kafka, "Das Schweigen der Sirenen," 39).

^{91 &}quot;und grade als er ihnen am nächsten war, wußte er nichts mehr von ihnen." (Kafka, "Das Schweigen der Sirenen," 40).



Figure 8: Advertisement for the "siren suit" during World War II, which could be thrown on quickly during air raids. Winston Churchill showed up in public wearing an exclusively tailored siren suit. Ray Deen, "The Siren Suit." CUNY Academic Commons, December 6, 2017 (https://eng410wwiilit.commons.gc.cuny.edu/2017/12/06/the-siren-suit/).

threatened civilization at every moment,"92 reflect Adorno and Horkheimer. Odysseus gives up this promise of joy. He becomes a victim not of the sirens, but of his own fear of transformation, of going astray, and of the naive belief in his tricks and tools.93

However, as Walter Benjamin attested that Kafka wrote "fairy tales for dialecticians," 4 the text has two fairy tale turns. First, exactly in the moment when the sirens disappear from Odysseus's horizon and seem to be lost forever to their one and only witness, Kafka jumps in and picks up on them: "But they – lovelier

⁹² Horkheimer and Adorno, "Dialectic of Elightenment," 26. Accordingly, Adorno assumes the threat the sirens embody for civilisation to be exactly the same threat that is posed by the erosion of the demarcation lines between the art genres (Adorno, "Art and the Arts," 368).

⁹³ For Bertolt Brecht, who read Kafka's text, Odysseus's unfreedom is the reason why the sirens no longer sing: "I say to myself: all is well, but who - except Odysseus - tells us that the sirens really sang in the face of the tied man? Should these powerful and skillful women really have wasted their art on people who had no freedom of movement? Is that the essence of art? I would rather assume that the swelled throats perceived by the rowers scolded the damned cautious provincial with all their might, and our hero performed his (also witnessed) writhes, because he was at last ashamed." ("Ich sage mir nämlich so: alles gut, aber wer - außer Odysseus sagt uns, daß die Sirenen wirklich sangen, angesichts des angebundenen Mannes? Sollten diese machtvollen und gewandten Weiber ihre Kunst wirklich an Leute verschwendet haben, die keine Bewegungsfreiheit besaßen? Ist das das Wesen der Kunst? Da möchte ich doch eher annehmen, die von den Ruderern wahrgenommenen geblähten Hälse schimpften aus voller Kraft auf den verdammten vorsichtigen Provinzler und unser Held vollführte seine (ebenfalls bezeugten) Windungen, weil er sich doch noch zu guter letzt genierte." Brecht, "Werke," 19, 340. See also Mittenzwei, "Brecht und Kafka.") 94 Benjamin, "Franz Kafka," 799.



Figure 9: "Mourning siren," ca. 350–300 BC. Figure held at the Yale University Art Gallery. Photo credit: Yale University Art Gallery (https://artgallery.yale.edu/collections/objects/77886).

than ever – strained and turned, letting the eerie hair flutter open in the wind and stretched their claws freely on the rocks."95

The sirens here are not just the objects of Odysseus' narcissist illusions and subjectivist projections. Kafka attributes them an existence independent of Odysseus's plans, perception, and desires, and looks at the desire of the desired (Figures 9 and 10): "They no longer had any desire to allure; all that they wanted was to hold as long as they could the radiance that fell from Odysseus's great eyes." 96

Again, this is not the end of the story – there is a second fairy tale turn, in the Benjaminian sense:

By the way, an appendix to this is handed down. Odysseus, they say, was so cunning, was such a fox, that even the goddess of fate could not penetrate into his innermost being. Perhaps he really noticed, although this is no longer comprehensible with human reason, that the sirens were silent, and only held the above mentioned apparent process [Scheinvorgang] against them and the gods as a shield, so to speak.⁹⁷

In the fairy tale, where reason and cunning have inserted tricks into the myth, the mythical forces cease to be invincible.⁹⁸ Odysseus knows about the danger of the siren's silence. He does not get trapped in the illusion of defeating the sirens by his own strength, while turning around endlessly in the gravity of his narcissistic subjectivity, but he becomes an actor on the mythological stage by playing the tied-up man in the *Scheinvorgang*.⁹⁹ He does not reject, nor does he affirm that the siren's song has become art for him.

^{95 &}quot;Sie aber – schöner als jemals – streckten und drehten sich, ließen das schaurige Haar offen im Winde wehen und spannten die Krallen frei auf den Felsen." (Kafka, "Das Schweigen der Sirenen," 40).

^{96 &}quot;Sie wollten nicht mehr verführen, nur noch den Abglanz vom großen Augenpaar des Odyssus wollten sie solange als möglich erhaschen." (Kafka, "Das Schweigen der Sirenen," 40).

^{97 &}quot;Es wird übrigens noch ein Anhang hierzu überliefert. Odysseus, sagt man, war so listenreich, war ein solcher Fuchs, daß selbst die Schicksalsgöttin nicht in sein Innerstes dringen konnte. Vielleicht hat er, obwohl das mit Menschenverstand nicht mehr zu begreifen ist, wirklich gemerkt, daß die Sirenen schwiegen, und hat ihnen und den Göttern den obigen Scheinvorgang nur gewissermaßen als Schild entgegengehalten." (Kafka, "Das Schweigen der Sirenen," 40f).

⁹⁸ Benjamin, "Franz Kafka," 799.

⁹⁹ In this sense, the composer Rolf Riehm, whose work has probably been most excessively devoted to the Sirens, both in content and form, calls Odysseus a "lousy trickster" (Riehm, "Sirens," 26). His musical incarnations of the Sirens sustain the



Figure 10: Alfred Böcklin's "Sirenen" displays their excitement while Odysseus is not even depicted. Painting from 1875, held at Alte Nationalgalerie, Staatliche Museen zu Berlin, digital copy from Wikimedia Commons (https://commons.wikimedia.org/ wiki/File:Arnold_B%C3%B6cklin_-_Sirenen_(1875).jpg?uselang=de).

Instead, he gets involved in the art himself. He is able to do so, because he has a consciousness of his own and of the siren's position. How he acquired this consciousness is difficult to say, as it "is no longer comprehensible with human reason."100 He must have passed through a transformation to do so. This transformation makes him cross the threshold from myth to fairy tale. For the composer Arsenij Avraamov, the Russian Revolution was the fairy tale to challenge the mythical split of subject and object and of consciousness and nature. The fifth anniversary of this revolution in 1922 was celebrated with the premiere of Avraamov's Siren Symphony, the instrumentation of which employed "a cast of choirs, the foghorns of the entire Caspian flotilla, two batteries of artillery guns, a number of infantry regiments including a machinegun division, hydroplanes, and all the town's factory sirens"101 and "Avraamov did not want spectators, but intended the active participation of everybody in the development of the work through their exclamations

utopian position through the simultaneous suspension and establishment of a Scheinvorgang within the condition of an absent historical telos (Kallenberg, "Begehren und Vernichten").

^{100 &}quot;obwohl das mit Menschenverstand nicht mehr zu begreifen ist" (Kafka, "Das Schweigen der Sirenen," 41).

¹⁰¹ Smirnov, *Sound in Z*, 148.



Figure 11: While this Odysseus is tied up, immobile, and unable to satisfy his desire, the other (see Figure 12) combines the entire forces of machinery, military, and workers and becomes an actor on the historical and artistic stage. Part of a detail from an Attic red-figured stamnos, ca. 489–470 BC from Vulci, held at the British Museum. The drawing of the stamnos appears in Adolf Furtwängler, Karl Reichhold, and Alois Huber, *Griechische Vasenmalerei: Auswahl hervorragender Vasenbilder aus dem gleichnamigen groβen Werke*. Munich: Bruckmann, 1924, plate 9.

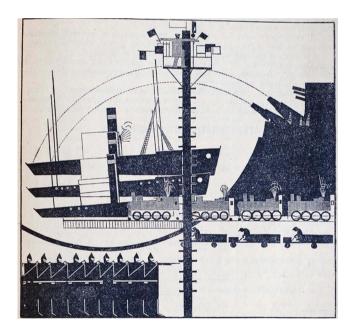


Figure 12: A free Odysseus figure, conducting and navigating music, men and machinery in revolutionary Russia. Conducting scheme of Avraamov's Symphony of Sirens, 1923. Digital copy by Monoskop (https://monoskop.org/File:Avraamov_Arseny_ 1923_Symphony_of_Sirens_conducting_scheme.webp).

and singing, all united with the same revolutionary will."¹⁰² The mythological and the revolutionary depictions of the encounter with the sirens differ accordingly (Figures 11 and 12).

6 Resumé: Self-criticism of the discipline

Perhaps today, the sirens have indeed ceased to sing. Then Odysseus, closing his ears to their unbearable silence, could mean both the inability to deal with the loss of their promise and the preservation of the necessity of their singing to be perceived again. However, if Odysseus can gain consciousness of his selfimposed limits, there is no need to protect himself from the siren's thread. Tied only to his metaphysical self-justification, there is "nothing to lose but [...] chains" - and "a world to win." 103 Wax and chains become pure requisites of a Scheinvorgang, staged for the mythological gods that are still in power. Through the metaphysical assumption of visuocentrism, sound studies has not left the self-chosen path, but tied itself to it. Sound studies runs the risk of passing the sirens without even recognising it. Caught in innocent joy about our inadequate means, the promise of the sirens disappears from the horizon. These means serve not the transcendence of the separation of the sensible but the self-justification of the discipline. Self-criticism seeks to break these self-made chains in resonating with the siren's promise. This promise is silenced by a conception of the object of investigation - sound - that limits it to listening practices, the normalised human ear, and the auditory field. Along with Mara Mills's claim that deafness is a variety of hearing, we should consider our understanding of hearing to be a variety of deafness. Sirenic thinking, thus, means to overcome self-imposed obstacles to the transformative potential of experience. The problem is not deafness, but the ideological obstacles that deafen us.

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References

Adorno, Theodor W. "Art and the Arts [1967]." In Can One Live after Auschwitz? A Philosophical Reader, edited by Rolf Tiedemann and translated by Rodney Livingstone, 368–87. Stanford: Stanford University Press, 2003.

Bauman, H-Dirksen L. "Audism: Exploring the Metaphysics of Oppression." *Journal of Deaf Studies and Deaf Education* 9:2 (2004), 239–46.

Bauman, H-Dirksen L. "Listening to Phonocentrism with Deaf Eyes: Derrida's Mute Philosophy of (Sign) Language." Essays in Philosophy 9:1 (2008), 41–54.

Bauman, H-Dirksen L. and Joseph Murray (eds). *Deaf Gain: Raising the Stakes for Human Diversity*. Minneapolis: University of Minnesota Press, 2014.

Benjamin, Walter. "Franz Kafka. Beim Bau der Chinesischen Mauer [1931]." In Selected Writings 2, Part 2: 1931–1934, translated by Rodney Livingstone, edited by Michael W. Jennings, Howard Eiland, and Gary Smith, 494–500. Cambridge, MA: Harvard University Press, 1999.

Benjamin, Walter. "Franz Kafka. On the Tenth Anniversary of His Death [1934]." In *Selected Writings 2, Part 2: 1931–1934*, translated by Harry Zohn edited by Michael W. Jennings, Howard Eiland, and Gary Smith, 794–818. Cambridge, MA: Harvard University Press, 1999.

Benjamin, Walter. "On the Concept of History [1940]." In *Selected Writings 4: 1938–1940*, translated by Harry Zohn, edited by Howard Eiland and Michael W. Jennings, 389–400. Cambridge, MA: Harvard University Press, 2003.

Brecht, Bertolt. "Werke." In *Große Kommentierte Berliner und Frankfurter Ausgabe*, vol. 19, edited by Werner Hecht, Jan Knopf, Werner Mittenzwei, and Klaus-Detlef Müller. Frankfurt am Main: Suhrkamp, 1997.

Bull, Michael. Sirens. New York: Bloomsbury Academic, 2020.

- Cagniard de la Tour, Charles. "Sur la Sirène, Nouvelle Machine D'acoustique Destinée à Mesurer les Vibrations de L'air Qui Constituent le Son." Annales de Chimie et de physique 12 (1819), 167-71.
- Chladni, Ernst Florens Friedrich. "Ueber Töne Bloss Durch Schnell Auf Einander Folgende Stösse, Ohne Einen Klingenden Körper." Annalen der Physik 84:8 (1826), 453-60.
- Eckert, Richard Clark and Amy June Rowley. "Audism: A Theory and Practice of Audiocentric Privilege." Humanitiy & Society 37:2 (2013), 101-30.
- Elliot, Richard. "The Milan Congress and the Future of the Education of the Deaf and Dumb." American Annals of the Deaf and Dumb 27:3 (1882), 146-58,
- Eschke, Ernst Adolf. Galvanische Versuche. Berlin: Im Taubstummen-Institute, 1803.
- Feld, Steven. "Acoustemology." In Keywords in Sound, edited by David Novak and Matt Sakakeeny, 12-21. Durham: Duke University Press, 2015.
- Friedner, Michele and Stefan Helmreich. "Sound Studies Meets Deaf Studies." In Sounding the Limits of Life: Essays in the Anthropology of Biology and Beyond, edited by Stefan Helmreich, Sophia Roosth and Michele Friedner, 164-72. Princeton: Princeton University Press, 2016.
- Gertz, Genie. "Dysconscious Audism: A Theoretical Proposition." In Open Your Eyes: Deaf Studies Talking, edited by H-Dirksen L. Bauman, 219–34. Minneapolis: University of Minnesota Press, 2008.
- Goodman, Steve. Sonic Warfare: Sound, Affect, and the Ecology of Fear. Cambridge: MIT Press, 2010.
- Graff, Karl F. "A History of Ultrasonics." In Physical Acoustics: Principles and Methods, vol. 15, edited by Warren P. Mason and R. N. Thurston, 1-98. New York: Academic Press, 1981.
- Herzogenrath, Bernd. "Sonic Thinking: An Introduction." In Sonic Thinking: A Media Philosophical Approach, edited by Bernd Herzogenrath, 1-22. New York: Bloomsbury, 2017.
- Homer. The Odyssey, 2 vols, translated by A. T. Murray. London: William Heinemann, 1919.
- Horkheimer, Max and Theodor W. Adorno. "Dialectic of Enlightenment: Philosophical Fragments [1944]," translated by Edmund Jephcott and edited by Gunzelin Schmid Noerr. Stanford, CA: Stanford University Press, 2002.
- Humphries, Thomas. Communicating Across Cultures (Deaf-Hearing) and Language Learning. Ph.D. dissertation, Union Institute and University, Cincinnati, Ohio, 1977.
- Jackson, Myles W. "From Scientific Instruments to Musical Instruments: The Tuning Fork, the Metronome, and the Siren." In The Oxford Handbook of Sound Studies, edited by Trevor Pinch and Karin Bijsterveld, 201-23. Oxford: Oxford University Press, 2012.
- Kafka, Franz. "Das Schweigen der Sirenen." In Beim Bau der chinesischen Mauer. Ungedruckte Erzählungen und Prosa aus dem Nachlass, edited by Max Brod and Hans Joachim Schoeps, 39-41. Berlin: Gustav Kiepenheuer Verlag, 1931.
- Kafka, Franz. Tagebücher 1910-1923. Frankfurt am Main: Fischer Taschenbuch Verlag, 1976.
- Kallenberg, Jim Igor. "Bilder des Begehrens und des Vernichtens: Zur Kompositionsweise des Archipels in der Musik Rolf Riehms." In Musik-Konzepte 182: Rolf Riehm, edited by Ulrich Tadday, 43-59. Munich: Edition Text + Kritik, 2018.
- Kant, Immanuel. Critique of Judgment [1790], translated by James Creed Meredith. Oxford: Oxford University Press, 2007.
- Lane, Harlan. The Mask of Benevolence: Disabling the Deaf Community. New York: Knopf, 1992.
- Marx, Karl. "Economic and Philosophic Manuscripts of 1844." In The Marx-Engels Reader, translated by Martin Milligan, edited by Robert C. Tucker, 66-125. New York: Norton, 1978.
- Marx, Karl, and Frederick Engels. Manifesto of the Communist Party [1848], translation authorised by Frederick Engels. Chicago: Kerr, 1906.
- McKusick, Victor A. and H. Kenneth Wiskind. "Félix Savart (1791-1841), Physician-Physicist: Early Studies Pertinent to the Understanding of Murmurs." Journal of the History of Medicine and Allied Sciences 14:4 (1959), 411–23.
- Mills, Mara. "Deafness." In Keywords in Sound, edited by David Novak and Matt Sakakeeny, 45-54. Durham: Duke University
- Mittenzwei, Werner. "Brecht und Kafka." In Tschechoslowakische Akademie der Wissenschaften, edited by Franz Kafka and Prager Sicht, 119-29. Prague: Verlag der Tschechoslowakischen Akademie der Wissenschaften, 1965.
- Mühlhans, Jörg H. "Low Frequency and Infrasound: A Critical Review of the Myths, Misbeliefs and Their Relevance to Music Perception Research." Musicae Scientiae 21:3 (2017), 267-86.
- Nietzsche, Friedrich. "The Birth of Tragedy [1872]." In The Birth of Tragedy and The Genealogy of Morals, translated by Francis Gollfing, 1-146. New York: Doubleday, 1956.
- Novak, David and Matt Sakakeeny. "Introduction." In Keywords in Sound, edited by David Novak and Matt Sakakeeny, 1-11. Durham: Duke University Press, 2015.
- Plann, Susan. A Silent Minority: Deaf Education in Spain, 1550-1835. Berkeley: University of California Press, 1997.
- Plato. The Republic of Plato, translated by Benjamin Jowett, 3rd edition, revised and corrected. Oxford: Clarendon Press, 1888. Pohl, Richard. Akustische Briefe. Leipzig: B. Hinze, 1853.
- Rancière, Jacques. The Politics of Aesthetics: The Distribution of the Sensible. New York: Bloomsbury, 2004.
- Rancière, Jacques. "Die Politik der Kunst und ihre Paradoxien." In Die Aufteilung des Sinnlichen, edited and translated by Maria Muhle, 75-100. Berlin: B books, 2008.
- Rehding, Alexander. "Of Sirens Old and New." In The Oxford Handbook of Mobile Music Studies, vol. 2, edited by Sumanth Gopinath and Jason Stanyek, 77-106. Oxford: Oxford University Press, 2014.

Riehm, Rolf. "Sirenen: Tötende Göttinnen." In Sirenen: Bilder des Begehrens und des Vernichtens, Programme Opera Frankfurt, edited by Bernd Loebe, Wolfgang Willaschek and Mareike Wink, 24-8. Frankfurt am Main: Oper Frankfurt, 2014.

Rolland, Romain. Beethoven, translated by Constance Hull, 3rd, revised edition. London: Kegan Paul, Trench, Trubner and Co., 1919.

Savart, Félix. "Notes Sur La Sensibilité de L'organe de L'ouïe." Annales de Chimie et de Physique 44 (1830), 337-52.

Schreiber, Ewa. "In the Face of the Other: Contemporary Composers' Reflections on the (Ideal) Listener." International Review of the Aesthetics and Sociology of Music 48:2 (2017), 225-44.

Schulze, Holger. Sonic Persona: An Anthropology of Sound. New York: Bloomsbury, 2018.

Shakespeare, William. The First Part of the History of Henry IV, edited by John Dover Wilson. Cambridge: Cambridge University Press, 2009.

"Siren." In Merriam-Webster.com Dictionary. www.merriam-webster.com/dictionary/siren. Accessed 01.05.2021.

Smirnov, Andrey. Sound in Z: Experiments in Sound and Electronic Music in Early 20th Century Russia. London: Sound and

Sterne, Ionathan, The Audible Past: Cultural Origins of Sound Reproduction, Durham: Duke University Press, 2003,

Sterne, Jonathan. "Hearing," In Keywords in Sound, edited by David Novak and Matt Sakakeeny, 65-77. Durham: Duke University Press, 2015.

Styler, Billy. "Investigating the Mysterious Siren Head Sightings." Video Episode, 30.11.2019. https://youtu.be/roDYtatjkr8. Accessed 01.05.2021.

Sun Kim, Christine. "The Enchanting Music of Sign Language | Christine Sun Kim." TED Talk, 19.11.2015. https://youtu.be/ 2Euof4PnjDk. Accessed 01.05.2021.

Virdi, Jaipreet. Hearing Happiness: Deafness Cures in History. Chicago: University of Chicago Press, 2020.

Voegelin, Salomé. Listening to Noise and Silence: Towards a Philosophy of Sound Art. New York: Continuum, 2010.

Voegelin, Salomé. The Political Possibility of Sound: Fragments of Listening. New York: Bloomsbury, 2018.

Wagner, Richard. "Art and Revolution [1849]." In Richard Wagner's Prose Work, vol. 1, translated by William Ashton Ellis, 30-65. London: Kegan Paul, Trench, Trubner & Co., 1895.

Wagner, Richard. "The Art-Work of the Future [1850]." In Richard Wagner's Prose Work, vol. 1, translated by William Ashton Ellis, 69-213. London: Kegan Paul, Trench, Trubner & Co., 1895.

Welsh, Caroline. "Sirene." In Handbuch Sound. Geschichte - Begriffe - Ansätze, edited by Daniel Morat and Hansjakob Ziemer, 211-16. Stuttgart: J.B. Metzler, 2018.