SOUND STAGE SCREEN

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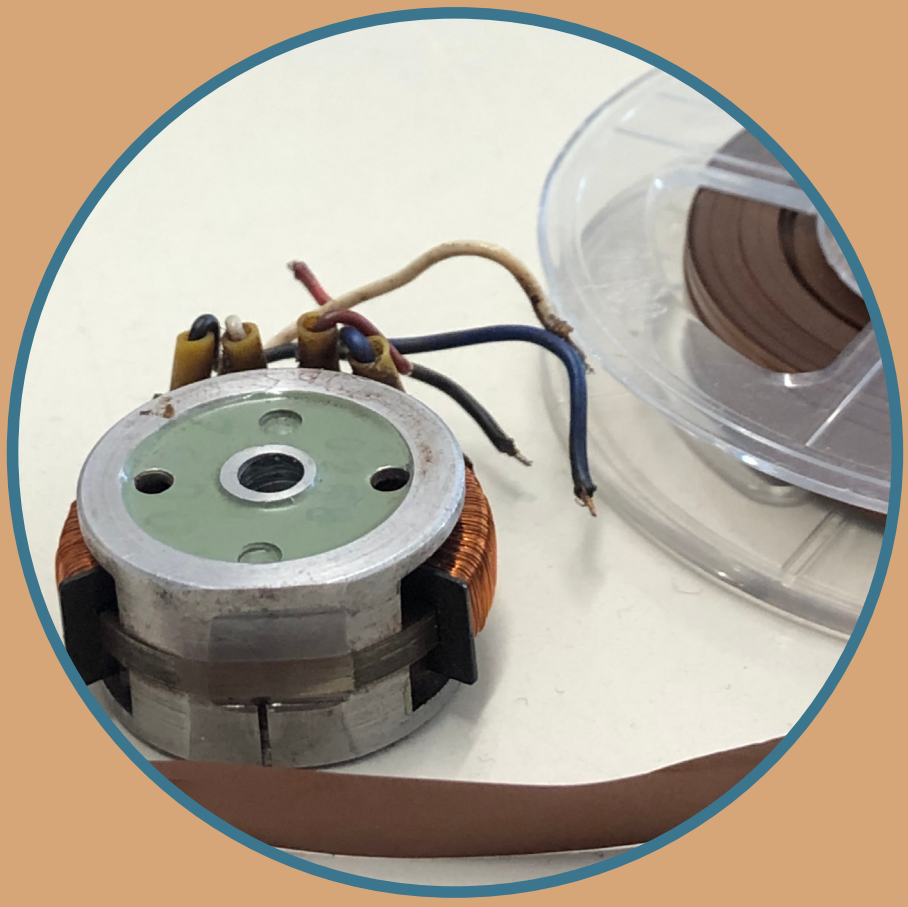

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Sound Stage Screen (*SSS*) is a biannual peer-reviewed journal devoted to historical and theoretical research into the relations between music, performance, and media. An open-access journal published in English by the University of Milan (Italy), *SSS* addresses a wide range of phenomena, practices, and objects pertaining to sound and music in light of the interconnections between performing traditions and media archaeologies.

Cover: Tape head from GDR tape recorder (Smaragd BG 20, 1962 / 63), plus magnetic tape. Permission to use by Wolfgang Ernst.

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ARTICLES

The Acoustemology of the Witch: Hearsay, Sound Recording, and Zaccheo Tapes

Delia Casadei and Marina Romani

One of the witches' crossroads in Zaccheo. Photo: Marina Romani (2023).

We can begin with an episode recovered from a taped interview recorded in August 1966. The speaker is a farm hand, Francesco, who recalls his encounter with witches in the countryside surrounding Villa Zaccheo (commonly known as simply Zaccheo), a village in the Teramo province of Abruzzo, some thirty years before, at a crossroads in the pitch black of night.[1] Though we listen to Francesco on a digitized tape, in a sound

1 We'd like to thank our two anonymous reviewers, as well as Gavin Williams and Carlo Cenciarelli, for the feedback they gave on various versions of this essay. Our gratitude goes

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archive in the province of Novara, Italy, he is being recorded at the age of 58 in August 1966 by historian Cesare Bermani (in whose sound archives the tape is stored).[2] At the time of recording Francesco is in his home in Zaccheo, likely at the kitchen table, surrounded by Bermani as well as five women who giggle knowingly as he speaks: his daughters Lillina (31 years old), Lucia (27), Natalina (26), and his wife Concetta (52); with them is also Mariafelice Forti (28), Bermani's collaborator, interpreter from dialect into Italian, and then-wife. The event narrated by Francesco dates back to roughly 1935, when Lillina was a sickly infant and suspected to be tormented by witches at night.[3] We, the present-day listeners, join Francesco's audience in 1966 as he leads them back in time to 1935, to the crossroads and into the darkness where the meeting with the witches is about to occur. He tells the story expertly, to the wry laughter of his companions at the table:

ITALIAN/DIALECT[4]	ENGLISH
Francesco: Una sere io partii, e sono andato a vedere, su una crucistrade di quaggiù a la furnace, no? E ho viste, parecchie ne so viste di sdreje, no? Allora je… una a una, una a una, una a una, una a una, una n'andre… so viste ci era e ci nengh'era, no?	Francesco: One night I left, and I went to see, there, on a crossroads by the brick-making furnace, right? And I saw them, I saw so many of them, right? One by one, one by one, one by one, one by one, one and then another… I saw who was and who wasn't [a witch], right?

also to Cesare Bermani and his partner Antonella De Palma who welcomed us to their home and archive and helped us with the research presented here. In Zaccheo, we had illuminating and important conversations with Lillina Olga, Luisa Di Marcello, Alessandra Piotti, Virginia Piotti, Cenzina Ricci, Pio De Gregorio, and Dario Romani; and we are grateful to all the people in Zaccheo who for the past two years have welcomed us around their kitchen table and shared with us their memories of people and conversations from long ago.

2 Here and throughout the essay we adopt Cesare Bermani's protocol of using pseudonyms for interviewees in *Volare al sabba. Una ricerca sulla stregoneria popolare* (Bologna: DeriveApprodi, 2008).

3 Throughout this essay we have provided our own transcriptions and analyses of all taped interviews. Some of the interviews we use also feature in Bermani's book, and others do not. Whenever we used interviews that are transcribed and cited in Bermani's book, we re-transcribed our examples directly from the tapes, and produced a new analysis that builds and expands upon Bermani's commentary and his anthropological and historical glosses. We therefore will provide both the reference for the archived taped interview and, where applicable, the reference for parts of Bermani's book that deal with the same interview.

4 The people interviewed by Bermani speak either fully in the local dialect of the area (which is a variant of the Neapolitan dialect family) or a blend of dialect and Italian. We

Allora, so 'rconosciute. Je lo so dette a quella persona che l'ho riconosciuta. E dice "perdona, non ci venghe cchiù."

[risate delle donne]
F: Dice non ci vengo più per sette ità. Non ti tocco e non ti faccio toccare.

Cesare Bermani: Ah. Ma lei ha proprio risposto così, quella persona!
F: Sì, sì—ma no mentre che io andavo laggiù! perché se era laggiù non puoi parlare quando la vai a trovare.
CB: Ah!
F: Eh no, perché dopo loro ti ammazzano.[5]

I recognized that witch [that was hurting Lillina]. I told that person that I had recognized her. She said "Forgive me, I'm not going to come anymore."
[women laugh]
F: She said, "I'm not going to bother you for seven years, and I'm not going to touch you nor let anyone else touch you."
Cesare Bermani: Ah, so she really responded like that!
F: She did—but not while I was there [at the crossroads]! Because, when you go look for her there, you can't speak.
CB: Ah!
F: You can't, because then they'll kill you.

Francesco presents an archetype encountered in the oral history of witchcraft in this area: it involves standing watch at a particular place and time so as to convince the witches to stop bothering a family member, often an infant who has fallen ill. A striking architecture of eye and ear often emerges from these stories, revealing a common theme of seeing and being seen, hearing and being heard. It involves an act of mutual recognition between the witch and her witness that happens, however, at a place and time when one cannot see but only hear: the open countryside at midnight.

To this day, the village of Zaccheo is minimally lit, and the area where Francesco went to see the witches in 1935 would have been in complete darkness. Lamps were not part of the protocol that would have allowed one to see the witches (unlike pitchforks, children's clothes, and carpet beaters, which were used as protective objects).[6] There was an injunction to keep total silence when standing at the crossroads at night: as Francesco tells

indicate at the top of each transcription the degree of the blend of dialect and Italian adopted by the speakers.

5 Villa Zaccheo, August 1966 (Tapes 121-122, digitized as CD 14H) from Archivio Cesare Bermani (Orta San Giulio, Novara, Italy). This same episode is transcribed and commentated by Bermani in *Volare al Sabba*, ch. 11 ("Sono stato al crocevia…"), 173-90.

6 It is important also to note, given the potentially violent associations of pitchforks and carpet beaters, that these weren't used to hit anybody: pitchforks were placed upside down as protective chinrests for those standing at the crossroads, and carpet beaters could be used to strike the afflicted child's clothes—an act that, by sympathetic magic, would have delivered a blow to the witch. These practices are detailed in Bermani's *Volare al Sabba*, 173–77. See also note 9.

us, the witch is recognized there and then, but can be verbally addressed only later, in the daytime. The aural and visual restrictions of the encounter are counterbalanced by the witness' subsequent compulsion to narrate it as many times as possible, and by the role of active listening from women—audibly marked by their laughter in the above recording. The encounter with the witch is a carefully staged missed connection: you may not speak to a witch as she is witching (or else, Francesco knows, she will kill you), and seeing her and recognizing her while she roams in the dark is highly unlikely. Directly seeing and even confrontation, where witches are concerned, are difficult tasks. Yet it is precisely this blocking of frontal, visual, and verbal encounter that produces an alternative, and intensely sonorous, sensoriality.

Another term for the alternative sensoriality swirling around the invisible and unapproachable figure of the witch might be acoustemology—Steven Feld's famous portmanteau joining "acoustic" and "epistemology."[7] Feld famously argues that an acoustemological analysis tracks the ways in which, in certain conditions, sound becomes a privileged carrier of knowledge in a society. In the analysis that follows, we argue that the tapes recorded by Bermani illuminate the means by which, in Zaccheo, the realm of hearing becomes a privileged means of knowledge in relation to witchcraft. Our analysis offers insights into acoustemology as it takes on new aspects at a contemporary and, we hope, potentially fruitful conjunction of sound studies and oral history, where witchcraft may cast light (or, better still, darkness) on broad themes.

7 Steven Feld, "Acoustemology," in *Keywords in Sound*, eds. David Novak and Matt Sakakeeny (Durham: Duke University Press, 2015), 12-21. A word of caution about our adoption of the term acoustemology here. Another important term for the critical study of sonorous realities is Ana Maria Ochoa Gautier's "aurality," from her homonymous book *Aurality: Listening and Knowledge in Nineteenth-Century Colombia* (Durham: Duke University Press, 2014). Indeed, Ochoa's term is in some ways more apt for some aspects of our analysis, because for Ochoa "aurality" is something that signals a rupture in epistemology, the emergence of the uncountable and unknown particularly in a linguistically fraught colonial context. Feld's acoustemology, on the other hand, has been critiqued precisely because of its emphasis on a kind of structured, rational "knowledge." The reason we use "acoustemology" here is that we believe Feld's term is better suited to a study, such as ours, which carefully outlines and maps the very terms of what can be known about a witch by ear, and how. Nevertheless, we admit that, particularly in the later sections of this essay pertaining to acousmatic listening and lapsing audio-visual perception, Ochoa's "aurality" might have been a better term; but we have decided to adopt "acoustemology" consistently so as to avoid confusion with terminology.

By way of demonstrating what acoustemology can bring to an oral history of witchcraft, we might observe that the most interesting part of the recorded interview transcribed and translated above is what happens after Francesco has finished his story. The interview, initially a question-reply format led by Bermani, turns into a choral undertaking, with Francesco's daughters, his wife, and Mariafelice eclipsing the interviewer's role. Bermani has asked the women, one by one—in a strange echoing of Francesco's "una ad una, una ad una…"—if they believe in witches, if they know how to defend themselves against them, what they learned about the evil eye, werewolves, saints, and miracles. Each of the women has openly denied believing in witches or knowing anything about the topic, and they have done so in Italian, albeit a dialect-inflected Italian: given that Bermani is from Novara, in north-western Italy, the choice of language shows their willingness to be recorded and understood by outsiders. Yet, once these initial answers have been given, true speech can begin: a debate in dialect on whether witches will disappear as newer generations stop hearing about them. This exchange is aurally opaque, aimed away from the interviewer's foreign ear and microphone, but it is much more urgent and controversial for the interviewees. Hearsay evidence and opinions are offered liberally: variations of the expressions *dece* (they say/it is said) and *so sendète* (I've heard) punctuate the tangle of voices and the rhythm of the conversation:

DIALECT

- Ma ahuarde, je deche na cose, tutte che dece che è sdraje, tutte sti cchiù andeche è. Mo 'llore sti sdraje fenesce, morte sti andeche, 'lli ggivene li sdraje nni sende niscine.

- Ma se quolle l'ha veste allora?
- Va bene, ma morte colle che mo sapome pure noje, li sdraje fenesce.
- Ma 'nge stava pure quelli ggivini 'mmezza a li sdraje ch'i viste ti?
- [Francesco]: Stavace li cchije vicchie e li cchie ggivine.
- Eh ma comunque pure quelle se murarà. 'Mpu sa murte e 'mpu se more.
- Eh ma ne ve l'iddre.
- Eh ma duva sta?

ENGLISH

- But look, I want to say something, all those who they say are witches, they're the older people. So these witches are going to end. Once the elders die, the young ones will never hear about witches.
- But if he [Francesco] saw them!
- Alright, but once we – us who know – die, witches are going to end.
- But weren't also young witches among those you saw?
- [Francesco]: There were old ones and young ones.
- Eh, but those will die too. Some are already dead, some will die.
- Eh, but new ones will arrive.
- But where are they?

- Ji ggivine non lo so… Li sdraje, li sdraje… ji nne sende niscine mo…	- The young ones, I don't know… witches, witches… I don't hear about them now…
[…]	[…]
- Mica ecc'a Zacchè 'dda sta! Da ca iddre parte se va sendenne. Se nasciave prima arnasce pure mo!	- But they don't need to be in Zaccheo! Somewhere else, they must hear about them. If they were born in the past, they are born now too.
- Se 'nze sende vordì ca fenesce…	- If we don't hear about them, it means they're going to end…
- Coma è nse sende…	- Oh, but of course they hear about them…
- Ecc'a Zacché 'nze sende…[8]	- It's here in Zaccheo that we don't hear about them…

Few admit to believing, but all feed passionately upon the hearsay through which the beliefs are created; and in feeding on it, they feed it in turn, even encouraging the notion that new witches are being made and roam lands nearby. There is also an important sense here—one which we will go on to qualify in political and historical terms—that the figure of the witch doesn't entirely overlap with the imagination of the witch inherited from Counter Reformation Inquisition tribunals: the witch as an object of violent persecution. In the world summoned by these tapes, by contrast, individual witches can be managed, subdued, and turned back into friends. They are not persecuted or killed, nor is their eradication deemed desirable.[9] Indeed,

8 Villa Zaccheo, August 1966 (Tapes 121-122, digitized as CD 14 H) from Archivio Cesare Bermani.

9 There exist numerous testimonies, dating back to the nineteenth and early twentieth centuries, documenting various means of defense against witches in Abruzzo. To our knowledge, these accounts don't mention the need to prosecute or eliminate a witch in order to be protected from her influence. Examples of typical rituals, which we also find in Bermani's research, are: placing an upside down broom near the door (this would force the witch to count the broomcorns at length in order to exit); placing other items around the house that the witch would have to spend time counting (such as salt or wheat grains); gathering or consuming specific herbs such as hypericum (St. John's wort); seeking the assistance of a service magician to prepare an amulet called *breve*. See Bermani's *Volare al sabba,* ch. 10 ("Nascere con il 'velo'"), 159-70, as well as the following: Gennaro Finamore, *Tradizioni popolari abruzzesi* (Lanciano: Carabba, 1882) and *Credenze, usi e costumi abruzzesi* (Palermo: Clausen, 1890), which is Volume 7 of the series titled *Curiosità popolari tradizionali* curated by Giuseppe Pitré; Antonio De Nino, *Usi abruzzesi descritti da Antonio de Nino* (Florence: Tip. di Barbèra, 1879), vol. 1; Giovanni Pansa, *Miti, leggende e superstizioni dell'Abruzzo (studi comparati)* (Sulmona: Caroselli, 1927), vol. 1; Emiliano Giancristofaro, *Tradizioni popolari d'Abruzzo: feste e riti religiosi, credenze magiche, superstizioni, usanze, pellegrinaggi, ex voto e*

the witch has a communitarian function. When Francesco and the others gleefully point out that witches might keep being born elsewhere, the implication is generative, as if to speak and hear of a witch is already to bring her forth into the world.

Sendè, the dialectal inflection of the verb *sentire* (to hear)—so present in this single episode—is commonplace in people's accounts of witches in all of the tapes we heard in Bermani's archive. As with all romance languages (and as famously theorized by Gilles Deleuze) the verb *sentire* means both "to hear" and "to feel," "to sense."[10] This slippage between hearing and states of being is heightened in the dialectal form: *sendè* atypically takes the auxiliary "to be" rather than "to have" (as is the case with *sentire* in Italian and most romance languages).[11] This means that, in Zaccheo, "I have heard" becomes *so sendète*—which can be more literally retranslated as "I *am* heard." Even more interestingly, in the world of the Zaccheo tapes on witchcraft, *sendè* in its transitive form can also mean to "hear about" witches; in other words, it can designate hearsay, indirect witnessing, and the relayed experience of another.[12] Therefore, the sentence *li sdraje li so sendète* (which can be literally translated as "witches, I am heard them") can be more idiomatically translated in two different (yet not easily separable) ways: as "witches, I have heard them" and "witches, I have heard about them."

In its polyvalent meaning, *sendè* opens up a series of questions about the acoustemology of witchcraft in Bermani's Zaccheo tapes, resulting from a dynamic interplay between the denial of knowledge/belief in witches and the consequent feeding of hearsay. As mentioned above, the interviewees' initial denial of knowledge/belief in witches is almost a ritual for generating

medicina popolare per riscoprire storia, aspetti e curiosità del folklore abruzzese (Rome: Newton Compton, 1995).

10 Gilles Deleuze, *The Logic of Sense* [1969], trans. Mark Lester and Charles Stivale (New York: Columbia University Press, 1990).

11 The use of the *essere* (to be) auxiliary with transitive verbs (instead of *avere,* to have) is not present in Latin, from which the Zaccheo dialect derives, and it's a peculiar feature of the language of this area, as historian and linguist Francesco Savini has noted. See Savini, *La grammatica ed il lessico del dialetto teramano* (Turin: Loescher, 1881), 94.

12 This connotation of "hearing about" as well as just "hearing" is present in the Italian verb *sentire* (which also means "to hear" and "to feel," like *sendè*) as well as the English *to hear*—one can say "l'ho sentito da lei/I heard it from her" as well as "ne ho sentito parlare da lei/I heard about it from her." However it is less common for the transitive form of the verb *sentire* (to hear) to mean "to hear about something" than in the Teramano dialect of Zaccheo, where *sendè* is constantly used to mean to hear, to hear about, and to feel.

a subsequent, passionate group conversation on witches, often made up of multiple, overlapping voices and laughter. Another deeply acoustemological question pertains to the historical and political importance of relaying, through hearsay, events where sight spectacularly fails and hearing strains to fill the gap. As we will go on to argue, in exploring the relationship of hearsay, hearing, and the temporary loss of sight that signals the presence of the witch, we are also urged to reconsider the definition and function of "acousmatic" listening (broadly defined as the listening to sounds whose source cannot be identified). Lastly, we consider this acoustemology as a product of the particular ways in which interlocutors respond to the microphone and tape recorder.

The Zaccheo Tapes

In this essay, we focus on the remarkable collection of tapes that Cesare Bermani recorded in Zaccheo—tapes that are, in large part, dedicated to interviews about local practices of witchcraft, witches, and ways of warding off evil magic. Marina Romani is a native of Zaccheo and fluent in the local dialect; she is familiar with the surviving interviewees as well as surviving family members of those who are deceased. Our return to this set of tapes is an unusual methodological choice, given that the tapes have already been the subject of a remarkable book by Bermani himself: V*olare al sabba. Una ricerca sulla stregoneria popolare* (*Flying to the Sabbath: A Research on Popular Witchcraft*), published in 2008.[13] Indeed, our work has been developed in consultation with Bermani, who has welcomed us into his personal archives and allowed us to listen to the tapes. In listening to them, we are building on Bermani's research and extending it towards a systematic consideration of the role of sound and listening in oral interviews on witchcraft. We are, in other words, carrying out an intellectually ecological mission: instead of creating new fieldwork to investigate the matter of witchcraft (something we plan to do at a later stage), we are drawing out an historical acoustemology by relying on recordings made by a scholar of a previous generation. This is in itself unusual and represents a model for how to recycle and redeploy ethnographic recordings:[14] one that accounts

13 For a full reference see note 2.

14 The issue of what is the sonic "waste" of ethnographic work and how it might be reconceived of and repurposed is the topic of the latest issue of the *Journal of Sonic Stud-*

for the historical and political conditions of the recordings themselves, as well as the interviewees' relationships with one another, with the place, and with the recording apparatus.

Some important information is now in order to explain the various layers of this "second-hand" acoustemology. As we mentioned above, Villa Zaccheo (henceforth Zaccheo) is a rural village in the province of Teramo, Abruzzo, with a population of around 300 people at the time of Bermani's fieldwork. Abruzzo is a region that, while geographically part of central Italy, has belonged—politically, culturally, and linguistically—to the south, that is, to the Kingdom of Naples, until Italy's unification in 1860. Bermani wound up in Zaccheo in 1959 in order to visit the family of his fiancée (and soon-to-be wife) Mariafelice Forti, whom he met at the University of Milan as a fellow student of philosophy. The Forti family had lived in the village for generations, where they were one of the major landowners, and were part of a close-knit community. Bermani would visit Zaccheo twice every year from 1959 until 1976, becoming a site of long-term anthropological fieldwork. Following an initial spurt of interest in local traditional songs,[15] Bermani's focus progressively shifted to documenting the belief, common among Zaccheo's inhabitants, that witches caused illness and mischief in the area. Between 1965 and 1976, Bermani officially narrowed his focus to witchcraft and conducted extensive interviews with 54 people—around one quarter of the town's inhabitants at the time—as well as numerous additional interviews with people living in neighboring villages and cities, coming from different professions, generations, and educational backgrounds.[16] Such is the richness and extension of the materials gathered by Bermani—more than 90 hours of recorded interviews—that *Volare al sabba* could only make partial use of them. Indeed, Bermani makes qualitative, rather than quantitative use of the tapes: in the book, he leaves an extraordinary amount of room to his narrators, and allows the book to flow much like an

ies, no. 25 (2024), edited by Jonathan Larcher and Heikki Wilenius, titled "Ethnographic Rubbish."

15 A few years later Bermani would be affiliated with the Nuovo Canzoniere Italiano, Milan's folk revival collective, together with other prominent figures such as Roberto Leydi, Gianna Marini, Gianni Bosio, Sandra Mantovani, and Ivan Della Mea. Bermani eventually wrote an important book about the history of the Nuovo Canzoniere Italiano. See Cesare Bermani, *Una storia cantata. 1962-1997: trentacinque anni di attività del Nuovo Canzoniere Italiano/Istituto Ernesto De Martino* (Milan: Jaca Book, 1997).

16 For a specific account of Bermani's research methods and data, see his *Volare al sabba,* 37–41.

extended oral narration, with long segments of interviews being presented around a series of recurring themes: l'*ammedia* (envy, or the evil eye), the belief in (consciously or unconsciously) being able to cast a curse through a malevolent glance; the ways in which one becomes a witch or is cured of being a witch; the characteristic behaviors of witches (night flight, shape shifting, dislike of children, compulsion to count); and, of course, the sophisticated system of protection and defense against witches.[17]

Most striking to us, however, is the importance of sound in *Volare al sabba,* and, in particular, the ways in which oral testimonies are so generously embedded within Bermani's interpretation, appearing on the page as large, lovingly transcribed sections in dialect, with Italian translations in the footnotes—creating a wall of thick dialectal transcriptions that the average reader will need to toggle away from in order to read the translation. The choice to highlight the linguistic opacity of a defiantly emic perspective is almost (but not quite) akin to the strategic exclusion of non-indigenous readers staged by scholars such as Audra Simpson and Dylan Robinson.[18] This heightened attention to oral testimony is also what most struck us as different from the obvious precedent and inspiration for Bermani's work—Ernesto De Martino's seminal research on southern Italian mourning rituals and tarantism in the 1950s, which were of a more traditionally interpretive bent.[19] Bermani aimed to continue this work but also show that, unlike

17 Although the focus of the interviews is intensely local, *Volare al sabba* is written as a contribution to the study of central and southern European witchcraft writ large. To the micro-historical level of the villagers' narration, Bermani adds both detailed interpretations based on Freudian psychoanalytic insights into the witch as an errant figure of womanhood and an impressive historical perspective. He highlights the documented continuity of these practices: both with witchcraft practices recorded during the European witch hunts of the sixteenth and seventeenth century, and with anthropologically recorded practices in other parts of Europe.

18 Dylan Robinson, *Hungry Listening: Resonant Theory for Indigenous Sound Studies* (Minneapolis: University of Minnesota Press, 2020); Audra Simpson, "On Ethnographic Refusal: Indigeneity, 'Voice' and Colonial Citizenship," *Junctures*, no. 9 (2007): 67–80.

19 See Ernesto De Martino, *La terra del rimorso. Contributo a una storia religiosa del Sud* [1961] (Milan: Il Saggiatore, 2015); *Morte e pianto rituale nel mondo antico: dal lamento pagano al pianto di Maria* (Turin: Einaudi, 1958); *Sud e magia* (Milan: Feltrinelli, 1959). De Martino and Bermani share a fundamentally functionalist understanding of magical practices—namely, that such practices articulate urgent socio-political needs in the community and gain ontological status through their functioning within such a community. For Bermani, these socio-political functions are explained through the language of psychoanalysis; for De Martino they are explained through a Heideggerian notion of a being-in-the-world (*Dasein*) that is socially and psychologically ruptured (a "crisis of presence") by traumatic events, and

what De Martino had postulated, magical practices were alive well into the 1970s. In other words, De Martino's implicit attribution of southern magic to a kind of pre-capitalist, agrarian economy was not the whole story and not entirely accurate. We are in broad agreement with Bermani here, but perhaps there is more: the figure of the witch is closely tied to moments of traumatic socio-economic transition—such as the passage from common land to land enclosures, the distinction between salaried and unsalaried labor, and transition from an agrarian to an industrial economy.

Our investigation focuses on two central questions to do with sound and listening that constitute the witch in these transitions. These questions are: in tapes of interviews about witches, what is the relationship between the obviously aural nature of the recording and the role of sound and hearing in the emerging local acoustemology of witches? And what relationship is there, if any, between the methods and technologies of oral history and the experience of witchcraft as narrated and performed by interviewees? It is essential, as a first step towards answering these questions, to say that the discourse of the witch is intrinsically suited to oral history because it is, constitutively, a privileged discourse of hearsay: witches almost never present themselves as such and are almost never seen in action.[20] It is hearsay that makes the witch, that points her out, that tracks her movements, and suggests remedies against her powers. Hearsay indeed deserves a full methodological account in relation to European witchcraft—one that is currently lacking elsewhere, and which we begin to sketch later on in the essay. For

must be repaired through magical practice. Yet in Bermani, more than in De Martino, it is the communal act of telling a story or relaying an event that gains importance over the effective magical practice.

20 It is for this reason that a twentieth-century oral history of witchcraft is not only interesting but necessary: oral history, particularly Italian oral history, was built on a reevaluation of both orality *and* hearsay as equally important means of relaying historical and political knowledge that counters the official historical record. Indeed, for Alessandro Portelli, founder and theorist of the Italian branch of oral history in the 1970s, the relationship between oral history and traumatic historical shifts was essential, in that oral history offered accounts that, while sometimes factually incorrect, permitted communities to survive, psychically, world-ending events. Examples of this include Portelli's famous oral history of the mass killing of the Fosse Ardeatine during the Nazi Occupation of Italy in World War Two as well as the history of the industrial area of Terni. See *L'ordine è già stato eseguito. Roma, le Fosse Ardeatine, la memoria* (Rome: Donzelli, 1999) and *Dal rosso al nero. La svolta a destra di una città operaia: Terni, laboratorio d'Italia* (Rome: Donzelli, 2023). Portelli has also written eloquently on the methodological significance of oral history against the official record, particularly when oral history gives factually incorrect information. See Portelli, "The Peculiarities of Oral History," *History Workshop Journal* 12, no. 1 (1981): 96–107.

now, however, and before we delve into some of the tapes' contents, suffice it to say that we use the term hearsay in a deliberate, but non-derogatory manner. Hearsay is now a term generally used for discredited, unreliable second-hand evidence, partly because of its historical association with the systematic legal persecution of anomalous behavior, especially witchcraft trials in the Counter Reformation. Yet in the history of witchcraft in Zaccheo and neighboring villages, hearsay requires a more flexible, generative approach that includes not only the signaling of anomalous behavior or even attribution of malevolence to vulnerable people, but also the reabsorption of such behavior into the community.

In other words, hearsay has a powerful role in knitting the witch into (and not out of) the social fabric, while also drawing attention to the social inequalities that foster an environment conducive to the figure of the witch. This communitarian function of hearsay brings up important questions regarding the effective reach of Counter Reformation heresy trials. It seems significant that Zaccheo and the neighboring area was, to our and Bermani's knowledge, never *directly* a site of persecution of witches during the Counter Reformation—Zaccheo is, to this day, a relatively isolated part of the region, one that Counter Reformation officials didn't directly control.[21] As such, witchcraft was perhaps not as closely associated with a history of trials or even persecution, but rather it was a means of internally managing political tensions in a largely non-violent manner. We will argue, indeed, that hearsay, in this world, has a particular power to summon the unfathomable to the senses without calling for its destruction.

Why the Word "Witch"?

No discussion of witchcraft today can begin without the acknowledgement that the very term "witch" is controversial and an evolving matter of discussion in anthropology and history.[22] Terms such as "magic" and "witchcraft"

21 See Romano Canosa and Isabella Colonnello, *Streghe maghi e sortíleghi in Abruzzo tra Cinquecento e Settecento* (Ortona: Menabò, 2013); Canosa, *Storia dell'Inquisizione in Italia: dalla metà del Cinquecento alla fine del Settecento* (Rome: Sapere, 1986–1990), 5 volumes.

22 This statement evokes a bibliography too monumental for us to conjure here. Some key texts on European witchcraft are Ronald Hutton, *The Witch: A History of Fear, from Ancient Times to the Present* (New Haven: Yale University Press); Carlo Ginzburg, *I benandanti. Stregoneria e culti agrari tra Cinquecento e Seicento* [1966] (Milan: Adelphi, 2020); Mary Douglas, *Witchcraft Confessions and Accusations* [1970] (London: Routledge, 2004); Norman Cohn,

were crucial to the formation of the field of anthropology in the early twentieth century, where comparative approaches—often based on second-hand fieldwork—were essential to establishing a set of shared methodologies for cultural practices that eschewed the bounds of Western medical and legal practice.[23] Such broad comparativism came rightly under scrutiny with the 1970s turn towards subaltern and area studies, which focused on local practices, emic language, and a suspicion of universally applied terminology as an a-critical, Eurocentric approach. Within this latter turn, which is still dominant not only in anthropology but in the humanities writ large, terms such as "magic" and "witchcraft" lose descriptive power precisely because, when used in broad intercultural sense, they risk describing anything that escapes an implicit Eurocentric notion of reason and science. From an historical standpoint, particularly as it concerns the history of European witch hunts in the Counter Reformation, it has been argued that the very term "witchcraft" reproduces the Counter Reformation's flat, misogynistic, and persecutory gaze on the multitude of local community practices and medicines that the term encompassed at the time of the trials.[24]

In this paper, we are using the terms "witch" and "witchcraft" deliberately, and for a number of interconnected methodological reasons. For one,

Europe's Inner Demons: An Enquiry Inspired by the Great Witch-Hunt (Chicago: University of Chicago Press, 2001); Julian Goodare, *The European Witch-Hunt* (London: Routledge, 2016); Marko Nenonen and Raisa Maria Toivo, eds., *Writing Witch-Hunt Histories: Challenging the Paradigm* (Leiden: Brill, 2014); Gábor Klaniczay and Éva Pócs, eds.,*Witchcraft Mythologies and Persecutions* (New York: Central European University Press, 2008).

23 This kind of broad comparativism is associated with some of the foundational, and now controversial or disproven texts of twentieth-century anthropology such as James Frazer's *The Golden Bough: A Study in Magic and Religion* (1922) or Mircea Eliade's *Myth and Reality* (1963).

24 See for instance Adriano Prosperi, "Credere alle streghe: inquisitori e confessori davanti alla 'superstizione,'" in *Bibliotheca Lamiarium: documenti e immagini della stregoneria dal Medioevo all'Età Moderna* (Pisa: Pacini Editore, 1994): 18: "The composite nature of the world of practices and beliefs, of myths and rituals that in inquisitorial legislation went under the name of witchcraft is a fact … Only when one manages grasp a single thread of this fabric—such as the fertility cults of the 'benandanti' studied by Carlo Ginzburg, the rituals and myths of the hunt addressed by Maurizio Bertolotti—does the illusory compactness of a single and well-polished object disappear, and one moves finally beyond the knowledge of the inquisitors." (Original Italian: "Il carattere composito del mondo di pratiche e di credenze, di miti e di riti che nella normativa inquisitoriale andava sotto il nome di stregoneria è un dato di fatto … Solo quando si è riusciti ad afferrare un filo di questo tessuto—i culti della fertilità dei 'benandanti' studiati da Carlo Ginzburg, i riti e i miti della caccia di cui si è occupato Maurizio Bertolotti—è venuta meno la compattezza illusoria di un oggetto unico e ben levigato e si è andati realmente al di là delle conoscenze degli inquisitori").

"witch" is the translation of the dialectal term used by Zaccheo's inhabitants, *sdraje*—which is the Teramo dialectal form of the Italian "strega/streghe" (*sdraje* functions as both singular and plural noun). The Italian noun is tied to the Latin "strix," for nightbird, and is generally translated as "witch" in English. We could have insisted on using the term *sdraje* throughout, but resisted this because we believe that the term requires a mindfully comparative approach that takes stock of the braided continuities of the figure of the witch in a European context and perhaps beyond. Indeed, despite a widespread postcolonial turn in the humanities towards historical and geographical specificity and emic (rather than etic) language, witchcraft is a topic that has invited a comparative approach even from historians and anthropologists. Such comparativism is done nervously and with a richness of disclaimers, but also with a justified sense of methodological urgency.[25] This is in large part because witch hunts in Europe coincided, and overlapped, with colonial conquest and the denigration of indigenous religious practices as witchcraft. Silvia Federici's seminal argument in her *Caliban and the Witch: Women, The Body And Primitive Accumulation* (to which we will later return) is that the category of the witch marks a moment in the sixteenth century in which the subjugation of women and the mechanisms of settler colonialism become part of a unified effort to secure land as private property.[26] Methodologically, this means that witchcraft is a significant and even unique point of contact between the disciplines of history and anthropology and a generative topic for the new strains of careful comparativism embodied by interdisciplines such as global history.

These considerations inform one of the most recent, broad-ranging books on this topic, British historian Ronald Hutton's 2017 *The Witch: A History of Fear, from Ancient Times to the Present*.[27] Hutton's approach is one of open, inquisitive, carefully documented comparativism, in which the category of "witch" clasps together a series of political and historical figures that are, as

25 A case in point is the work of anthropologists Pamela J. Stewart and Andrew Strathern, whose *Witchcraft, Sorcery, Rumors and Gossip* (Cambridge: Cambridge University Press, 2004) we will consider later in the article. The necessity and difficulty of comparativism has been a recurring topic in the humanities for the past twenty years—one significant contribution being Rita Felski and Susan Stanford Friedman, eds., *Comparison: Theories, Approaches, Uses* (Baltimore: Johns Hopkins University Press, 2013).

26 Silvia Federici, *Caliban and the Witch: Women, The Body And Primitive Accumulation* (New York: Autonomedia, 2009).

27 The missed connection between anthropology and history on the matter of witchcraft is admirably explained and reconstructed in Hutton, *The Witch: A History of Fear.* In particular, see ch. 1, "The Global Context," 3–43.

he shows, recurrent across a wide range of societies and whose emergence is neither predictable nor easily reducible to a set of social and historical factors. After taking into consideration sources spanning from Middle Eastern and Mediterranean traditions, as well as drawing from a wealth of anthropological work on cross-cultural understandings of witchcraft, Hutton highlights four core features that ground a comparative analysis of the figure of the witch:

> The first … was that such a person worked to harm neighbours or kin rather than strangers, and so was an internal threat to a community. The second was that the appearance of a witch was not an isolated and unique event. Witches were expected to work within a tradition, and to use techniques and resources handed down within that tradition, acquiring them by inheritance, initiation or the spontaneous manifestation of the particular powers to which they were connected. The third component of the European stereotype of the witch was that such a person was accorded general social hostility, of a very strong kind … Finally, it was generally agreed that witches could and should be resisted, most commonly by forcing or persuading them to lift their curses; or by making a direct physical attack on them to kill or wound them; or by prosecuting them at law, with a view to breaking their power by a punishment which could extend to having them legally put to death.[28]

It is remarkable how, even from the short opening episode of Francesco's story, we can get a sense of the applicability of these four criteria. First, we see the importance of witches as a community-based figure—one that lives in a specific locality and harms only those within it (the crossroads for meeting witches are all within the bounds of the village). Second, the importance of tradition—as highlighted by the women's discussion of the emergence of new witches in Zaccheo. Indeed, as Bermani shows, there were many codified conditions under which one might be born a witch or become one.[29] Third, the witch was feared—so much so that confronting one, as Francesco did, was considered the ultimate show of masculine

28 Hutton, 3–4.

29 For example, being born at midnight on Christmas day could result in the child becoming a witch (if female) or a werewolf (if male), or other forms of supernatural beings. Many folklorists and ethnographers specializing in Abruzzese traditions have recorded the particular circumstances in which a newborn could be in danger of turning into a magical being. See, among others, Finamore, *Credenze, usi e costumi abruzzesi*, 76–8; De Nino, *Usi abruzzesi*, 131–3. Bermani also discusses these beliefs in *Volare al sabba,* 250–7.

strength. Lastly, the need to resist the witch by either persuading her to lift the curse, performing protective counterspells, or by quickly scolding her with a hot poker in order to turn her back into a friendly figure. It would be disingenuous to say that the latter act wasn't a form of physical disciplining. Yet it is also important to note that, in the community, this was considered a very quick and not especially violent act, often performed on children as a form of immunization against a range of evil spirits.[30] Such practices signal that coexisting with witches was an accepted part of everyday life.

Lastly, a broader comparative approach is essential to understanding the political dimension of the acoustemology of witches in the Zaccheo tapes. It is striking that a feminist Marxist historian such as Federici considered *Caliban* a preparatory study for the examination of a return to witch hunts and femicide in the global twenty-first century.[31] As mentioned earlier, Federici argues in *Caliban* that the process of land expropriation and privatization in both North and Latin America and Europe was accompanied by the emergence of a salaried, male, and white labor force to the devaluation, persecution and economic exclusion of all other forms of labor. Unpaid labor, such as feminine reproductive labor in Europe and plantation slavery in settler colonies were part of the same system for drawing profit from cheaply-worked, stolen land, and both forms of unpaid labor were tied to accusations of witchcraft. Federici's take on the phenomenon of witchcraft is strikingly broad to this day, and it is an implicit response to a focus on the hyper-local (the village) when discussing this topic.[32] We will begin to consider the applicability of

30 As mentioned in note 29, there were circumstances in which newborns were deemed to be particularly vulnerable to evil forces. In *Credenze, usi e costumi abruzzesi,* 77, Finamore recounts: "Those who are victims of destiny can do nothing of their own accord to free themselves; but anyone—whether through fire or even the slightest shedding of blood—is able to redeem them. And, in the act of doing this, the freed person calls them by the name of St. John = godfather; because he is truly the one who gives a new life to someone who was previously a slave to their evil fate." (Original Italian: "Chi in tal modo è vittima del destino, non può fare da sè nulla per liberarsene; ma chiunque—o col fuoco o con effusione, anche lievissima, di sangue—può redimerlo; e, nell'atto che fa questo, dal liberato è chiamato col nome di s. Giovanni = compare; perché veramente è quello che dà una nuova vita a chi dianzi era schiavo della sua rea sorte"). See also De Nino, *Usi abruzzesi,* 132.

31 Silvia Federici, *Caliban and the Witch* and *Witches, Witch-Hunting, and Women* (Oakland: PM Press, 2018).

32 Having said this, however, it is important to note that Federici's wide-ranging economic interpretation of witch hunts points to a sustained global attack on the very notion of the village, which for her broadly means subsistence farming and women-led communities. See Federici, "Women, Land Struggles and the Valorization of Labor," *The Commoner*, no. 10 (2005): 221: "The 'village'—a metaphor for subsistence farming in a communal setting—has

this history of land privatization to Zaccheo below, but for now may it suffice to say that we share Federici's ambition to discuss witchcraft as a response to epochal socio-political shifts. The creation of the witch in moments of historical transition corresponds to a sensorium closely attuned to failing sight, dangerous listening, and sounds without a detectable source.

Performative Denial and Nurtured Hearsay

In considering the discourse of the witch in Zaccheo, we highlight three key dimensions of hearsay. The first is that the suspected witch denies, when questioned, all knowledge of witchcraft, but then feeds hearsay by doing things she knows will identify her as a witch. The second is a constitutive inability to see witchcraft being performed, and the remedial use of hearing. The third is connected to the witch's own hearing abilities: on Fridays (and other days, according to different traditions), she is able to hear when people talk about her, creating a reversal of the atmosphere of surveillance and suspicion that makes the witch in the first place.

Let's now consider the first dimension of hearsay: denying allegations of witchcraft while performing behaviors usually attributed to the witch. In the years of Bermani's research there was one witch uniformly pointed out in Zaccheo: Rina, a low-income, elderly unmarried woman with no children who lived with her sister (also unmarried and with no children). Rina and her sister lived in the village square, around which most of the houses were located, adjacent to one other. Bermani recorded Rina only once—in her home in 1966—together with her sister and a younger woman present, Gloria, who translated between dialect and Italian. When pressed by Bermani on whether she knows about witches or about people's gossip about her, Rina responds by saying she doesn't know anything about such beliefs:

DIALECT	ENGLISH
Rina: Mo so vvicchie, diciave jeje, nen vac' sendenne li farille… je me facce lu fatta mi, e nen vac' sendenne li cose. Gloria: 'Ndese c'ha dette Soline, non gli piace sentire le chiacchiere.	Rina: Now I'm old, I don't listen to gossip, I mind my own business, and I don't listen to gossip. Gloria: Did you hear what Rina said, she doesn't like listening to gossip.

been a crucial site also for women's struggle, providing a base from which to reclaim the wealth the state and capital were removing from it."

[voci sovrapposte]
Cesare Bermani: Ah, ho capito.
R: Sembre fatte lu fatta mi, segnò *[confuso]*… me stinghe simbre eccadandr'a mmo, me stinghe… e cuscè, me facce lu fatte mi'.
G: Brava a Rina, fai bene così.
[confuso]
R: *[ride]* Quande ine, segnore mi', se fa lu fatte so, sembre belle è.[33]

[overlapping voices]
Cesare Bermani: Ah, I understand.
R: I've always minded my own business, Sir *[unclear]*… I'm always here in my house… and I mind my own business.
G: Good for you, Rina, well done.
[unclear]
R: *[laughs]* It's always better to mind one's own business, Sir.

Rina declares that she knows nothing of witches and she doesn't go around *sendenne* (hearing/feeling/hearing about) things; the act of refusal is similar to that of the women surrounding Francesco earlier, all of whom declare that they do not believe in witches. As with those women, Rina's denial is not an ending; instead, it is a necessary premise to a different mode of conjuring the witch. In the case of the women encountered at the opening of the essay, this conjuring was communal dialectal speech; in the case of Rina, it is the performance of a series of small behaviors that she knows will generate gossip about her. Many of Bermani's interlocutors, as well as many who are still living in Zaccheo to this day and with whom we have spoken informally, remember how Rina would perform small actions that, while harmless in themselves, were interpreted as symptomatic of being a witch in Zaccheo.[34] For example, she was unwilling to kiss children when asked, and she wouldn't leave a neighbor's house when an upside down broom had been placed by the exit. These actions carried significant weight: having a suspected witch kiss one's children constituted an act of protection against her curse, so this is something that a witch would avoid doing unless she was either threatened or bribed. The upside down broom trick was a well-known way of trapping a witch in one's house until she agreed, for instance, to lift a curse.[35] Therefore, while Rina openly denies any involvement with *sendè* of witches, she is in fact openly feeding it in her everyday life. How, and why, would she do such a thing?

The answer lies in a mechanism for the generation of hearsay, and the role of hearsay in securing—by generating fear for the witch—the physical

33 Villa Zaccheo, September 28, 1966 (Tape 138, digitized as CD 26H) from Archivio Cesare Bermani. This episode is also transcribed and discussed in *Volare al Sabba,* 206.

34 See Bermani, *Volare al Sabba*, ch. 13 ("Un comportamento da strega").

35 See note 9.

and social survival of elderly, unmarried women. Behaving, as Rina does, in ways that will generate gossip is the second part of a ritual that begins with denying all knowledge of witches. On the same day of her interview with Bermani, we learn about Rina's undeniably witchy behaviors when he converses with another group of women in another home. This gathering includes Maria, who's hosting the gathering at her house, as well as Gloria (the young woman present on the taped interview of Rina), who leads the conversation:

ITALIAN/DIALECT

Gloria: A Rina è andata nelle case e gli è successo a Rina, no? Mo quella ha fatto vedere che non sapeva niente, ma quella quando iva llà li case, le famiglie gli ha fatto baciare il bambino. "Se tu non baci questo, non ti faccio riuscire." Allora gli regalano la robba, la farina, l'olio, no? E allora dice "Baciami il bambino!" *[imitando Rina]* "Eh" dice, "ma io li mammucce, so poco amante," faceva questa, "so poco amante… je li mammucce nni tinghe, so poco amante." Invece gli facevano baciare i bambini e dicevano "Adesso sì, adesso puoi riuscire." Sennò non la facevano riuscire.

[…]

Maria: O puramende l'avava da bacià, o ji metteva la ranara loche, 'rrete a la porte, n'arsceva.

CB: E lei non usciva!

M: E quell'arriva a nu punde, a mezzanotte, no, se nn'arhesce, calle abbìa a pisci mezz'a la case *[risate]*.

CB: Ah si? L'ho sentito dire *[risate continuano]* a mezzanotte deve fare…

M: Calle a mezzanotte deve uscire sembre, se per caso nn'arhesce, che la scopa gni s'arvodde pe ne gnà, allora calle abbìa a piscià.

ENGLISH

Gloria: Rina went to people's houses and it happened to her, no? She'd say that she didn't know anything, but when she went to people's places, they would make her kiss the child. "If you don't kiss him, I'm not going to let you out." Then they give her things, flour, oil, right? And they tell her, "Kiss my child!" "Eh," she says *[imitating Rina]* "but I'm not fond of children," she would say, "I don't have children, I'm not that fond of them…" But they would have her kiss them and they'd say "Now you can leave." Otherwise they wouldn't let her.

[…]

Maria: She had to kiss the child, or they'd put the broom behind the door.

CB: And she couldn't leave!

M: She'd get to a certain point, at midnight, that if she couldn't go out, she started peeing in the middle of the house *[everybody laughs]*.

CB: Ah! I'd heard about it *[more laughter]* at midnight, she has to go out…

M: At midnight she always has to go out of the house, and if by any chance she can't—if they don't turn the broom upright again—then she starts peeing.

CB: Ah ho capito.	CB: Ah, I see.
[altre risate][36]	*[more laughter]*

The recording is amazing because of the delight, laughter, and warmth that emerges in the joint pleasure of discussing Rina's behavior. Laughter occurs fairly often in Bermani's interviews, and it is common for it to be laughter among a group of women. We heard it already around the kitchen table where Francesco was narrating; and its valence, in our opinion, is similar across these two recordings. In other words, this is not a malevolent laughter aimed at an outsider, but an expression of glee at discussing something forbidden. By laughing, the speakers mask themselves in a moment of reticence—they withhold their speech from both microphone and interviewer—while expressing their participation in a discourse that gives them pleasure. Laughter tells us that witchcraft is a sensitive topic (hence the need to giggle and screen oneself off from speech) that has a function of catharsis, a release of pent-up psychic energy.[37] In the story told by the women, Rina commits two defiant acts: openly admitting to not liking children and urinating on the floor. This latter act was connected to the belief that, if a witch is blocked in someone's home after midnight, her only way out is to pee on the house floor. At the time, indoor bathrooms were almost nonexistent in Zaccheo, and people would need to relieve themselves outside. By peeing indoors, the witch inverts the inside/outside the house social norm, thus freeing herself. It is to this ritual of inversion of social norms that the women are reacting, and they react with glee, vicariously participating in, rather than rejecting, a behavior that attracts them and repulses them at once.

Rina is therefore an active participant in, and not a passive victim of, the mechanism of hearsay. As an unwed, child-free woman, Rina has a social function to absolve: she consciously becomes a conduit for antisocial, unconventional behavior—of a kind that other women must repress in public.

36 Villa Zaccheo, September 28, 1966 (Tape 138, digitized as CD 26H) from Archivio Cesare Bermani.

37 The strong tendency to associate laughter with derision comes from a broadly Aristotelian tradition that includes Henri Bergson's famous essay *Le rire: Essai sur la signification du comique* [1900] (Paris: Presses Universitaires de France, 2007). We are here implying another understandings of laughter to do with women's reproductive and emotional labor; for a full general discussion of this, see Delia Casadei, *Risible: Laughter without Reason and the Reproduction of Sound* (Berkeley: University of California Press, 2024), especially ch. 3 ("Laughter as Sound Reproduction"), 58–85.

In return, she (not having a husband or children to support her and, being a woman, barred from salaried work) can ask for food and practical help from her neighbors without being denied. Amidst the brutal inequalities brought on by a rural society centered around property and salaried male labor, her role as a witch doesn't signify, in the community, a radical correction of that inequality. Instead, it's an acknowledgement of a vestigial sense of communal obligation that comes around, literally, knocking on people's doors. Both in Bermani's interviews as well as from our own research,[38] we have learned that Rina's means of survival derived from traveling on foot around Zaccheo and the neighboring villages, going door to door asking for daily work as well as charity in the form of flour, oil, and other staple foods. The mechanism of hearsay is tied to the political economy and social inequalities of Zaccheo and its environs. Rina must deny all knowledge of witchcraft and yet behave publicly in ways that will make people talk. This talk, in turn, lends Rina a form of social capital that allows her to be woven into the village's social fabric and thus survive.

Hearing the Witch: The Work of Acousmesis

Now for the second dimension of hearsay, which we defined above as the inability to see a witch in action and, instead, of hearing/feeling her. Even Francesco—who saw several women at the crossroads whom he recognized as witches—could not catch them performing witching acts such as flying, braiding horses' hair, and casting curses. In fact, hearing/feeling the witch is a recurrent trope in the tapes: several people say they can hear and feel her, but nobody can see her in action. This, as we have seen, is partly because she operates at night, usually in poorly lit parts of the town. Yet the witch's invisibility is more deeply built into her ontology than mere circumstance. In sound studies parlance, we could say that the experience of the witch is acousmatic—that is, that she takes the form of sounds whose source is occluded from the senses but also semiotically unplaceable. Michel Chion famously articulated the particular power held by cinematic voices whose sources are invisible; and it is perhaps no coincidence that, in doing so, he

38 See Bermani, *Volare al sabba,* 206–21. Although our research is in the early stages, between July 2023 and January 2024 we conducted informal interviews with several inhabitants of Zaccheo, some of whom were teenagers or young adults when Bermani was pursuing his fieldwork in the 1960s and 70s. All our interviewees knew Rina (who died in 1974) and were able to offer personal testimony of their relationship with her.

conjures a witch-like creature: "everything," he notes, "hangs on whether or not the acousmêtre has been seen. In the case where it remains not-yet-seen, even an insignificant acousmatic voice becomes invested with magical powers as soon as it is involved, however slightly, in the image. The powers are usually malevolent, occasionally tutelary."[39]

We can explore the notion of the acousmatic in more depth by considering an interview from August 16, 1966. Gerardo, a 34-year old resident of Zaccheo, recalls encountering a witch in the form of crying sounds outdoors. He tells his story without hesitation, while his father is listening and confirming, at the end, that what his son witnessed was the presence of a witch:

ITALIAN/DIALECT	ENGLISH
CB: Ecco raccontami la storia che mi hai raccontato prima.	CB: Tell me the story you told me earlier.
G: *[ride]* Eh quella, una sera, no?, era di venerdì, era, statahàme ecche, qui davanti, e sentimmo a piagne… pure papà ci stava… a piagne come un bambino, qui vicino, là prima ci stava tutto lu fosse, quella strada… cuscì. Je so' poco pauroso, diciamo, pioveva un po', ive là, e mentre m'avvicinive non sentii più di piangere sto bambino. Ma io, dicive, voglio vedere la fine. Arrivai ancora più in là, e sentii un'altra volta… allora, presi un sasso, lo tirai, quando mi passò davanti, io ero, bè, ere notte, come una fiammata inzomma, e non vidi più niente. Capito? *[ride]*	G: *[laughs]* One night, it was on a Friday, we were here outside, dad was there too. We heard crying, as if it were a child… there, in the past, there was a ditch, on that road… It was raining a little, but I'm not easily scared, so I went there. And as I got closer, I couldn't hear crying anymore. But I said to myself, now I want to see how it ends. So I went further, and I heard him again… So I picked up a stone, I threw it, and all of a sudden—it was nighttime—something like a burst of flames passed me by. And then I couldn't see anything else. Do you understand? *[laughs]*
CB: E che cos'era secondo te?	CB: And what do you think it was?
G: Beh io vidi una cosa bianca in un albero, ma certe ca…	G: Well, I saw a white thing on a tree, but of course…
G's father: Si trasforma, quella si trasforma come vuole…[40]	G's father: She changes herself, that one changes herself however she likes…

Three aspects are crucial here. For one, the sound is deemed strange not just because it has no indexical referent (it sounded like a child weeping) but because it is occurring at an unusual time and place (nighttime and away from houses). The sound is also intermittent and difficult to position

39 Michel Chion, *The Voice in Cinema* [1982], trans. Claudia Gorbman (New York: Columbia University Press, 1999), 23.

40 Villa Zaccheo, August 16, 1966 (Tape CB N 119) from Archivio Cesare Bermani.

in space, and therefore invites heightened attention. Secondly, Gerardo's trick of throwing a stone towards the source of the sound marks the gap between the sound and its source, measures it, and therefore makes that gap real, materially expressive. Lastly, the flare of fire and temporary blindness as the witch escapes doesn't resolve, but rather draws new sense from the inability to see the source. In other words, Gerardo's encounter hinges not so much on poor visibility (lack of light, nighttime) but on the experience of temporarily losing one's ability to see. The relationship of acousmatic listening to witchcraft goes from being circumstantial (it was nighttime, I couldn't see) to being constitutive and necessary (she called to me and then blinded me as she escaped, so I could actively see her in the act of vanishing). Here the acousmatic is neither a mark of an omnipotent other, nor a semiotic disturbance awaiting resolution—but instead a call, an invitation to hearken to, to measure (the stone's throw), and finally to behold (the blinding flare) the *disappearance* of the sound's source. Equally striking is that the disappearance-through-temporary blindness coincides with the reconnection of the witch's voice with her body.

We can observe a similar experience in the testimony of Omero, interviewed by Bermani on August 29, 1969. Omero remembers going, four or five years earlier, to a particular crossroads in a neighboring village where witches transited at night. This was in order to help a neighbor's children who were often sick and thought to be tormented by witches (like Francesco's daughter Lillina, previously discussed). Omero agreed to help by meeting the witches at the crossroads at midnight, as he had already done for his own daughter. Night-time, let us remember, meant no visibility, especially in the country lanes that wound around the crossroads where Omero went. He tells that the first time he went, he also brought a scythe for protection; but in so doing, he broke the protocol for witch visitations, and scared the witches so much that they changed course and didn't pass by the crossroads; Omero remembers hearing them clamor nearby:

ITALIAN/DIALECT	ENGLISH
A mezzanotte meno cinque, il crociv-ia era qui, vicino a questa chiesa, ho incominciato a sentire di sotto come un rumore, come che fosse stato una squadriglia di apparecchi; ma un rumore terribile. […] Allora, passato questo qui, non ho sentito più niende.	At five to midnight, the crossroads was this one here, next to that church, and I started hearing a noise, almost like a group of planes; the noise was so terrible. […] After that, I couldn't hear anything else.

Datosi che io portevo questa falce, allora una vecchia mi ha detto: "Quelle lì non ha potuto passare lì, datosi che tu ci aveva l'arma e perciò ha fatto tutto quel fracasso."[41]

Given that I was carrying a scythe, an old woman told me: "The witches couldn't pass because you had a weapon, and that's why they made all that noise."

The second time, Omero left the scythe at home, and so could watch the witches transit. And yet, he said, once again couldn't truly see them: "I couldn't recognize them, because they were all veiled. I could see the horses, but I couldn't tell if they were women or men."[42] While he was able to distinguish the horses (both tall and short, all thin) and noticed colorful clothes, he couldn't give any details about the witches' appearance gleaned from sight. Rather, the witches took (sometimes unexpected) shape through sound; and it is Omero's inability to see that provides the condition of this sonorous embodiment, as his attention focuses on the terrible noises that announced the witches' arrival.

Other people interviewed by Bermani similarly experience the witch not so much as invisible, but as a momentary lapse in vision, and such temporary blindness corresponds to the power, specific to witches, to shapeshift. Let's now turn to an extraordinary recording from 1966—a witness account of shapeshifting, provided by Gerardo, whom we have encountered above. The protagonist of the story is, once again, Rina, this time accompanied by her sister Giovanna:

DIALECT/ITALIAN

G: Allora iemme là, e jere nu vanardè ssare. Je so state simbre mezze berbone, anche da peccule [*ride*], da simbre. Allora andai là, stava Giuànne e Rina. Mo sta Rina piagnava, ma piagnava che non sapava più, allora gli facevo a Giuànne: "C'ha fatto?" "Eh, sta male, sta male."

ENGLISH

G: We were hanging there, it was a Friday night. I've always been a rascal, even when I was little [*laughs*], always. So, Giovanna and Rina were there. Rina was crying, she was crying so much that she almost couldn't take it anymore. So I asked Giovanna: "What happened to her?" "She's not well, she's not well."

41 Villa Zaccheo, August 29, 1969 (Tape 225, digitized as CD 36H) from Archivio Cesare Bermani. This episode is also transcribed and discussed in *Volare al Sabba*, ch. 11 ("Sono stato al crocevia…"), 176.

42 Original Italian: "Non ho potuto riconoscerle, perché erano tutte coperte. I cavalli si vedevano, ma non potevo riconoscere se era donna o s'era uomo."

Dicive mah, e allora quella non poteva stare, proprio non poteva stare. All'uddeme Giuànne je disse, "E vattene nghe n'accidente!," je fece *[ride]*.

Allora se ne jò da lò, dove statahame noie, se ne jò. Tutte nu mumende, quando arpasso lò, mezz'a lu… nzomme lu fuche, cuscè, lu smuvò, quande fece VUUUM… e partò.
Mariafelice Forti: e che forma aveva?

G: Be' io inzomma… vedive na cosa che passò lò, ma la forma per quanto era veloce non la potetti vedere, per quanto andava veloce.[43]

And I said to myself, "Mmm, I don't know…" Rina wouldn't calm down at all. In the end, Giovanna told her, "Leave, for hell's sake!" *[he laughs]*.

And so she went away from where we were, she went away. All of a sudden, when she passed there, in the middle of the fire, she shifted it, and it was like VOOOM, and she left.
Mariafelice Forti: And what was her shape?
G: I only saw something that passed there, but for how quick it was, I couldn't see it.

It's hard to put into words the vivid soundscape of this tape. Listening to it, we bear witness to Gerardo's talent for storytelling—setting an evocative scene, the use of suspense, the presence of sound effects—as well as the pleasure of sharing such an extraordinary occurrence. Importantly, we can see how, in telling stories of hearing witches, the acousmatic realm is created through coordination of narrative and sound effects provided by the teller ("VOOOM!"). In fact, the acousmatic becomes almost a Barthesian "reality effect" in stories about witches: the stretching of the gap between sound and source is the place where the witch manifests herself, in the most material sense possible, in a momentary lapse of vision and understanding.[44]

The above examples and analyses suggest that Chion's classical definition of the acousmêtre requires some revision for the purposes of an acoustemology of witches. For Chion, the acousmêtre is a speaking, intelligible voice that addresses people in the cinematic frame. The witch in Zaccheo is never addressed directly and doesn't ever speak to others in her role as a witch. Indeed, as we saw from Francesco's story, addressing a witch at a crossroads at night results in death. The acousmatic sounds that signal a witch's presence are not her voice or anything directly traceable to her physical form, but genuine malfunctions of the sensorium, strange sounds without an obvious source that signal a dangerous (and witch-related)

43 Villa Zaccheo, August 16, 1966 (Tape CB N 119) from Archivio Cesare Bermani.

44 Roland Barthes, "The Reality Effect," in *The Rustle of Language* [1969], trans. Richard Howard, ed. François Wahl (Berkeley: University of California Press, 1989).

lapse in audio-visual perception. Brian Kane, in his *Sound Unseen*, argues, against the French intellectual tradition of acousmatic listening, that the gap created between a sound and its source is not in itself that significant an event.[45] A sound isn't made powerful by its source being occluded; instead, it is the cultural techniques and discourses that fill that gap that make a sound acousmatic, that lend it power in a sociological and political sense. In other words, for Kane, it is listeners who create—through discourse, and for specific socio-political reasons—an acousmêtre. In the case of witches in Zaccheo, sounds that come from no-one, or have no reasonable source, are a lightning rod for a listener-generated discourse of hearing/feeling the witch without seeing her. This discourse, as we will see below, has political and historical origins in the impossibility of ocular witnessing in witch trials; and it has developed, in Zaccheo, into a form of creative hearsay whose impact on the shared sensorium is profound.

The Witches Can Hear, and Speaking "As If"

The third dimension of hearsay that we want to highlight is the ability of the witch to overhear what is said about them on certain days, depending on each family's inherited belief. Being able to hear people talking about her, for the witch, was a way to identify and punish those who might give her away, and so endanger her powers. Tuesdays, Wednesdays, and Fridays were all days on which witches' ears for gossip about them was especially keen. In Zaccheo, people might deem either Tuesdays or Wednesdays dangerous for discussing witches, but Friday was a day on which witch-talk was uniformly understood to be forbidden. In several recordings, we can hear people double-check the day of the week before launching into narrations about witches; other times the ascertaining of the date is not uttered, and people simply speak and act in accordance with the day of the week. In these instances, interviewees need to gauge what they want to be heard or not heard saying on the microphone; and when they don't want to be heard, they start speaking softly, turn their faces away from Bermani and talk amongst themselves, speak in dialect only (which they know Bermani cannot always understand).[46] Such a protocol of reticence indicates that the

45 Brian Kane, *Sound Unseen: Acousmatic Sound in Theory and Practice* (Oxford: Oxford University Press, 2016).

46 Bermani notes the various forms of reticence in interviews made on forbidden days.

tape might have been recorded on a day on which it was forbidden to speak of witches. The opening episode of this essay—Francesco's story about visiting the crossroads and the ensuing conversation among his daughters and Mariafelice Forti—was recorded, according to Bermani, on a Wednesday. The interviewees' awareness of witches eavesdropping on the conversation might well be the reason why Francesco does not identify the witches by name. It might also explain the opaque quality of the women's ensuing discussion regarding the survival of witches in the area. What is more, in examining the tapes, we noticed a particular acoustic quality to some of these recordings. Namely, there are times in which Bermani raises the gain of the recorder to the highest level in order to capture these reticent voices, making the recording full of background noise and prone to sudden distortions. This, as much as the interviewees' behavior, signals the particular dynamic of the interviewer and interviewee on a tape recorded on a forbidden day.

We're going to turn our attention to one such tape from August 1964. Here, participants are reticent and the recording is confused, while, on other tapes, the same people had no qualms talking to Bermani about witchcraft. Although we don't have an exact date, this interaction has the feel of a recording made on a forbidden day. Here, Bermani is asking about witches and the several women present answer more and more evasively until someone reminds the others: "he is already recording." After some consultation, the women decide to sing a song in three-part harmony, given that they knew Bermani's main focus at the time had been popular songs:

DIALECT/ITALIAN	ENGLISH
Parlano tra di loro in dialetto, confuso:	*They talk to each other in dialect, confused conversation:*
"Ai cavalli intrecciavano la coda…"	"They would braid horses' hair…"
"Che ne sapame noje…"	"We don't know anything…"
"Sta a registrà…"	"He's recording…"
"Faciame Pellegrin?"	"Let's sing *Pellegrin*?"
[Iniziano a cantare][47]	*[They start singing]*

In this recording, the singing at the end is so loud, given the high gain of the recording, that it sounds distorted. There is an interplay between the

See *Volare al sabba*, 175–76.

47 Villa Zaccheo, August 1964 (Tape 38, digitized as CD 3H) from Archivio Cesare Bermani.

presence of a sonic record and the ways in which people tactically withdraw from the microphone without, however, being silent; and this interplay is an important part of the acoustemology of witches in oral history. On the one hand, the interviewees seem to be resisting the extractive practice of recording bits of conversation. The switch to dialect is one such act of micro-resistance against their interviewer. It is also remarkable that the interviewees don't flat out refuse to discuss witches, but do so in a hushed voice. Their refusal is performative, it is meant to be witnessed and heard by others. This, then, leads us back to the question of hearsay: on a Friday (or Tuesday or Wednesday), one must be heard speaking of witches as if one didn't wish to be heard. Interviewees perform their withdrawal from the microphone and from the witch's ear by marking their own speech as forbidden. They lend power to their speech by using it sparingly, suspiciously—but continuing to use it all the same. In this sense, the technology of the microphone plays into, not against, the acoustemology of witchcraft. On days in which witch-talk is forbidden, people must speak as if under surveillance, and be heard to do so. The microphone becomes an extension of the ubiquitous hearing of witches, and as such it doesn't foreclose witch-talk, but lends it special power precisely by monitoring it, by recording the reticence with which it is offered. As an extension of the witches' keen ear on certain days, the microphone participates in a ritual poetic justice: it allows townsfolk to project back on themselves the monitoring and gossiping—the generation of hearsay evidence—that served to mold the figure of the witch.[48]

Hearsay and the Work of "Darknesse"

Does witchcraft possess a codifiable relationship to sound and hearing? And if so, how might we trace such a relationship and how does it manifest in the case of the recordings in Zaccheo? In 2004, anthropologists Pamela J. Stewart and Andrew Strathern devoted a substantial volume—including scholarly perspectives on African countries, India, New Guinea, North America and Europe—to the particular, and to their minds, overlooked relationship between the study of witchcraft and the study of rumor and

48 On similar effects of continuity between technology and local epistemology see Nicola Scaldaferri, "Voce, corpo, tecnologie: storie da un piccolo paese arbëresh," *Trans: Revista Transcultural de Música*, no. 18 (2014): 2–20.

gossip. They justified their commingling of these two anthropological fields of inquiry as follows:

> Ideas about witchcraft and sorcery have often been pointed to by anthropologists and social historians as markers of social stress (notably by Marwick 1965). Our point is that rumors and gossip enter into the early stages of the development of stressful circumstances and so lead into later stages that may crystallize in accusations […]. Witch trials represent the confluence of … local and interlocal events, culminating in acts of expurgation or scapegoating, usually directed against those who are socially weak or marginal.[49]

For Stewart and Strathern, the relationship between gossip, rumors, and witchcraft passes by way of witch hunts and trials, which are often the culmination of a process of collective suspicion towards, and then formal accusation against, a set of vulnerable individuals. It is important to clarify that, in the context of Zaccheo, the "culmination in expurgation and scapegoating" through witch hunts and trials did not occur. Nevertheless, here too, the element of rumor and hearsay was foundational to, and generative of, the figure of the witch. This prompts us to consider the function and result of rumor and gossip aside from their "crystallization into accusations." Indeed, once we lift the cause-and-effect connection between rumors and witch hunts, the point about the relationship between hearsay and witchcraft can be refined into an acoustemological inquiry, particularly within a European context.

The acoustemological roots of the witch might be found, within European history, in the slippery, emergent legal distinction between direct (ocular) witnessing and indirect witnessing, and the special use of indirect witnessing where a direct (ocular) witness isn't available. Early modern witch hunts caused a breakdown and then rebuilding of legal systems built around witness statements and the evaluation of these statements' validity—a process that left traces far beyond the seventeenth century and the realm of witchcraft. It is indeed because of the horrific witch hunts in the European and American sixteenth and seventeenth centuries that we have an explicit record of the evolving and complex role of rumors—community-based, indirect witnessing, hearsay—in court law, with far-reaching implications in legal history and much more broadly.[50]

49 Stewart and Strathern, *Witchcraft, Sorcery, Rumors and Gossip*, xi-xii.

50 For example, in his *Witches and Witch-Hunts: A Global History* (Cambridge: Polity Press, 2004), Wolfgang Behringer comments on the legacy of British colonialism in the

The distinction between direct ocular witnesses and indirect witnesses in Roman Law corresponded to the *de visu/de auditu* distinction, according to which direct and indirect witnessing are implicitly (and messily) codified through the Western hierarchy of sight (understood as stable, objective, and rational) over hearing (understood as unstable, subjective, and emotional). We might say that the distinction between acceptable direct (ocular) witnessing and everything else—whether it is a direct aural testimony with no visual confirmation, or a fully indirect witnessing—presents a sliding scale between the ocular and the aural. In this paradigm, at the strongest end of the credibility spectrum, we have direct witnessing, which has to be ocular; this is not because hearing doesn't come into it (one may well see and hear someone do something) but because it is the eye that determines the true source of a sound. When unable to see directly, a witness might recognize someone's voice saying something; this, however, isn't the same as seeing the person talk, and therefore direct aural testimony without visual confirmation is far less valuable as evidence.[51] This hierarchy of eye over ear is what Jonathan Sterne famously referred to as the "audio-visual litany"—the critical cultural history of which is, in many ways, the bedrock of sound studies and acoustemology as a discipline.[52]

long-standing issue of whether South Africa's legal ban on witch hunts (a heritage of colonial and then apartheid governments) should be revoked, and replaced with local and indigenous methods for the identification of witches. The issue is a very complex and lively one—tied, on the one hand, to the revocation of colonial legislation (which banned witch hunts in many African countries) and, on the other, to adherence to international human rights legislation. Ronald Hutton also touches upon this problem in *The Witch: A History of Fear*, ch. 1.

51 This became a sore point in the legislation around recorded phone calls and wiretappings which, in the 1970s, strained (and failed) to devise protocols for the identification of recorded voices (for precisely the reason just mentioned). The key text was American audiologist Oscar Tosi's *Voice Identification: Theory and Legal Applications* (Baltimore: University Park Press, 1979). Tosi had been the research director for a dedicated voice identification project at the United States Department of Justice between 1968–1971, and, most importantly, the expert witness for the analysis and identification of voices in taped phone calls related to the assassination of Italian prime minister Aldo Moro in 1979.

52 See Jonathan Sterne, *The Audible Past: The Cultural Origins of Sound Reproduction* (Durham: Duke University Press, 2003), 15: "hearing is spherical, vision is directional/hearing immerses its subject, vision offers a perspective/sounds come to us, but vision travels to its object/hearing is concerned with interiors, vision is concerned with surfaces/hearing involves physical contact with the outside world, vision requires distance from it/hearing places us inside an event, seeing gives us a perspective on the event/hearing tends toward subjectivity, vision tends toward objectivity/hearing brings us into the living world, sight

Hearsay, like hearing, certainly carries a negative bias against the aural realm as a site of rational knowledge in Western thought (a bias that, of course, corresponds to what Jacques Derrida diagnosed as the overvaluation of voice as origin and metaphysical truth over writing).[53] Yet hearsay is also tied to a particular history of the state of exception that allowed rumor to stand as valid testimony, in situations in which ocular witnessing was deemed impossible and indirect witnessing (with its aural implication) became the next-best alternative. In fact, the legal history of witchcraft shows that the negative bias against hearing and voice could become twisted into a positive bias in a violent state of exception.[54] In other words, witchcraft and the law of hearsay are not just related, but messily and chronically co-emergent states of exception, in which gossip and indirect witnessing came to have the legal weight of an accusation that could be sustained in court. The point is crucial lest we fall prey to a simplistic view of early modern witch hunts as being symptomatic of a pre-modern, and implicitly unreformed and pre-rational, understanding of the law. On the contrary, the rejection of hearsay as proof in Roman Law as well as English Case Law was categorical, and so closer to contemporary legal attitudes towards hearsay (according to which hearsay is admitted in court only under a highly restricted set of circumstances).[55] The use of hearsay in court is, therefore, not so much a thing of a pre-modern past, but a chronic political and historical condition activated in moments of crisis.

moves us toward atrophy and death/hearing is about affect, vision is about intellect/hearing is a primarily temporal sense, vision is a primarily spatial sense/hearing is a sense that immerses us in the world, vision is a sense that removes us from it."

53 This is of course the notion of "phonocentrism," which Derrida brings up in *Of Grammatology* [1967] (Baltimore: The Johns Hopkins University Press, 1997) as a critique of Jean-Jacques Rousseau's *Essay on the Origin of Languages* (1781).

54 See Malcolm Gaskill, "Witchcraft and Evidence in Early Modern England," *Past & Present*, no. 198 (2008): 35: "witch-hunts were rare, localized and short-lived; most began due to a temporary weakness of state authority and ended when authority was reasserted. Scotland is a case in point. The example of Sweden in 1668–76 demonstrates that a country with low levels of prosecution might experience an intense craze if popular belief in diabolism was ingrained, popular anxiety high, and judicial restraint weak. The Salem trials of 1692 took place against a background of intense religiosity and uncertainty in the aftermath of ethnic warfare."

55 These evolving criteria for the admission of hearsay as evidence in court are, for instance, those found in Chapter 2 ("Hearsay Evidence") of Criminal Justice Act 2003 of Crown Prosecution Law in the United Kingdom, which aims to standardize common law with regards to indirect witnessing. The Criminal Justice Act 2003 can be perused at https://www.legislation.gov.uk/ukpga/2003/44/part/11/chapter/2 (accessed March 27, 2024).

We see this outlined with hair-raising clarity in a famous manual for sixteenth-century witch hunts, the *Malleus Maleficarum*.[56] Here, the three means of initiating an inquest into witchcraft are outlined like so:

> The first question, then, is what is the suitable method of instituting a process on behalf of the faith against witches. In answer to this it must be said that there are three methods allowed by Canon Law.
> The first is when someone accuses a person before a judge of the crime of heresy, or of protecting heretics, offering to prove it, and to submit himself to the penalty of talion if he fails to prove it.
> The second method is when someone denounces a person, but does not offer to prove it and is not willing to embroil himself in the matter; but says that he lays information out of zeal for the faith …
> The third method involves an inquisition, that is, when there is no accuser or informer, but a general report that there are witches in some town or place; and then the Judge must proceed, not at the instance of any party, but simply by the virtue of his office.[57]

Note how three modes of accusation are listed in reverse order of verifiability and accountability, but also, as becomes apparent, in increasing order of legal and theological value. Indeed, the first option (involving someone making themselves accountable for false witnessing) is "not ac-

56 Heinrich Kramer [Henricus Institor], *Malleus Maleficarum* [1487], trans. Montague Summers (Martino Publishing, 1928). The *Malleus*' importance as a witch-hunting manual and treatise has been significantly inflated by Montague Summers' English translation and the interest the text subsequently generated among modern-day occultists and wiccans. We do not cite it here a-critically. Though scholars still debate the effective impact of the *Malleus* in Renaissance Europe, there is factual evidence showing that the text was influential. See for instance the commentary from Hans Broedel, *The Malleus Maleficarum and the Construction of Witchcraft: Theology and Popular Belief* (Manchester: Manchester University Press, 2004), 7: "By 1500, eight editions of the *Malleus* had been published, and there were five more by 1520. By the time of Institoris' death around 1505, his work could be found in many libraries and judicial reference collections throughout Europe, although especially in Germany … In an extensive treatise written in the early sixteenth century, the Dominican inquisitor Sylvester Prieras treats the *Malleus* throughout as the authoritative witchcraft text, and refers to Institoris as a vir magnus. At about the same time, Gianfrancesco Pico della Mirandola praises the *Malleus* at length in his dialogue on witchcraft, and lists its authors along with Augustine and Gregory the Great as authorities on the subject."

57 Kramer, *Malleus Maleficarum*, Part 3, Question I: "The Method of Initiating a Process." Available at https://cdn.britannica.com/primary_source/gutenberg/PGCC_classics/malleus.htm#1_4_3 (accessed March 15, 2024).

tuated by motives of faith;" importantly, it is not "very applicable to the case of witches, since they commit their deeds in secret."[58] By the time the third method is appraised, we have gone past indirect witnessing into a regime of paranoid listening in which the inquisitor may act in service of the true faith:

> The third method of beginning a process is the commonest and most usual one, because it is secret, and no accuser or informer has to appear. But when there is a general report of witchcraft in some town or parish, because of this report the Judge may proceed without a general citation or admonition as above, since the noise of that report comes often to his ears; and then again he can begin a process in the presence of the persons, as we have said before.[59]

This passage goes beyond the notion of hearsay as a necessary if unpleasant substitution to direct ocular witnessing and into hearsay as the preferred method of accusing a witch whose work cannot be seen. Indeed, the ocular is almost discounted, or certainly not declared preferable anymore.

In a strange twist of the Pythagorean definition of the acousmatic, here it is the unseeing eye that unblocks the ear as a site of knowledge. In other words, hearsay is accompanied by an intense feeling of *unseeing*. It is the active obstruction of sense—of seeing that one does not see—that works as the trigger for the ear as a compensatory site of knowledge and guides the processing of aural stimuli. This mechanism was at work in Western legal systems more broadly, which betray an almost existential obfuscation of sight in the face of witchcraft. In 1618, one of many legal pamphlets published in England on best practices for witch hunting warned "not alwaies to expect direct evidence [against witches], seeing all their works are the works of darkenesse, and no witnesses present with them to accuse them."[60] The existential and political relationship of witchcraft to hearing and hearsay must go through a political phenomenology of a "darknesse" that makes anxious hearkening necessary.

58 Kramer, Question I.

59 Kramer, Question I.

60 Michael Dalton, *The Countrey Justice*, 2nd edition (London, 1622, STC 6207) as quoted in Gaskill, "Witchcraft and Evidence in Early Modern England," 43, note 55.

Towards an Acoustemology of Sendè

We return, finally, to the Zaccheo tapes. What, exactly, is the relationship we are positing between emergent legal protocols in Early Modern Europe and hearsay in a town in twentieth-century Abruzzo? Certainly, the practices attributed to witches in Zaccheo correspond to the behaviors listed as witchcraft in sixteenth-century demonological works: the harassing and kidnapping of children and livestock, petty acts of cruelty motivated by envy, night-flight, the ability to transform into an animal, anti-social behavior (living alone, disliking children, asking neighbors for food donations). Abruzzo as a region was a site of fierce inquisitorial disciplining, with documented witch hunts and burnings between the sixteenth and early eighteenth century in Penne, Chieti, Teramo, and several other places.[61] As we have seen, however, Zaccheo and its neighboring villages were not sites of persecution. It is plausible, then, that Zaccheo picked up some of the sensorium associated with witch hunts but did not associate it with reporting to a disciplining authority; instead these practices were folded into a fragile, internally resolved community equilibrium.

This is not to say, of course, that Zaccheo offers a happy anomaly or an historically innocent version of witchcraft. Rather, it shows the complex role of "darknesse" and the urgent recourse to the ear in communities that were affected by it. In their aforementioned work, Stewart and Strathern note that gossip and rumor are responses to acute societal stress; Zaccheo, at the time of Bermani's recording, was a place where land was owned by wealthy landowners (Mariafelice's father, Bermani's father-in-law at that time, was one of them) and worked by salaried farm hands (Francesco, who supported his wife and six children through his labor in the fields, was one such person). Between male salaried labor and landowners were petty landowners, that is to say families who managed to buy themselves a piece of

61 Inquisitors did not reach Abruzzo, yet other members of the ecclesiastical hierarchies took on their responsibilities. See Canosa and Colonnello, *Streghe maghi e sortíleghi in Abruzzo tra Cinquecento e Settecento,* 17: "Where the inquisitors were not present (for example, in almost all the peripheral areas of the Kingdom of Naples), their place was taken by the bishops, for whom the same substantive and procedural norms applied, in a manner akin to heresy, and who, in some cases … had been, before ascending to the episcopal throne, inquisitors in other regions of the peninsula." (Original Italian: "Dove gli inquisitori non furono presenti (ad esempio in quasi tutte le località periferiche del regno di Napoli), il loro posto fu preso dai vescovi, per i quali vigevano, in maniera di eresia, le stesse norme, sostanziali e processuali, e che, in qualche caso … erano stati, prima di ascendere al soglio vescovile, inquisitori in altre regioni della penisola").

land to work on their own, or families who owned agricultural machinery and worked other people's land. Women, though crucial to the community, did not produce value in this economy because they neither owned land nor worked the land for a salary, and were mostly involved with managing the home and children. Although the state provided a small pension for people without a means of subsistence, this money was often insufficient to cover basic expenses such as rent (unwed women were rarely homeowners). This vulnerable status of women in the transition between agrarian and capitalist economy is, for Federici, the breeding ground of witchcraft:

> Particularly disadvantaged were older women who, no longer supported by their children, fell onto the poor rolls or survived by borrowing, petty theft, and delayed payments. The outcome was a peasantry polarized not only by the deepening economic inequalities, but by a web of hatred and resentments that is well-documented in the records of the witch-hunt, which show that quarrels relating to requests for help, the trespassing of animals, or unpaid rents were in the background of many accusations.[62]

Petty theft, particularly of farm animals, land trespassing (witches often manifested in the roads between properties) borne of resentment were indeed an important part of the profile of the witch in Zaccheo, even if, as mentioned several times already, these incidents mostly did not result in persecution and prosecution. Marginalized, unwed, child-free and non-earning women, such as Rina, were likely to be blamed for such misdemeanors and so cast as witches. Yet, in some cases, this casting was not simply a matter of scapegoating, but also the thing that ensured the woman's livelihood. The fear of a witch's reprisal when denied a favor expressed, as Federici would argue, a barely repressed awareness of the brutality of private property and salaried labor. This is precisely the role that witchcraft played in Zaccheo: it articulated a fear of those not accounted for by family and property, while simultaneously protecting those same, unaccounted-for people from penury.

It is no coincidence that so many of Bermani's recordings were made around kitchen tables—communal, feminine spaces where women might gather to work together on home-related tasks: food preparation and preservation, mending, and so on. These spaces were full of talking, discursively alive: multiple children and multiple generations of women were almost al-

62 Federici, *Caliban and the Witch*, 72.

ways, and often disruptively, present on tape.[63] In this context, witches were discussed through the slipstream of *sendè*—of hearing, hearing about, and feeling, often in contradiction of an outward dismissal of witches. *Sendè*, in other words, signaled a perilous but necessary reliance on hearing and hearsay in a world of existential darkness: shifting property relations, the loosening of female kinship, an altered relation to one's rights, one's belongings, and coping with new forms of social inequality. In its more positive connotation, *sendè* is a creative network of hearsay that binds—through a series of sometimes friendly, sometimes threatening rituals—the witch to her community, and they to her.

There are, evidently, many methodological gaps to be filled in this initial set of considerations on doing an acoustemology of witchcraft through oral history, in Zaccheo and perhaps elsewhere. For one thing, it remains to be studied how land privatization and salaried labor (with the attendant social inequalities between the earning and unearning) emerged in this area and by what means it was sustained into the 1960s, the decade in which Bermani's interviews took place. It might be that, in rural areas such as Zaccheo and environs, the middle stage between agrarian economy and industrial capitalism (as described by Federici) became an extended transition, essentially, over more than four centuries; and that, over this time, the figure of the witch evolved from a figure of persecution into something that needed to be folded into a longer-term equilibrium. It is telling, in this respect, that the crossroads where one could go and see witches were often at the boundary between lands owned by different people, marking a place quite literally in between properties at a time when property had come to determine societal value. It is by these same roads that land workers traveled to and from their jobs working private land; and by these same roads that Rina, a lone woman expected to stay home, traveled on foot from village to village to ask for alms. Bermani himself visited the village towards the end of this long period of transition, as finally the landowning classes became less tied

63 Federici has indeed much to say about the very category of gossip as being at the tipping point of a powerfully positive depiction of female kinship and a negative, dismissive vision of feminine chatter. See Federici, 186: "female friendships became an object of suspicion, denounced from the pulpit as subversive of the alliance between husband and wife, just as women-to-women relations were demonized by the prosecutors of the witches who forced them to denounce each other as accomplices in crime. It was also in this period that the word 'gossip,' which in the Middle Ages had meant 'friend,' changed its meaning, acquiring a derogatory connotation, a further sign of the degree to which the power of women and communal ties were undermined."

to their land and the surrounding area was given over to industrialization. Indeed, many of the crossroads indicated by people in their interviews with Bermani are now gone, taken over by factories that drew more people to the area, and which are now, in turn, in crisis due to deindustrialization and outsourcing of labor elsewhere.

Listening to the Zaccheo tapes, to the voices of those experiencing seismic socio-economic changes taking place in the Italian 1960s, we bear witness to the ways in which being unable to see—and the recourse to hearing and hearsay that arose in their wake—were not only responses to stress or the manifestation of superstitious beliefs. The witch was not only a local, unfortunate, and persecuted byproduct of world-historical forces that conspired to enclose common lands. She was also, in an anthropological sense, its incarnation and material expression. Her complex embodiment bodied forth the ways in which a world lost concreteness, could be reversed and concentrated into a tangible figure. The witch was made in the anxious hearing that confronted darkness, during a time in which a cry in the tree or clamor at a crossroads could replace what one failed to see.

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Abstract

This paper offers an acoustemological exploration of a set of taped interviews on the subject of witchcraft made in the 1960s and 1970s by historian and ethnomusicologist Cesare Bermani in the village of Villa Zaccheo (Abruzzo, Italy). Bermani's extraordinary research has resulted in a celebrated monograph as well as more than 90 hours of taped interviews and songs made available through the Archivio Cesare Bermani in Orta San Giulio (Novara, Italy). Beginning with a few examples from Bermani's taped interviews (which we transcribe and thickly describe so as to render their overall aural effect), we investigate the role of feeling and listening in the interviewees' perception of witches. In particular, we observe the way interviewees recount the role of hearing in their encounters with witches (and the particular declination of "acousmatic" listening that results from it), as well as the interviewees' complex relationship to the recording apparatus and microphone. We then excavate the importance of the legal and conceptual category of "hearsay" in the long political history of European witchcraft, and point out some of the long-standing political implications of this category for recent oral histories. Finally, we offer some preliminary conclusions on the ways in which voice, listening, recording technology and language (Italian as well as dialect), as well as shifting constructions of gender, combine to render the figure of the witch in oral history, in the hope of laying the groundwork for future re-evaluations of the relationship of sound, media, and the construction of the witch.

Delia Casadei is a scholar, critic, and translator who works broadly on the intersection of voice, ideologies of language and intelligibility, recording technology, and politics in twentieth-century music and sound practices. She was Assistant Professor of Musicology at UC Berkeley from 2017–2023. She obtained her PhD in Musicology from the University of Pennsylvania in 2015 with a thesis entitled *The Crowded Voice: Speech, Music and Community in Milan, 1955–1974*. Between 2015–17 she was a junior research fellow at the University of Cambridge. In 2021/2022 she was a Humanities Research Fellow at UC Berkeley and an Andrew W. Mellon Fellow at the Institute of Advanced Studies of Princeton University. She has published in the *Cambridge Opera Journal,* the *Opera Quarterly*, and the *Journal of the Royal Musical Association*, and her two latest articles were published in *Representations*, one about a recording of a Milanese riot, and the other about Giambattista Vico and sound theories of history. Her musical criticism has been featured in the *Los Angeles Times* and *The Conversation*. For the past few years, she has been working on laughter as an aural cipher of the twentieth-century relationship to the notion of the human, of language, and to ideologies of biological and social reproduction, including sound reproduction. Her first monograph, *Risible: Laughter without Reason and the Reproduction of Sound*, came out in February 2024 with the University of California Press.

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ARTICLES

From LP to Screen: Tito Schipa Jr.'s *Orfeo 9* (1973–1975)*

Daniele Peraro

On the evening of 8 February 1975, *Orfeo 9*, a film musical, was aired for the first time on RAI 2, a channel of the state-owned Italian public television company. The film was written, directed, and performed by Tito Schipa Jr. (son of the famous tenor) and produced for television by Programmi Sperimentali Rai. The earliest example of an Italian rock opera on the small screen, *Orfeo 9* is a modern reworking of the Orpheus myth.

In Schipa's version, Orfeo is a young hippie living peacefully but unhappily in a commune relocated in a deconsecrated church far from the heavily industrialized, alienating space of the city (the latter is a representation of Hell). A "Vivandiere" (Sutler) arrives from the city with a sack of bread and urges Orfeo to play the guitar to find happiness. Orfeo obliges, Euridice appears, and our protagonist falls in love with her. The couple is united in a pagan marriage ceremony but the idyll is broken when the "Venditore di Felicità" (Happiness Vendor) arrives and deceives Orfeo, selling him ephemeral happiness in the form of a dose of drugs. Not recognizing true happiness in Euridice, Orfeo falls under the spell of the Venditore. Euridice disappears, kidnapped by the diabolical Venditore. Orfeo is thus forced to leave his communal paradise and enter the infernal city to rescue his bride. During his journey, he is confronted with many of the horrors of the contemporary world (such as the threat of an atomic war). Crushed by its diabolical machine, Orfeo does not make it out of the city alive. As in many other twentieth-century adaptations of the classical myth, in *Orfeo 9* the Orpheus figure is no longer a god but a man like any other tormented by anxiety and doubt.[1]

* This article is a new and expanded version of earlier papers presented in past years at various conferences. One of these papers was recently published in the proceedings of the conference *Le ricerche degli* Alumni*Levi*, organized by Fondazione Ugo e Olga Levi (Venice,

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I should say at the outset that *Orfeo 9* is the title of three different works: a play, a double LP, and the resulting feature film. The film is an adaptation of the theater play staged at the Teatro Sistina in Rome in 1970 but it is above all a remake of the double LP released in 1973 (also signed by Schipa). The record was conceived as a commemoration of the theatrical performance; yet it was released as a stand-alone product. It was framed as the soundtrack of a new "pop opera," as Schipa called it: a single work iterated in different media. The film was shot in color in 16mm format and produced by Programmi Sperimentali Rai in order to be televised. Its broadcast was aborted by RAI's executives in 1973. In his memoir *Orfeo 9 – Then an Alley*, Schipa states that someone in the board of directors of RAI did not understand the film's overarching aim. The image of a syringe and the preparation of a dose in a key scene of the film was viewed as problematic, and *Orfeo 9* was accused of promoting synthetic drug use.[2] However, *Orfeo 9* was aired in black and white two years later (in 1975). It was subsequently blown up to 35mm format by the distribution company DAE (Distribuzione d'Arte e d'Essai) and shown in university auditoriums and avant-garde cinemas. Over the years, *Orfeo 9* became and to this day remains a cult film for fans of rock music and 1970s culture alike. The stage musical, the double LP, and the film are linked by a single ideation and production process, which began with the theater performance and culminated in the filmic adaptation. Nevertheless, Schipa notes, the three iterations are distinct and autonomous products.[3]

In light of the above, how to define the film *Orfeo 9*: a filmic adaptation or a television adaptation? As mentioned, it was shot in 16mm but con-

14–15 October 2022). See Daniele Peraro, "Una 'colonna sonora visualizzata' per un mito moderno: *Orfeo 9* di Tito Schipa Jr." in *Le ricerche degli* Alumni*Levi*: *la giovane musicologia tra riflessioni, dibattiti e prospettive*, ed. Paolo De Mattei and Armando Ianniello (Venice: Edizioni Fondazione Levi, 2024): 145–56.

1 The title is in this respect a statement. Schipa's choice to juxtapose the number "9" to the name of the mythological cantor is a homage to the Beatles' song "Revolution No. 9" (1968). A poster of the song is seen hanging in the recording studio in the title sequence. "Revolution No. 9" is a synthesis of rock and *musique concrète* aimed at expanding the boundaries of the song form. In a similar vein, Schipa tried to combine the sounds of the rock genre with Italian melodrama to build a new type of rock musical. See Tito Schipa Jr., *Orfeo 9 – Then an Alley. Nella storia di due spettacoli musicali, una via alla rifondazione italiana dell'opera popolare* (Lecce: Argo, 2017), 64.

2 See the scene "Venditore di Felicità" (Happiness Vendor) examined below. See also, Schipa, 174.

3 Tito Schipa Jr., personal communication, December 22, 2022.

ceived for television. Therefore, both definitions may be correct. I nevertheless prefer to use the term filmic adaptation, for the film earned a reputation that resonated long after its TV première.

Unlike a conventional musical or animated film, the filmic adaptation was aired as a visualized version of the record. In the former, the prerecorded voice and orchestral tracks are tied to the production of the film per se. Without the film, the soundtrack would not exist. By contrast, the *Orfeo 9* double LP was—and still is—a stand-alone product from which a film was made. The album is strictly speaking not a soundtrack.

Schipa himself declared that the film was almost entirely a by-product of the record, and not only in the chronological sense. He recalls the beginning of his idea for a film adaptation with these words:

> I began to understand that the idea of turning *Orfeo 9* into a film was certainly alluring, but that in reality the drivers of the action had to be changed: it should not have been a film with that soundtrack, but instead, *a soundtrack from which to create a film*. The images were suggested by the music, in short, and not the other way around.[4]

Schipa's words invite us to reflect on the relationship between video and audio as one between a film and a recorded album. His intention was to rewrite the detailed theatrical performance as a record, which would later become a film, "forcing the narrative to focus its rhythms according to the patterns of a pop music record."[5] Thus, the LP became the starting point for the making of the film. But Schipa also wanted to compose an audio track that could be an object with a life of its own.[6] The work of arranging and rewriting the music was entrusted to the Italian-American composer Bill Conti, who a few months earlier had arranged the tracks for Schipa's EP *Sono passati i giorni/Combat* (1971).[7]

Schipa conceived the pop opera based on the length of a double LP.

4 "Cominciavo ad intravedere che l'idea di tramutare Orfeo 9 in film, restava allettante, certo, ma che in realtà bisognava cambiare i fattori dell'operazione: non avrebbe dovuto trattarsi di un film con quella colonna sonora, *ma di quella colonna sonora da cui trarre un film*. Immagini suggerite dalla musica, insomma, e non l'inverso." Schipa, *Orfeo 9 – Then an Alley*, 121.

5 Schipa Jr., 121.

6 Tito Schipa Jr., personal communication, December 22, 2022.

7 Tito Schipa Jr., *Sono Passati I Giorni / Combat*, Fonit SPF 31290, 1971, 7". See Schipa, *Orfeo 9 – Then an Alley*, 120–2.

At less than 25 minutes per side, its length could not therefore exceed a hundred minutes.[8] Furthermore, the opera was structured so that each side contained a complete part of the story. The A-side of the first record contains the introduction of the opera up to the presentation of Orfeo, while the second side recounts the story of his life in the commune up to his marriage to Euridice. The finale of the first act coincides with the last track of the second side of the first record; consequently, the first side of the second record begins with the piece that introduces Orfeo's journey as he leaves his retreat to save his bride. Perhaps *Orfeo 9* is subtitled "opera pop," at least in part, because it is enclosed in a popular format for music: a record.

As a by-product of the album, the film had to be adapted to the rhythms and pacing of the record format. The relationship between image and sound thus took on a special significance. Critic Renato Marengo has emphasized the defining characteristic of Schipa's modus operandi thus:

> The image–sound pairing is one of the greatest merits of *Orfeo 9*. In essence, it is the first Italian experiment with a visualized soundtrack, and that is no small feat when you consider that normally a film is first written, performed, and filmed; then, a soundtrack is added. Here, the reverse was done: images were superimposed onto a soundtrack.[9]

It is best to rephrase the notion of a "visualized soundtrack" as visualized album, however, in order to mark the distance that exists between Schipa's project and the soundtrack production process of a conventional film musical. The merit of Marengo's quote lies in the suggestion that we consider the relationship between two types of media. Already in the first phase of recording, the relationship between the two media created the need to make strategic choices. With regards to the voices of the singers, for example, Schipa recounts: "I had to keep in mind that the final product was a film. I wanted whoever played a lead role on tape to play that role also on film …

8 This is why the film and the record are of almost equal duration, about 82 minutes in total.

9 "L'accoppiamento immagini–suoni è uno dei pregi maggiori di *Orfeo 9*. In sostanza è il primo esperimento italiano di colonna sonora visualizzata; e non è poco se si considera che normalmente un film viene prima scritto, interpretato, girato e poi vi si aggiunge una colonna sonora; qui è stato fatto il lavoro inverso: su di una colonna sonora sono state sovrapposte delle immagini." Renato Marengo, "Pop in Tv: il mito di Orfeo," *Ciao 2001* 5, no. 47 (1973): 62.

I wanted the audience to know that this was the complete cast. No tricks."[10] As an acknowledgement of this choice, the film's credits read: "Tutti hanno cantato con la propria voce" (Everyone sang with their own voice). Schipa decided that the choice of vocal performers depended on two factors: first, singing skills; second, compelling stage presence and acting talent. The look of someone whose voice seemed ideal on record might not meet the demands of a film. It was the cinematic image that dictated the choices made for the record. For example, the character of the hitchhiker, played on stage by Giovanni Ullu, who had an ideal voice but was not a professional actor, was entrusted in the film to Roberto Bonanni, a photogenic singer who had already played Claude in the Italian theater version of the musical *Hair* (1970). Despite Schipa's declaration of intent, it was not always possible to have the actors sing with their own voices. Ullu for example, lent his voice to a minor character at the beginning of the film (a young member of the commune).

Building on Marengo's suggestion, I invert the oft-asked question of what pop music can bring to cinema. Instead, I ask what cinema can bring to a record. Focusing on three moments of the film, I investigate how *Orfeo 9* contributed to "shaping the experience of song," to cite film scholar Claudio Bisoni's words with reference to the *musicarello* film genre.[11] As Raymond Knapp notes with regards to the process of re-creating performances across media, "at each stage within this layered process of remaking and performance, identities are conceived and reconceived, formed and re-formed, and, above all, *per*formed, which is a matter of both assimilation and self-invention."[12] I begin by framing *Orfeo 9*'s double LP in the Italian and international popular music context, in particular the rock operas of that era. Next, I consider the functions of images for music identified by Bisoni as the key to interpreting the scenes I have selected. In keeping with Knapp's suggestion to move musical theater studies toward a more performance-centered methodology, I link these images to the categories of liveness and audio-video synchronization, the actors' gestures, and music, as

10 Schipa, *Orfeo 9 – Then an Alley*, 142.

11 Claudio Bisoni, *Cinema, sorrisi e canzoni. Il film musicale italiano degli anni Sessanta* (Soveria Mannelli: Rubbettino, 2020), 10.

12 Raymond Knapp, "Performance, Authenticity, and the Reflexive Idealism of the American Musical," in *Identities and Audiences in the Musical: An Oxford Handbook of the American Musical,* ed. Raymond Knapp, Mitchell Morris and Stacy Wolf, vol. 3 (Oxford: Oxford University Press, 2018), 209.

theorized by Paul Sanden and Michel Chion (among others).[13] This leads me to analyze what film language can offer to the listening experience. Building on Sergio Miceli and Rick Altman's interpretations of the film musical, I show how Schipa's embrace of a novel type of relationship between sound and image is the fulfillment of the genre's potential for self-renewal. Through both the recording and the film, Schipa rewrote the fable of Orpheus for a cross-media context.

Orfeo 9 between Rock Operas and Italian Concept Albums

If "musical theater is popular music," as Jake Johnson points out in his introduction to *Divided by a Common Language*,[14] then the study of *Orfeo 9* is a great opportunity to include the Italian context in the growing debate about popular music and its intersection with the musical. As Kevin J. Donnelly points out, the visualized concept album is an aspect of the recording industry rather than the film industry and, for this reason, it needs to be studied in its relationship to the former.[15] In *The Evolution of the Original Cast Album*, George Reddick states: "Changing ideas of what an album could be during the late 1960 had a profound effect on the role of Broadway cast recordings."[16] In 1967, The Beatles released *Sgt. Pepper's Lonely Hearts Club Band*, defined by critics as the first concept album in rock history. Although critics and scholars disagree on whether it inaugurated or merely consolidated a new genre, The Beatles endorsed a new phase of artistic experimentation, assisted in part by the new opportunities provided by new recording technologies. While previously the pop record was contingent on corresponding live performances, with the arrival of the concept album the LP began to be considered as the artist's final goal.[17] Reddick highlights a

13 Knapp, 218.

14 Jake Johnson, Masi Asare, Amy Coddington, Daniel Goldmark, Raymond Knapp, Oliver Wang, and Elizabeth Wollman, "Divided by a Common Language: Musical Theater and Popular Music Studies," *Journal of Popular Music Studies* 31, no. 4 (2019): 32.

15 K. J. Donnelly, "Visualizing Live Albums: Progressive Rock and the British Concert Film in the 1970s," in *The Music Documentary: Acid Rock to Electropop*, ed. Robert Edgar, Kirsty Fairclough-Isaacs, and Benjamin Halligan, (New York: Routledge, 2013), 171.

16 George Reddick, "The Evolution of the Original Cast Album," in *Media and Performance in the Musical: An Oxford Handbook of the American Musical, Volume 2*, ed. Raymond Knapp, Mitchell Morris, and Stacy Wolf (Oxford: Oxford University Press, 2018), 114.

17 See Kenneth Womack and Todd F. Davis, *Reading the Beatles: Cultural Studies, Literary Criticism, and the Fab Four* (Albany: State University of New York Press, 2006), 16.

further shift in the relationship between album and live performance. Two years after the release of *Sgt. Pepper's*, the single *Superstar* (1969) by Andrew Lloyd Webber and Tim Rice came out. The double LP concept album *Jesus Christ Superstar* was released following the success of the single. In 1971, in turn, the Broadway musical production of the same name opened as a result of the album's huge success.[18] The album was no longer the final product, the document of a performance, but the starting point of a process that would lead to stage a musical.

During the mid-1960s, the evolution of the studio recording process led to the introduction of the multitrack tape, which, as Julie Hubbert observes, "dramatically expanded the ability to create a more complex sound landscape."[19] In the following years, multitrack technology changed the way musicians and recording engineers conceptualized their work. Songs were constructed and assembled in the same way films were edited. As Elizabeth Wollman notes, "concept albums are for the most part studio creations."[20]

Schipa says he wanted to give the record a cinematic idea. During the editing process of the LP, the eight-track machine allowed Schipa to construct a soundscape by selecting different parts and adding echo effects, noises, manipulating voices and sounds in order to lend "different colors" to the final product.[21] For example, in the final track of the first LP, infernal voices are constructed by using a reverse tape effect and mixing them with the sound of the wind. This solution evokes a desolate and disturbing sonic place, visualized in the film as empty rooms with no doors or windows, and the tribe boys curled up in fetal positions.

At this point, it is necessary to clarify the terminology used to refer to the recording of *Orfeo 9*. Roy Shuker points out that concept albums and rock operas are collections of songs "unified by a theme, which can be instrumental, compositional, narrative, or lyrical."[22] In *Grove Music Online*, John Rockwell writes: "'Rock operas' grew out of 'concept albums,' LPs with a theme, in the mid-1960s, and hence are really closer to the song cycles

18 See George Reddick, "The Evolution of the Original Cast Album," 114. See also Elizabeth Lara Wollman, *The Theater Will Rock: A History of the Rock Musical, from Hair to Hedwig* (Ann Arbor: University of Michigan Press, 2006), 90–102.

19 Julie Hubbert, "The Compilation Soundtrack from the 1960s to the Present," in *The Oxford Handbook of Film Music Studies*, ed. David Neumeyer (Oxford: Oxford University Press, 2014), 299.

20 Wollman, *The Theater Will Rock,* 90.

21 Schipa, *Orfeo 9 – Then an Alley*, 147.

22 Roy Shuker, *Popular Music: The Key Concepts* (London: Routledge, 1998), 5.

of classical tradition than to opera," and he notes that "some of the more interesting examples were never intended for live performance." Rockwell also notes that rock operas are "part of the far larger alternative tradition of music-theater works."[23] The relation to music theatre might explain the difference between rock operas and the concept album. Yet it remains difficult to define a clear difference between the two genres; how we label a work depends on many, overlapping factors (such as how musicians describe their LPs, their sources of inspiration, and the cultural and artistic context of production).

In our case study, Schipa states that he drew inspiration from the English rock opera, in particular The Who's *Tommy* (1969). Nevertheless, *Orfeo 9* has more in common with another English rock opera of those years, one that is rarely mentioned by Schipa, namely *Jesus Christ Superstar* (1970). Firstly, both operas draw on well-known mythic-religious stories made modern through avant-garde staging and the use of rock music. Secondly, unlike *Tommy*, whose music is performed only by The Who themselves, *Orfeo 9* and *Jesus Christ Superstar* are sung-through operas performed by a classic rock ensemble (drums, bass, guitar, keyboards) supported by a symphony orchestra. In *Tommy*, the lead singer Roger Daltrey plays all the characters of the story, while in both *Jesus Christ Superstar* and *Orfeo 9* each role is performed by a different singer. *Tommy*, too, differs from *Orfeo 9* and *Jesus Christ Superstar* because The Who did not initially intend to create a musical out of the concept album.[24] Although *Orfeo 9* was staged at Teatro Sistina, the starting point for the film adaptation was the LP. For all these reasons, Schipa defines *Orfeo 9* as an "opera pop" or "opera rock."[25]

In Italy, between the late 1960s and the early 1970s, the concept album remained the exclusive domain of singer-songwriters such as Fabrizio De André. In those years the world of Italian popular music was undergoing a sea change. Singer-songwriters were the first to realize that the singles market was running out of steam and that the long-playing could be a com-

23 John Rockwell, "Rock opera," in *Grove Music Online, Oxford Music Online*, 2002, https://doi.org/10.1093/gmo/9781561592630.article.O008572.

24 The stage musical of *The Who's Tommy* premiered on Broadway in 1993. See Wollman, *The Theater Will Rock*, 159–170.

25 In 1970s Italy, rock and progressive rock music was defined by the press and by the bands themselves as "Italian pop." As Jacopo Tomatis points out, music festivals that hosted groups defined today as progessive were named "Festival pop." Nowadays, however, pop is a very generic term, so I have chosen to use rock for clarity of exposition; see Jacopo Tomatis, *Storia culturale della canzone italiana* (Milano: il Saggiatore, 2019), 400–8.

mercially more viable format. As it turned out, the concept album became a widespread format not only for singer-songwriters but also for progressive rock bands such as Banco del Mutuo Soccorso and Premiata Forneria Marconi.[26]

Orfeo 9 differs from Italian concept albums of the time in that the tracks moved beyond the song form. Until the late 1960s, concept albums in Italy consisted of a string of songs that, although linked by a concept or narrative theme, were not musically related to each other. From the beginning of the next decade, artists, especially those associated with the prog scene, attempted to link tracks musically as well. *Orfeo 9* can be seen as an intermedial effort to push the boundaries of the song in the direction of the film soundtrack. Due to the fast evolution of recording technologies, those years saw not only the consolidation of the bond between studio song and film editing but also the cross-pollination of their aesthetic principles and narrative forms. On the one hand, drawing on the example of the concept album, artists subsumed song composition under the development of a narrative. On the other hand, cinema began to move more and more toward popular music. I now turn to three examples of this convergence in as many scenes of *Orfeo 9*.

"Tre note"

I begin with a segment from the opening scene, set in a studio where Schipa and his band, playing themselves, are preparing to record the opera.[27] The drummer sits on his stool, while a cut takes us to a close-up of the young Schipa speaking into a microphone; the audio, however, is muted at this point. The opening credit reads: "Un film scritto, musicato e diretto da Tito Schipa Jr." (A film written, set to music, and directed by Tito Schipa Jr.). Simultaneously, the mixer "opens" the audio to Schipa, saying "Tito, parla" (Talk, Tito) to test the volume levels. There follows a close-up of two hands turning up the volume on the console. Now the viewer, too, can hear what is happening in the recording studio. As the frame widens, we notice that

26 For a history of the concept album and the opera rock, in particular in Italy, see Daniele Follero and Donato Zoppo, *Opera Rock. La storia del concept album* (Milano: Hoepli, 2018).

27 The entire film, in color and restored in high quality, is available on *Orfeo 9*'s official YouTube channel. The scene analyzed here starts at 0:00:32 of "ORFEO 9 di Tito Schipa Jr. (1972)," Orfeo 9 Ufficiale, uploaded on January 31, 2022, https://youtu.be/sGcdjYBN2ls.

Fig. 1 – Still frames from the opening scene of the film.

Schipa is standing next to music director Conti on the piano, the drummer, and the organist. They start rehearsing. The silhouette of the mixer adjusting the sound is in the foreground, backlit. Finally, an ensemble of shots survey the preparatory stages of the session, the camera pausing to show a few details of the equipment and instruments being used.

This fictional recreation has the function of evoking a live performance: the "here and now" of a group of artists gathering in a studio to record a pop opera. The scene opens with the image of a piece of magnetic tape being hooked up to the tape recorder and then lingers on the microphones, amplifiers, and other equipment being readied by the musicians. These images are consistent with the remediation of pop/rock performances in film, particularly the music docufilms and *musicarelli* (Italian musical films produced for young audiences) of those years. But above all, the scene introduces us into a meta-cinematographic or better, meta-discographic sphere in which the recording and the film are mutually implicated: the fable of Orpheus is narrated as if it were a dream evoked by this musical session.

From within the recording studio, a choir of three Narrators—who will then become bona fide characters—intervenes by commenting on the story.

Music-making plays a fundamental role in the entire film. To describe performance, I prefer to avoid the diegesis/non-diegetic opposition.[28] Given how the story of Orpheus is narrated in the film, it's possible to trace a demarcation between the real world of the recording studio and the fantastic, dreamed world of the fairy tale. Building on Rick Altman and Jane Feuer's distinction between fantasy and reality in the film musical, I use the terms "dream" or "fantasy" to indicate the Orpheus fable, a separate imaginary universe with its own rules where protagonists express themselves through song.[29] I reserve the term "reality" for the "here and now" of the recording studio instead.

The introductory images of the film perform what Bisoni describes as a "theatricalizing function" which, by framing the passage as entertainment, "connects the voice to the body."[30] As Paul Sanden has argued in *Liveness in Modern Music*, the musician's body is an increasingly crucial element in live performance. The display of the performer's body and gestures is a function of what Sanden calls the "corporeal liveness" of the performer—that is, the assumption that "music is *live* when it demonstrates a perceptible connection to an acoustic sounding body."[31] This is one of the seven categories of liveness theorized by Sanden that contribute to making a performance, in his words, "authentic." In the same vein, Simon Frith argues that the musician's body in a live performance is like an instrument that demands to be seen.[32] By displaying the bodies of the musicians in the studio and an-

28 Scholars who discuss the diegetic/non-diegetic opposition in film musicals include Rick Altman, *The American Film Musical* (Bloomington: Indiana University Press, 1987), 62–7; Raymond Knapp, *The American Musical and the Performance of Personal Identity* (Princeton, NJ: Princeton University Press, 2006), 67–8; Graham Wood, "Why Do They Start to Sing and Dance All of a Sudden? Examining the Film Musical," in *The Cambridge Companion to the Musical*, 2nd ed., ed. William A. Everett and Paul R. Laird (Cambridge: Cambridge University Press, 2008), 316–18; Nina Penner, "Rethinking the Diegetic/Nondiegetic Distinction in the Film Musical," *Music and the Moving Image* 10, no. 3 (2017): 3–20. Scott McMillin illustrates the difference between diegetic songs and out-of-the-blue numbers in stage musicals: see Scott McMillin, *The Musical as Drama* (Princeton, NJ: Princeton University Press, 2006), 112–16.

29 Altman, *The American Film Musical*, 65; Jane Feuer, *The Hollywood Musical*, 2nd ed. (Bloomington: Indiana University Press, 1993), 68–76.

30 Bisoni, *Cinema, sorrisi e canzoni*, 149.

31 Paul Sanden, *Liveness in Modern Music: Musicians, Technology, and the Perception of Performance* (New York: Routledge, 2013), 11.

32 See Simon Frith, *Performing Rites: On the Value of Popular Music* (Cambridge, MA:

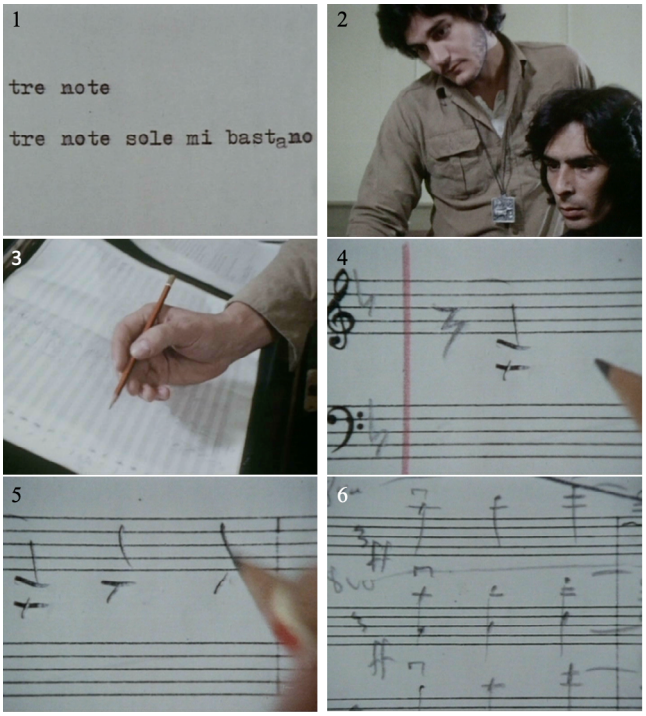

Fig. 2 – Still frames from the first scene of the film, visualization of the beginning of the song "Tre Note."

choring the sounds we hear to their gestures, Schipa sought to recreate the authenticity of rock performance in the context of cinematic fiction.

In the next segment of the film, following Schipa's announcement that the first piece to be performed will be "Tre note" (Three pitches), a sign appears with the words "tre note/tre note sole mi bastano" (three pitches/three pitches alone are enough for me) (Fig. 2, frame 1). Schipa approaches the piano (frame 2) and writes on a sheet of music paper the three notes of the overture that open the opera (frames 3, 4, 5). As we see his hand jot down musical symbols on paper, we also hear—in perfect synchrony—the corresponding sounds produced by the Hammond organ. The camera glides over the score and shows the sequence of chords (frame 6), to which the corresponding sound is matched, and then cuts back to the recording booth. The audience hears the music they simultaneously see being notated. The film creates the impression that the music springs from the act of writing.

The images of the performance are synced to the sounds of a pre-record-

Harvard University Press, 1998), 224–25.

ed soundtrack. Such level of attention to synchronization was by no means a given in the films of those years (whether they were made for television or not). Lip-synching could be imprecise, especially in low-budget productions such as *musicarelli* but also in films with the same budget as *Orfeo 9*. As Maurizio Corbella has argued, filmmakers were less interested in recreating the "here and now" of a live performance than in constructing an ideal space in which the performance took place.[33] In contrast, Schipa felt it was essential that the musicians play in sync to the recording and that during his film the lips on the screen be in perfect synchrony with the corresponding voice tracks.

The title sequence also serves the purpose of establishing the idea of an auteur rock opera. As noted, Schipa introduces himself to the audience as the creator and writer of *Orfeo 9* in the opening title. In addition, the mixer refers to him as "Tito"; not as an actor impersonating a character, in other words, but as the author. Secondly, it is from Schipa's hand as a composer that the opera is born. This idea is reinforced by the fact that Schipa himself plays the role of the protagonist Orfeo, and thus he is at the center of the narrative. In the finale, Orfeo is crushed by the diabolical, infernal machine (a sort of mechanical press) and does not make it out of the city as the same person he was before. Eventually, Orfeo turns towards Euridice, but he does not recognize her. Tellingly, at that moment, Schipa is playing himself. We know this because he is wearing the same clothes he wears in the recording studio scene. As Schipa himself has stated, he does not blame Orfeo's fatal doubt on the character but rather on himself.[34] In this way, the author Schipa returns to the center of the story, replacing Orpheus at the juncture that is perhaps most strongly associated with the mythical singer. It is at this moment that the idea of a pop opera—composed by a singer-songwriter who must legitimize himself as such within the various media forms and through the modalities of each—is consolidated.

The question of authorship is fundamental to the relationship between the genres of rock and the musical. As Elizabeth Wollman has pointed out, while the musical is conceived as a product of a plurality of authors and

33 See Alessandro Bratus and Maurizio Corbella, "This Must Be the Stage: Staging Popular Music Performance in Italian Media Practices around '68," *Cinéma & Cie* 19, no. 31 (Fall 2018): 36–7.

34 This statement was made by Tito Schipa Jr. during a conversation with Daniele Peraro and Alessandro Avallone as part of the live-streamed event *Alumni Levi Live*. See "Alumni Levi Live, Musica e Mito, 9 novembre 2022," Fondazione Ugo e Olga Levi, streamed live on November 9, 2022, https://www.youtube.com/watch?v=hONuYoEWXVU&t=889s.

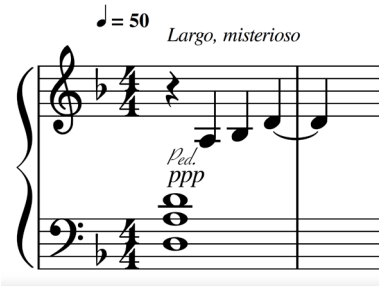

Fig. 3 – The first bar of the track "Tre Note."

professional figures, the myth of authenticity in rock music dictates that the album is produced under the control of a single controlling intelligence, be it an individual, a singer, or a band.[35] The cover of the first version of the *Orfeo 9* recording emphasizes the centrality of the singer-songwriter: it shows an extreme close-up of Schipa's face, his closed eyes made up as if they were open (an idea that Schipa states was borrowed from a photo of the model Veruschka).[36] Schipa's name appears above the title, while the words "opera pop" appear below. Conti's name appears in a much smaller font as the orchestrator and conductor. The names of the soloists are not listed. Schipa, then, places himself at the center of the recording as its sole author.

The beginning of the title sequence establishes Schipa's role in the film in a similar fashion. As Schipa writes the "three pitches," the soundtrack begins, just as one hears it on the double LP. When listening to the LP, however, we only hear the three pitches; in the film they are also announced by Tito's signs on a sheet of paper. The images do not merely confirm what we hear but they also underline the dramaturgical and narrative importance of this melodic cell, which is linked to Euridice. The three pitches are all Orfeo needs. These pitches—A, B-flat, and D—are not only the inaugural pitches of the work but they also function as an important musical motif for the opera as a whole.

It is this initial musical cell that gives the piece "Tre note" its name. At first, this first measure is not recognizable as a musical motif in the strict sense of the word but rather as a simple, recurring figure of three pitches.[37] Immediately after its first appearance, this figure is repeated in rhythmic diminution and transposed as an iterated arpeggio by the piano (E – F – A), only to return several times throughout the piece.

The song "Tre note" is Conti's arrangement of the introductory num-

35 Elizabeth Lara Wollman, *The Theater Will Rock*, 32.

36 Schipa, *Orfeo 9 – Then an Alley*, 175.

37 I use the term "musical motif" as it is defined by Sergio Miceli: "a short succession of sounds with either a complete or incomplete melodic character, but which—unlike the theme—is not subdividable."; see Sergio Miceli, *Musica per film. Storia, estetica, analisi, tipologie* (Lucca: LIM, 2009), 611.

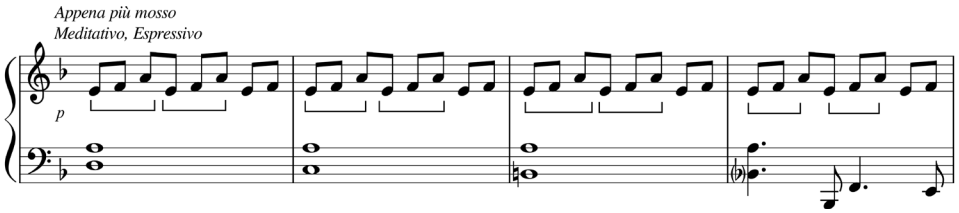

Fig. 4 – Excerpt from the track "Tre Note."

ber of the theatrical version of *Orfeo 9* (whose score was also based on the three notes). Echoing the way in which the three pitches are played by the piano in the overture, in "La ragazza che non volta mai il viso" (The girl who never turns her face), the same sequence of notes is sung by Orfeo in response to the Vivandiere's question, "E tu cos'hai" (And what's wrong with you)?

ORFEO
C'è come una stecca che sento nel vento
Una frase incompiuta, una rima taciuta.
Se fosse in amore un silenzio,
Se fosse in un boccio di fiore una brina,
Se fosse…
(I hear a sort of false note in the wind,
An unfinished sentence, an unspoken rhyme.
If might be a silence in love,
It might be a frost in a flower bud,
It might be…)

Although he cannot name his love, Orfeo sings of it. In this sense, the music has the function of anticipating the singer-songwriter's own realization. Only at this moment in the piece does the musical cell begin to take on precise significance for the attentive listener: the three pitches evoke Euridice, who is the reason for Orfeo's journey. The beloved thus becomes the driving force behind the entire work. This is why the musical figure is placed at the beginning of the overture.

This interpretation of the three-note motif is possible only after carefully listening to the entire record multiple times. The written text that accompanies the beginning of the piece, bearing the words "tre note/tre note sole mi bastano" (three pitches/three pitches alone are enough for me), brings

the viewers' attention to the opening line written by Schipa and fills the notes that follow with meaning, tying them inextricably to the figure of Euridice. If in a strictly musical sense the three-note arpeggio cannot legitimately be called a motif, the images change its status by empowering it with an explicit dramaturgical mission. In the first few minutes of the film, the insistence of the camera on these pitches, written both as and musical notation, communicates to the viewer the importance that these pitches will assume in a way that music alone cannot express. The soundtrack alone cannot convey their unique value, at least not at so early a point in the film. The images visually confirm what we hear, taking on what Bisoni calls the function of visual accompaniment.[38] More importantly, they are an early example of how Schipa sought to inscribe the recorded album within a visually salient narrative, thus in a sense endorsing Marengo's definition of the film as a "visualized soundtrack."

"Eccotela qui"

"Eccotela qui" (Here she is) is the track that accompanies the scene in which Orfeo meets his beloved Euridice (Eva Axen) and sings of his love to her.[39] Compared to the opera's other tracks, in "Eccotela qui" narrative time is suspended. This allows the protagonist to express his innermost feelings (as in a conventional operatic aria). The piece begins with a repeated guitar riff over which various people answer the question: What is happiness? As we hear their different answers, we see images of Orfeo intent on playing the guitar while Euridice enters a church. When she draws his attention, a cut takes the two of them to a place where Orfeo had awakened earlier. This place is now suffused with the atmosphere of a dream, however. The change in visual style and editing rhythm contributes to emphasize the meeting between the two lovers. A few, fast-paced shots show Schipa sitting at a desk reading a black volume marked "R. Tagore" (a book of poems by Indian poet Rabindranath Tagore). Orfeo looks at himself in a pool of water and sees his double with a "painted" face. Euridice smiles at him. A cutaway shot shows the Narrators in the recording studio, smiling at the young couple. Euridice caresses Orfeo's head as he leans over the water and turns away. On the freeze-frame of the close-up of Orfeo's expression as he sees

38 Bisoni, *Cinema, sorrisi e canzoni*, 149.

39 "Eccotela qui" begins at 0:26:33 in "ORFEO 9 di Tito Schipa Jr. (1972)."

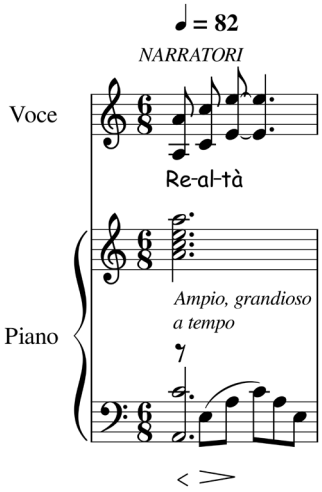

Fig. 5 – Excerpt from the track "Eccotela qui."

Euridice, one of the Narrators (Marco Piacente) intones the first notes on the words "Eccotela qui, davanti agli occhi" (Here she is, before your eyes). Euridice pushes Orfeo's head underwater.

After we have seen these images, Orfeo's solo part begins. The shots that follow are not linked to the soundtrack, however, nor do they move the story forward. Instead, they are conceptual in nature and quite different from one another at that, their meaning buried. The shot of Schipa reading verses from Tagore in his study at home alternates with images of Orfeo unveiling a statue of Euridice with a triumphant gesture before a festive audience throwing hats in the air or those of waves crashing against the rocks.[40] This is not to say that the picture is entirely devoid of a logical order; some of the images are conceived with the musical progression in mind. For example, the shot of Orfeo and Euridice removing the mosaic tiles that conceal each other's faces resonates with the musical phrasing. Schipa has stated that this type of synchronization was conceived *in macchina* (in the camera), that is, during filming.[41]

As seen in Figure 5, the "three pitch" fragment is at this point also reprised. After Orfeo declares his love for Euridice, the three Narrators sing an ascending arpeggio of A minor (the third note is tied to a longer one) on the word "re-al-tà" (reality), articulated in the shape of three syllables.

An intervallic variation of the initial musical fragment helps develop the musical dramaturgy further. If in the opening the interval between the first two notes of the melodic cell is a minor second, which contributes to an aura of mystery, here it is a minor third. The change establishes a more soothing and perhaps even casual atmosphere. Due to the changing interval, the relationship between the two melodic cells may appear very weak.

40 The frame that shows Schipa reading poetry in his study also shows the poster for *Then an Alley* (1967)—a previous work with beat music written and performed by Schipa—hanging on the wall. This reference is not casual: the author cites himself and his previous work, which paved the way for the idea of the theatrical version of *Orfeo 9*.

41 Schipa, *Orfeo 9 – Then an Alley*, 165.

Yet one thing is certain: the music suggests Orfeo's realization and as such it is a turning point in the narrative. Prior to the repetition of this variant of the "three-note" fragment, Orfeo sings of his love for Euridice, and then the melodic cell—in its altered form sung on the word "re-al-tà"—takes on the function of defining the feeling Orfeo could not name. But only the images clarify the relationship between the initial fragment and what I have now defined as its variant, as well as its meaning. The Narrators, who play a role akin to that of a Greek chorus, also sing these three pitches in the recording studio. This choice serves to emphasize the significance of this moment of the film. The passage clarifies that to Orfeo Euridice is the ultimate expression of the "real." Schipa, in turn, views Orfeo's love for Euridice as the reality that stands in opposition to the illusion of happiness sought in drugs.

At the end of the same piece, the three pitches (in the form presented in the overture) are echoed in Orfeo's lines referring to Euridice: "Sei proprio come la musica/Senza di te non sarebbe più vita" (You are just like music/Without you there would be no more life). Euridice, then, is like music—that is, the vision of reality that Orpheus can play using only a few notes. The "three-pitch" fragment and its variation musically unite the character of Euridice with the concept of reality, which for Schipa represents the only thing one needs, because it is the truest of all. These three pitches and their various iterations, then, encapsulate the moral of the fable of Orpheus as interpreted by Schipa.

Schipa visualizes a song that is essentially static, without narrative development. How, then, does he manage to inscribe the passage in the filmic images? Tellingly, Schipa does not focus on the protagonist who, overwhelmed by passion, sings of his love for Euridice. As mentioned above, the singing is not synchronized with images of the performance. Indeed, the scene does not perform the function of visualizing the sound at all. Orfeo's singing can be traced back to what Chion calls "internal sound"—that is, sound that expresses the protagonist's thoughts and psychology in the scene.[42] The choice not to visually display Orfeo's singing allows viewers to tune into the protagonist's feelings, as we are the only ones who can hear his words of love. It is no coincidence that this piece is arranged for orchestra and does not include electric instruments or the rhythm section of the rock ensemble (only the drums are heard). Where in the opening scene Schipa decided to make the performance of the ensemble fully visible, here the instruments

42 Michel Chion, *Audio-Vision: Sound on Screen*, trans. Claudia Gorbman (New York: Columbia University Press, 1994), 76.

of the orchestra remain all but invisible. As Wollman has shown, in the traditional musical orchestral music does not need to be anchored in the film's storyworld. Instead, it has the function of focusing the attention of the audience on the narration and enshrining the singing voices.[43] Chion locates such unanchored music in "an imaginary orchestra pit."[44]

In "Eccotela qui," then, images and music have different yet complementary functions. If Orfeo sings of his love for Euridice because he discovers that she is the representation of reality that leads to genuine happiness, the video component has the function of amplifying the dimension of the dream (more difficult to express through song). The images described above can be understood as echoes of Orfeo's dream, each limited to a particular place. The image that closes the piece, significantly, shows Orpheus asleep with Euridice.

"Venditore di Felicità"

My next and last example features the arrival of the "Venditore di Felicità" (Happiness Vendor), played by a young Renato Zero.[45] He is a Luciferian figure, the personification of the serpent of classical mythology, a charlatan who sells Orfeo the illusion of happiness in the form of drugs and takes his bride Euridice in return. During the marriage ceremony between Orfeo and Euridice, the strings used to unite the two lovers morph into the triangular head of a serpent. The distorted sound of eerie laughter and the sepia-toned image of a serpent segue into the entrance of the Happiness Vendor. Accompanied by a syncopated, dotted rhythm entrusted to the rock ensemble, he enters the stage driving his house-shaped hawker's booth, covered in children's drawings and the misspelled word "felicittà," (happiness, the second 't' crossed out). This shady figure introduces himself to the commune of hippies from inside his smoky den, where he is brewing potions, as he sings his first line, "Sento dei canti dalla strada" (I hear chanting in the street). He is next seen fill a syringe over a pot in which liquid is boiling, grab Orfeo and (figuratively) inject drug into his body. A rapid montage shows the movement of the syringe crosscutting with the

43 Wollman, *The Theater Will Rock*, 207.
44 Chion, *Audio-Vision*, 68.
45 "Venditore di Felicità" begins at 0:34:38 in "ORFEO 9 di Tito Schipa Jr. (1972)."

drops of liquid coming out of the needle. In a strange, distorted voice, the Venditore invites Orfeo to follow him.

Schipa has managed to link the track "Venditore di Felicità" to images that represent the Venditore's complex and multi-faceted character. Céline Pruvost has observed that the Venditore is a polymorphous character, pointing out that Schipa calls upon references and aesthetic models from various artistic practices such as music, cinema, and painting to associate this shadowy figure to that of the devil.[46] The Venditore is presented through what I like to call a "montage of attractions" in which the alternation of seemingly disparate images produces new meanings.[47] At the beginning of the scene, the image of a serpent is juxtaposed to that of the Venditore's entrance to suggest to that the character is evil. Throughout the piece, shots of the entrance scene are alternated with stock footage of snakes chasing fleeing mice. As the Venditore grabs Orfeo and the latter's face morphs into a mask, we see for a split second the image of a predator assaulting a small prey. It is a significant, albeit fleeting, sync point, an audio and video "synchresis" (to quote Chion), in which the rapid montage of these images, accompanied by a dry drum roll and emphasized by the subsequent sudden stop of the musical accompaniment, underscore the meaning of the action.[48] Orpheus has fallen into the trap of the Mephistophelean Venditore, and he will not be able to escape. Once again, the images flesh out what the music alone, drum roll notwithstanding, could only suggest.

Spectators familiar with the myth will understand that the Venditore is the personification of the serpent that in the classical fable kills Eurydice. In the Western tradition, the image of the serpent has always been associated with the diabolical and evil in any case. Pruvost has pointed out that the Venditore entices Orpheus by offering him a happier life, recalling the serpent's biblical role as tempter. This allusion is emphasized by the make-up on Renato Zero's face, which resembles the scales of a reptile.[49] Pruvost also highlights how the character's tall, dark silhouette and the contrived

46 Céline Pruvost, "*Orfeo 9*, de Tito Schipa Jr.: une réécriture polymorphe du mythe," *Cahiers d'études romanes*, no. 27 (2013): 259–79, https://doi.org/10.4000/etudesromanes.4094. Although her focus is limited to this scene, Pruvost is one of the few scholars to have examined Schipa's opera in detail.

47 Pruvost, paragraph 34.

48 As Chion explains: "*Synchresis* (a word I have forged by combining *synchronism* and *synthesis*) is the spontaneous and irresistible weld produced between a particular auditory phenomenon and visual phenomenon when they occur at the same time;" Chion, *Audio-Vision*, 63.

49 Pruvost, "*Orfeo 9*," paragraph 34.

Fig. 6 – Still frames from the scene "Venditore di Felicità."

atmosphere created by the shadows in his den, as well as the use of smoke, rework in a vernacular context the aesthetics of expressionist cinema—particularly Robert Wiene's *Das Cabinet des Dr. Caligari* (1920). These elements return each time the Venditore appears on stage, thereby embodying "the principle of the musical theme in the language of cinema."[50]

Pruvost also emphasizes how the complex construction of the track is decoupled from the traditional notion of the song form.[51] The sung part is built around the libretto, and—particularly in the second section of the piece—the music supports the exchanges between the two protagonists. The track consists of a first stanza, repeated twice, in which the singing has a marked melodic character. The second section, in which the musical accompaniment is almost absent, is a dialogue between the Venditore and Orfeo in the form of a recitative that occasionally also leaves room for spoken lines. The text alone, without music or imagery, amounts to no more than the call of a street merchant who traffics in happiness for the good of the people he encounters. It is the music and especially the accompanying images that make the character devilish and disturbing. Absent the screen dramatization, listeners cannot imagine Orfeo being physically trapped and, beguiled by the Venditore's words, accepting a dose of drugs.

The melodic line sung by Zero has a strongly undulatory contour. After

50 Pruvost likely refers to the logic of the recurring motif in theatre and opera. Pruvost, "*Orfeo 9*," paragraph 33.

51 Pruvost, paragraph 30.

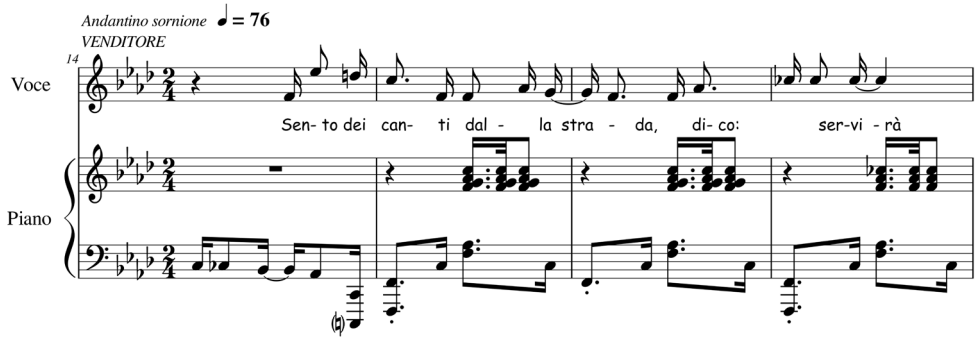

Fig. 7 – Excerpt from the track "Venditore di Felicità."

the attack with a minor seventh leap on the first two syllables, the melody descends and then rises again.

The cyclic, serpentine rise and fall of this melodic line create a dreamlike atmosphere: an ambience of mystery and tension. The corresponding image is the needle of the syringe with a few drops of liquid rising upwards, against gravity. The image enshrines the moment—the point of no return—at which the Venditore injects Orfeo with the dose of drugs that will lead him to lose Euridice. The background effects and distorted sound of Zero's voice, redolent of the hissing of a snake, complete the construction of the character. The lyrics align with this sonority. Words begin with or contain phonemes such as the incorrectly-defined "'s' sorda" (literally, the "deaf" /s/, which in English is referred to as "voiceless"), /f/, and /t/. These include "felicità" (happiness), "specialità" (specialty), "raffinato" (refined), "affidato" (entrusted), and "fratellino" (little brother). The predilection for these sounds phonetically emphasizes the association between the Venditore and a metaphorical serpent. The recurring tritone and the use of diminished and semi-diminished chords, moreover, create strong harmonic tension. In the opening verse, the first syllable of the word "servirà" (will serve) is underpinned by a chord containing a tritone interval that is emphasized by the voiceless /s/ and the accenting of the corresponding syllable. This use of harmonic and melodic elements helps to increase the sense of anguish and to musically characterize the Venditore as diabolical.[52]

The images build a more detailed framework of references through precise, calculated editing, rhetorically effective sync points, and visual choices

52 Pruvost, paragraph 31.

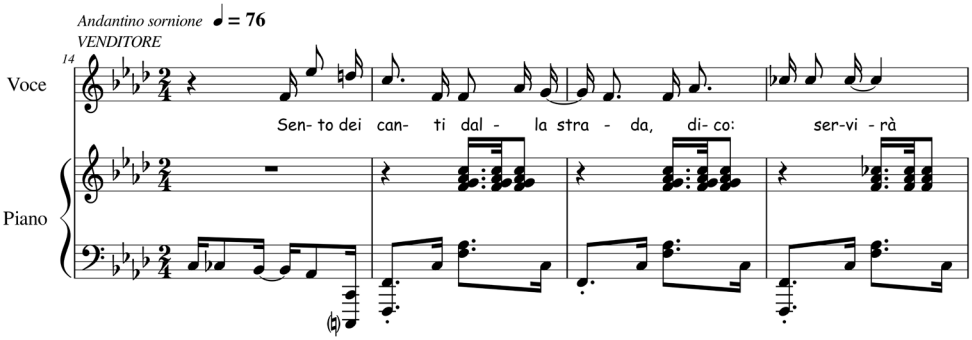

Fig. 8 – Excerpt from the track "Venditore di Felicità."

that call to mind a wide range of cultural and artistic models. This piece is an important example of Schipa's concept of music as an act of direction—as a tool, that is, both for constructing a drama and developing a narrative. Not only are the musical tempos written with the corresponding images or camera movements already in mind, but much of "Venditore di Felicità" is also composed of dialogue that was written with the explicit intent to be visualized. Schipa sought to make the music serve a poetic idea, and consequently, the development of the narrative of the opera.

Orfeo 9, from record to film musical

The narrative structure of the film consists of several concentric levels activated by the recording session on which the narrative hangs. The first and outermost level is that of the recording room where Schipa, the three Narrators, and the musical ensemble play and sing the opera. This is constructed as an artifice—that is, a projection of the musical performance. During the film, the camera returns to frame the recording studio and the movements of the musicians, focusing especially on the comments of the Narrators. The meta-filmic level is, as Miceli has argued, the place "where cinematographic language is extolled as the true magic and extreme epiphany of artifice."[53] Indeed, this level highlights the ways in which the subsequent dream-like spheres are tied to the imagination and to dreams. Not coincidentally, the viewer is invited to enter the world of the fable at night, just before sunrise.

53 Miceli, *Musica per film*, 767.

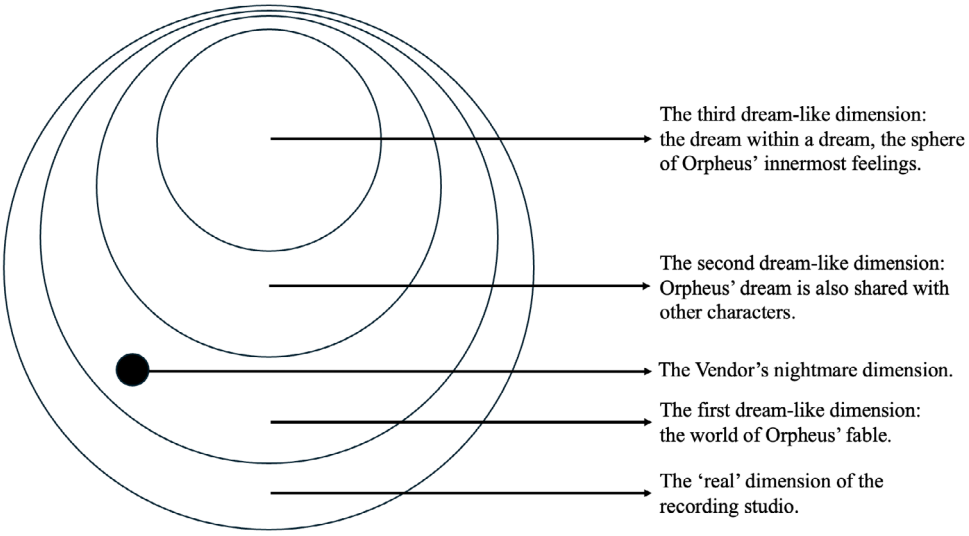

Fig. 9 – Structural diagram of the concentric spheres that constitute the plot of *Orfeo 9*.

This construction has much in common with what Sergio Miceli calls "the Kelly model"—that is, the filmic formula associated with the actor/dancer Gene Kelly and based on a series of ideal spheres, like "a dream within a dream within a dream"—each sphere folded within the next. Similarly, the rather thin plot of *Orfeo 9* is demarcated by the protagonist's continuous entrances and exits from dream-like spheres—the underpinning of which is, as we have seen, the recording studio. The film is an example of an integrated musical in which the musical number is not merely embedded in the narrative but also overcomes its status as fiction. The integration of musical numbers into the narrative is made possible thanks to the world of the fable which, as conceived by Schipa, is an imaginary dimension capable of evoking other dream spheres. In *Orfeo 9*, everything is a dream, and within that dream, anything is possible.

This model lends itself to Schipa's reworking of modern myth because, as Miceli states, "the [Kelly] formula can facilitate at once realism and allegory, everydayness and abstraction, predictability and surprise."[54] Accordingly, *Orfeo 9* attempts to blend opposing registers. For example, the avowedly constructed film studio scene of Orfeo and the Vivandiere immersed in a dreamlike environment as they discuss the explosion of the A-Bomb is

54 Miceli, 757.

followed by shots of the protagonist amid the traffic of contemporaneous Rome. Each scene is thus placed in a different dream dimension, and the audience is able to connect even the most divergent scenes so that they can coexist in something like an ordered whole. Some images draw on the aesthetics of rockumentary, others gesture toward the industrial film of those years via quotations of the trilogy of Orphic films by the poet and director Jean Cocteau. Different film genres coexist and with them, what Simone Arcagni has defined, different modes of "musical re-writing of the image."[55] Such an eclectic display of registers, styles and modes of spectatorial address pulls *Orfeo 9* away from the realm of the musical. Conversely, it suggests that the musical is best understood as a mode of representation rather than a genre in the strict sense.

Conclusion

In my commentary on three exemplary moments of *Orfeo 9*, I have focused on the ways in which a double LP may be remediated on film within the parameters of the musical. *Orfeo 9* draws attention to the potential of the musical understood as a mode of representation—a characteristic that, as Rick Altman has argued, defined the early musical[56]—in that it encompasses a wide range of cinematic genres exhibiting divergent aesthetics. This is not only because the film musical has very regular tempos and rhythms, as Massimo Locatelli points out,[57] but also because it contains other worlds within itself.

I have explored what the language of one medium can offer to the other or, more precisely, how cinema can flesh out a soundtrack composed to be visualized to begin with. Pop opera thus stands as an example of how the study of the genre of the musical in Italy can—indeed, should—extend its reach to embrace a cross-media, and cross-format, understanding of pop-

55 Simone Arcagni, *Dopo Carosello. Il musical cinematografico italiano* (Alessandria: Falsopiano, 2006), 207.

56 Altman states that, in the first sound film, musical numbers were "a manner of presenting narrative materials that already had its own generic affinities." Rick Altman, *Film/Genre* (London: British Film Institute, 1999), 31–2.

57 Building on the most recent studies on the psychology of rhythm and tempo in music, Locatelli analyzes the film musical as a product consisting of a succession of musical numbers, thus bringing this film genre closer to the song compilation practices in popular music records. Massimo Locatelli, "Il catalogo musicale pop e il cinema delle emozioni. Il caso *Yuppi Du* (1975)," *Schermi* 4, no. 7 (2020): 65–6.

ular music. I have demonstrated how the listener of the recording and the television audience enjoyed two completely different experiences. Through images, Schipa creates a place for the myth of Orpheus from within the musical, seeking in the genre a synthesis between different modes of remediation recorded tracks to rework a modern myth. Playing with the possibilities offered by his formal models, Schipa uses visual aesthetics from other film genres, constructing a polymorphic version of the myth while maintaining the essence of the fable of Orpheus.

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Abstract

Broadcasted for the first time in 1975, *Orfeo 9* is a film musical written and directed by Tito Schipa Jr. and produced for television by Rai, the Italian state broadcaster. The first Italian rock opera to appear on the TV screen, it is a modern version of the myth of Orpheus. Adapted from the theatrical musical staged in 1970 in Rome, the film is primarily a remediation of the double LP released in 1973: it was in fact built on the pre-existing audio recording, thus becoming the first experiment of "visualized soundtrack" on Italian television, according to critic Renato Marengo's definition. Accordingly, this presentation reverses the common perspective that considers what pop music can bring to cinema, asking instead what the language of film can bring to a record.

In particular, I focus on the ways in which the film *Orfeo 9* contributed to the "shaping of the experience of song," to quote film scholar Claudio Bisoni. I discuss the modalities of the "musical re-writing of the image" (Simone Arcagni) that allowed Schipa to experiment with different relationships between audio and video through the medium of cinema. The issue of genre, in particular the American film musical, plays a significant part in my analysis. My overall intention is to show how the film *Orfeo 9* was an experiment that aimed at a synthesis between different possibilities of remediation of songs.

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ARTICLES

From *Thin to Deep*: Mapping Urban Music through Multimedia Web Apps

Martin Nicastro

Introduction

In the last few years, geospatial data analysis and visualization tools are progressively spreading across music studies. After an experimental phase, which we could identify in the work carried out by Sara Cohen on Liverpool,[1] we are witnessing a systematic use of Geographic Information Systems (GIS) in projects of greater and greater scope. Their employment both in a historical context[2] and for the investigation of contemporary live music ecosystems[3] testifies to the adaptability of these tools to different research needs, while the persistence of the urban perspective seems to demonstrate a particular effectiveness in a distinct branch of studies. In fact, GIS enables researchers to carry out wide-ranging readings of complex spatial phenomena thereby broadening the scope of urban music research. This potential does not come without methodological risks, however, some of which appear to be specific to the object of study.

This article stems from a discussion of these risks, in the belief that the tension between humanistic disciplines and digital tools should be, first and foremost, a constructive one. At the heart of what we define today as Digital Humanities lies a vision of reciprocity,[4] the conception of a circular

1 Sara Cohen, "Live Music and Urban Landscape: Mapping the Beat in Liverpool," *Social Semiotics* 22 (2012): 587–603.

2 "MML – Mapping Musical Life," accessed May 17, 2024, https://www.mml-project.it/.

3 Adam Behr, Craig Hamilton, Patrycja Rozbicka, "Birmingham and the (International) Business of Live Music in Times of COVID-19," *Journal of World Popular Music* 9, no. 1–2 (2022): 31–48. "Live Music Mapping Project," accessed May 17, 2024, https://livemusicresearch.org/.

4 "Especially since the 1990s, with the advent of the World Wide Web, digital humanities has broadened its reach, yet it has remained in touch with the goals that have animated it

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and recursive relationship between research and technology. On one hand, the possibilities offered by new tools should lead to new ways of analyzing the sources, to new research questions and to new methodologies.[5] On the other, humanistic perspectives can and should contribute to the formation of technology. While less frequent, this second interaction appears to have become easier in the light of recent developments in the field of digital mapping. For this reason, I will present at a later stage how certain tools allow the creation of custom-made web-maps, using as a case study my research on the historical live music scene of Milan.

The paper is divided into five sections. In the first one I will describe the advantages and risks inherent in the application of spatial visualization techniques to music research; in the second, I will introduce the concept of deep mapping as a possible solution to the contradictions underlying music mapping; in the third, I will present the Leaflet for R package as an open-source, sustainable and accessible environment. Finally, the Milanese music scene of the economic boom (1958–1962) will be brought into play: it will be a test bed for the theories and tools previously proposed and the object of a multimedia mapping process that combines quantitative and qualitative approaches.

Flattening Practices: Risks and Potential of Music Mapping

Every map, to be effective, needs to lie. At the core of any type of visual representation there is a process of selection that necessarily distorts reality by offering an incomplete view:

> Not only is it easy to lie with maps, it's essential. To portray meaningful rela-

from the outset: using information technology to illuminate the human record, and bringing an understanding of the human record to bear on the development and use of information technology." Susan Schreibman, Ray Siemens, and John Unsworth, "The Digital Humanities and Humanities Computing: An Introduction," in *A Companion to Digital Humanities*, ed. Susan Schreibman, Ray Siemens, and John Unsworth (Malden: Blackwell Publishing, 2004), xxiii.

5 "Although the breadth of fields covered is wide, what is revealed is how computing has cut across disciplines to provide not only tools, but methodological focal points … Many disciplines have gone beyond simply wishing to preserve these artifacts, what we might now call early forms of data management, to re-represent and manipulate them to reveal properties and traits not evident when the artifact was in its native form." Schreibman, Siemens, and Unsworth, xxiii–xxiv.

> tionships for a complex, three-dimensional world on a flat sheet of paper or a video screen, a map must distort reality … To avoid hiding critical information in a fog of detail, the map must offer a selective, incomplete view of reality.[6]

The idea that loss of information is inherent to the process of abstraction is also one of the foundations of what was defined by Franco Moretti as "distant reading."[7] At the basis of his approach there is an awareness, we could say relativistic, of how the observation point always influences what is observable. The traditional analysis of a single literary text precludes the emergence of patterns observable only on a large scale; vice versa, the analysis of a large number of objects, made possible by datafication and algorithms, allows us to identify previously invisible trends to the detriment of the comprehension of the individual text.

For this reason, geodata visualization techniques seem to hold the key to what has been the main objective of urban music research since its inception: to capture the richness of the musical life of an entire city. At the beginning of the 1980s, way before the introduction of GIS in music studies, the temporal coincidence of a series of works dedicated to late-medieval or early modern cities led to the definition of "urban musicology,"[8] meant to designate what was perceived as a new research procedure. As argued by Carter, however, these seminal writings also shared a gap between the ambitious methodological premises and the actual results. On the one hand, they manifested the desire for a holistic representation of the music practices of a city, capable of setting "an uncertain, largely self-referential discipline—such as music historiography—on a secure enough footing to enable it to speak to the broader worlds of political, economic, social and cultural history."[9] On the other hand, this perspective often translated into linear and verbal historical narratives, in which the anchoring to the spatial dimension remained in the background.

6 Mark Monmonier, *How to Lie with Maps* (Chicago: Chicago University Press, 1991), 1.

7 Franco Moretti, *Distant Reading* (London: Verso, 2013).

8 Anthony Newcomb, *The Madrigal at Ferrara, 1579–1597* (Princeton: Princeton University Press, 1980); Iain Fenlon, *Music and Patronage in Sixteenth-Century Mantua* (Cambridge: Cambridge University Press, 1982); Lewis Lockwood, *Music in Renaissance Ferrara, 1400–1505: The Creation of a Musical Center in the Fifteenth Century* (Oxford: Oxford University Press, 1984); Allan W. Atlas, *Music at the Aragonese court of Naples* (Cambridge: Cambridge University Press, 1985); Reinhard Strohm, *Music in Late Medieval Bruges* (Oxford: Clarendon Press, 1985).

9 Tim Carter, "The Sound of Silence: Models for an Urban Musicology," *Urban History* 29, no. 1 (2002): 9.

Visual mapping, thanks to the ability to simultaneously represent a plurality of elements and relations within geographical space, offers instead the means for a global investigation. This is the case, for example, of the Mapping Musical Life project,[10] which exploits the potential of GIS systems to reconstruct the music practices taking place in six different Italian cities between 1866 and 1882. Through the geolocation of news and advertisements contained in a corpus of newspapers, the symbiotic relationship between urban space and music becomes tangible, allowing for new historiographical narratives. The clustered visualization of places and events within a series of historical maps, which can be activated in synergy with a set of filters and a time slider, brings to light the stratification of the musical life of the time, beyond the main institutions of each city.

Although with different purposes, the Live Music Mapping Project adopts a similar perspective distancing, with the aim of creating a homogeneous data set for the comparison of numerous contemporary urban live music ecosystems.[11] The peculiarity of the interactive maps developed by the project is that they are capable of dynamically showing different music venues based on type, capacity, opening and closing year. In combination with this functionality, it is then possible to activate time-based choropleth layers in which the coloring of certain areas within the city corresponds to a quantitative value, such as the average price of properties.[12] In this way it becomes possible to demonstrate how the spatial concentration of live music venues systematically precedes the increase in prices and sales of houses, one of the most evident traits of urban gentrification processes.

According to these examples, it would be somehow contradictory to critique maps based on the very elements that make them useful. Visual abstraction, namely the transformation of an event or a place into a graphical symbol placed on a bi-dimensional representation of space, is a necessary "lie" for projects that aspire to investigate hundreds of music performances spanning multiple decades and involving several urban centers. At the same time, it is crucial to be careful of which lies we allow ourselves to tell when we use maps for research purposes. As Mark Monmonier argues, it is quite easy to slip from what he calls "white lies" to more "serious lies."[13]

10 "MML – Mapping Musical Life," accessed May 17, 2024, https://www.mml-project.it/.

11 "Live Music Mapping Project," accessed May 17, 2024, https://livemusicresearch.org/.

12 This feature, to the development of which I contributed personally as part of the research group, has currently only been shown during conferences, but it will soon be published on the project's website.

13 "Because most map users willingly tolerate white lies on maps, it's not difficult for

Since most map users do not know the processes that are behind map building, people tend to trust maps and map makers. As humanists we are somehow subject to the same tendency, especially when we entrust the development of maps to professionals or when we use premade tools offered by commercial companies.

In music studies, some of these "serious lies" can be related to the complexity of music practices when considered in their immanency. Georgina Born argues that any type of Euclidean and Cartesian[14] visual abstraction is unable to catch the multiplicity of the embodied experience of music in space:

> At this point it is productive to bring out the implications of the relational understanding of music, sound and space … They center on three kinds of irreducible multiplicity at work in musical and sonic experience. All three depart from Euclidean and Cartesian understandings of space in/and music, all are interwoven … The first is the multiplicity of any human subject's experience of music and sound as s/he inhabits a particular physical or virtual space … The second is the social multiplicity given by the existence in the same performance space, site or event of many (diverse, often previously unrelated) human subjects … The third foregrounds temporal mediation.[15]

What is called into question here is not only the datafication process that preludes the creation of a digital map but the very possibility of a visual representation of space. Based on Nigel Thrift's "non-representational theory,"[16]

maps also to tell more serious lies … As with many things beyond their full understanding, they readily entrust map-making to a priesthood of technically competent designers and drafters working for government agencies and commercial firms … Map users seldom, if ever question these authorities, and they often fail to appreciate the map's power as a tool of deliberate falsification or subtle propaganda." Monmonier, *How to Lie with Maps*, 1.

14 The definition of Euclidean space commonly describes a two- or three-dimensional representation of physical space in which the fundamental laws of geometry apply. Thanks to Cartesian coordinates it is possible then to represent the location of a point by using a pair (or a triplet, when a third dimension is present) of numbers, which represent the distances between the point and two or three perpendicular axes. Although latitude and longitude represent angular and not planar measures, the geographical coordinate system used in most maps is based on similar mathematical principles.

15 Georgina Born, "Introduction. Music, Sound and Space: Transformations of Public and Private Experience," in *Music, Sound and Space: Transformations of Public and Private Experience*, ed. Georgina Born (Cambridge: Cambridge University Press, 2013), 19.

16 Nigel Thrift, *Non-Representational Theory: Space, Politics, Affect* (London: Routledge, 2008).

the spatial dimension is described by Born as constantly constructed and reconstructed within a network of relationships, no longer a fixed container:

> The theorisation of space in contemporary geography is remarkably consonant with the ideas presented so far. In the most general terms, for geographers today space is the focus of an epistemological revolution involving a rejection of Kantian conceptions of space as an "absolute category" in favour of the tracing of a series of "species of space" … Space is here conceived as plural, as the outcome of social and material practices, and as indivisible from time.[17]

A "plural" space in continuous transformation is incompatible with the univocal processes of geometric measurement on which cartography, digital or otherwise, is based. Behind the potential of geospatial representation of music practices could lie a new type of sonic and spatial "visualism," with the risk of turning back to a stage prior to the valorization of auditory perception by models such as Raymond Murray Schafer's soundscape[18] or the more recent Steven Feld's "anthropology of the senses."[19] An unaware use of GIS could replicate issues that are well known across music studies, a field that struggled for decades with finding a balance between the multifariousness of sound and music and their representation through notation or other graphical means.

Deep/Thick Mapping and Thin Mapping

It is interesting to note that similar assumptions underlie a particular approach to mapping which has been defined as "deep," in opposition to the "thinness" of maps that exclusively rely on a Cartesian representation of space.

> The fixity and abstraction of the cartographic frame (the map) belie the unboundedly complex, contingent and temporal spatialities of "the field." The deep map is a utopian imaginary of space inasmuch as it strives to frame or in

17 Born, "Introduction," 20.

18 R. Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of The World* (Rochester: Destiny Books, 1994).

19 Steven Feld and Donald Brenneis, "Doing Anthropology in Sound," *American Ethnologist* 31, no. 4 (2004): 461–74.

> some way open itself up to that which is "lived." By contrast, the *thin* map … is unapologetically representational.[20]

This ambition of a visual map opening itself to what is "lived" is closely linked to the possibilities offered by new mapping technologies: a digital map is not necessarily a transposition of an "analogic" one. In fact, the core concept that defines a deep map is that GIS can be hacked and transformed into hybrid representations of space that include both quantitative data, for which they were initially developed, and qualitative multimedia content.[21] The tension and the interaction between these two dimensions define the approach: deep maps allow us to "explore how digital tools and interfaces can support ambiguous, subjective, uncertain, imprecise, rich, experiential content alongside the highly structured data at which GIS systems excel."[22]

This blended attitude towards the spatial dimension is similar to what has been defined as "thick" mapping. By admission of the authors of *HyperCities: Thick Mapping in the Digital Humanities*, "thickness" is a different metaphor to indicate something that, in practice, is very similar to a deep map.[23] It is interesting to report why and when the concept of thick mapping

20 Les Roberts, "Preface: Deep Mapping and Spatial Anthropology," *Deep Mapping*, ed. Les Roberts (Basel: MDPI, 2016), xii.

21 "Traditional GIS with its emphasis on precise measurement and spatial models is not the means for constructing a deep map. But it is part of the solution, especially when linked to recent advances in spatial multimedia, GIS-enabled web services, cyber geography, and virtual reality, among other tools … Collectively, these technologies allow us to probe the situated knowledge that resides in dynamic and contested memories and to understand the affective or emotional geographies of space and place. They have the potential, in brief, to revolutionize the role of place in the humanities by moving beyond the two-dimensional map." David J. Bodenhamer, "The Varieties of Deep Maps," in *Making Deep Maps: Foundations, Approaches, and Methods*, ed. David J. Bodenhamer, John Corrigan, and Trevor M. Harris (Abingdon: Routledge, 2022), 4.

22 Mia Ridge, Don Lafreniere, and Scott Nesbit, "Creating Deep Maps and Spatial Narratives through Design," *International Journal of Humanities and Arts Computing* 7, no. 1–2 (2013): 176.

23 "Instead of positing another depth model or yet another celebration of postmodern hyperspace, the HyperCities project strives for 'thickness.' Thickness means extensibility and polyvocality: diachronic and synchronic, temporally layered, and polyvalent ways of authoring, knowing, and making meaning." Todd Presner, David Shepard, and Yoh Kawano, *HyperCities: Thick Mapping in the Digital Humanities* (Cambridge, MA: Harvard University Press, 2014), 18. "In practice, there is much convergence between the notion of 'thick mapping' that we are describing here and Bodenhamer's 'deep maps' that embody humanistic approaches to spatio-temporal data marked by ambiguity, uncertainty, contingency, and incompleteness." Presner, Shepard, and Kawano, 204.

originated because we could safely reemploy the same words to describe the emergence of the "depth" imagery, which spread in the same years:

> Until recently, mapping in the humanities was deeply bifurcated between what might be called, on the one hand, a "quantitative" approach using data analysis and visualization techniques adopted from the field of Geographic Information Systems (GIS, for short), and, on the other, what might be called "metaphorical mapping," variously articulated in cultural studies through theorizations of space and place, critiques of spatial systems, and critical cartography studies […]. Over the past couple of years, blended approaches have started to emerge in the digital humanities … without uncritically embracing or cavalierly dismissing GIS.[24]

Ten years after, the term "deep map" appears to have had a greater diffusion—a comprehensible and practical simplification given the overlap between the two definitions since their inception—which is the reason why I have given to it my preference here. This does not mean, however, that the interests and needs that initially gave rise to both definitions have weakened, quite the opposite. This is proved by the recent publication of the volume *Making Deep Maps: Foundations, Approaches, and Methods*, where Bodenhamer once again returns to the definition of deep map.[25]

Compared to his latest formulation,[26] we find here an interpretation that is even more open to different applications and is underpinned by the intention of retrospectively strengthening a research tradition. To achieve this, a gradual categorization of increasing complexity is employed for

24 Presner, Shepard, and Kawano, 49.

25 Bodenhamer, "The Varieties of Deep Maps." See also David J. Bodenhamer, "The Potential of Spatial Humanities," in *The Spatial Humanities: GIS and the Future of Humanities Scholarship*, ed. David J. Bodenhamer, John Corrigan, and Trevor M. Harris (Bloomington: Indiana University Press, 2010), 14–30; David J. Bodenhamer, "Narrating Space and Place" in *Deep Maps and Spatial Narratives*, ed. David J. Bodenhamer, John Corrigan, and Trevor M. Harris (Bloomington: Indiana University Press, 2015), 7–27.

26 "A deep map is a finely detailed, multimedia depiction of a place and the people, animals, and objects that exist within it and are thus inseparable from the contours and rhythms of everyday life. Deep maps are not confined to the tangible or material, but include the discursive and ideological dimensions of place, the dreams, hopes, and fears of residents—they are, in short, positioned between matter and meaning." David J. Bodenhamer, John Corrigan, and Trevor M. Harris, "Introduction: Deep Maps and the Spatial Humanities," in *Deep Maps and Spatial Narratives*, ed. David J. Bodenhamer, John Corrigan, and Trevor M. Harris (Bloomington: Indiana University Press, 2015), 3.

which a deep map may or may not use all its features without however being excluded from the definition. To understand the level of inclusivity we can refer to this minimal description: "deep maps are fluid cartographic representations that reveal the complex, contingent, and dynamic context of events within and across time and space."[27]

At the same time, the historical contextualization of the approach is broadened. Bodenhamer's definition is no longer bound to French Situationism and Heat-Moon's work—from which the term "deep map" was derived[28]—but can be traced back to the earliest representations of space in the history of humanity.[29] The use of web based maps, exploiting multimedia hyper textuality, allows us to turn the clock back to the point where cartography was not aimed solely at measuring space but at its narration. In this fascinating view, HTML pop-up windows[30] embedding texts and images in a digital map resembles thirteenth-century *mappae mundi* much more than modern maps driven by colonial conquest.[31]

At a time when music studies face similar methodological issues in the approach to GIS, deep mapping presents itself as an established methodology, with its own tradition of research and a clear theoretical formulation. It now remains to understand how to concretely enter the horizon opened by digital mapping without delegating most of its development to specialists or pre-established commercial platforms. It doesn't matter how "deep" a map is: it can never ignore the consideration of its inevitable incompleteness and temporariness. Therefore, the invitation to be aware of its "lies" remains valid.

27 Bodenhamer, "The Varieties of Deep Maps," 6–7.

28 William Least Heat-Moon, *PrairyErth (a Deep Map)* (Boston: Houghton Mifflin, 1991).

29 "The impulse toward deep mapping—linking geographic and cultural representations of a place—began when mankind first created maps. One of the earliest known examples, the Çatalhöyük Map from Turkey (ca. 6200 BCE), displays an arrangement of differently sized dwellings, possibly representing social status, and a far out-of-position volcano that had both religious and economic significance for the inhabitants." Bodenhamer, "The Varieties of Deep Maps," 1.

30 HTML, an acronym for HyperText Markup Language, is a textual markup language used for creating multimedia documents on the web. Together with CSS and JavaScript it is one of the central technologies of the World Wide Web. In a web-mapping context, HTML is mostly used to manage the creation of pop-up windows that are activated by the user through interaction with the graphic objects present in the map.

31 "Consider the thirteenth-century Ebstorf Map, the largest example from a genre known as *mappae mundi*. The map, an idealized depiction of the known world sewn from thirty goatskins, is a visual encyclopedia of knowledge about the world, with over 2,000 drawings and explanatory texts that combine geography, religion, science, and folklore. In it the earth is an event-filled and storied place. It was a deep map." Bodenhamer, 1.

Leaflet for R: Multimedia Web Apps for Humanists

The fact that musicology has entered the Digital Humanities "big tent" later than its peer and cognate disciplines[32] ensures that it can resort to open-source mapping tools that are well-oiled and accessible to begin with.

This means, for example, being able to contain problems such as those encountered by Cohen in her experimental mapping of the music scene of Liverpool. In her case, the dependence on specialized programmers caused difficulties in the interaction within the research group and made it impossible to achieve all the objectives.[33] Broader accessibility reduces the reliance on commercial platforms which, in addition to offering their services for a periodic fee, can be subject to sudden modifications. This is the case of Carto, previously known as CartoDB, cited by Bodenhamer[34] among the GIS environments with a more "qualitative" orientation: by May 1st, 2022, the software made a definitive transition to a new platform, called Carto3. These updates are quite common in the sector and are often an obstacle to the interoperability and longevity of humanistic research projects: at this moment the previous version of the Carto is no longer accessible, meaning that all the visualizations created before the update are not replicable. While the company affirms that it will maintain the cloud support for all the web-maps developed using the old platform—so that they will be still accessible by the users—there is no guarantee that it will be the same in the future.

32 Melissa Terras, "Peering Inside the Big Tent: Digital Humanities and the Crisis of Inclusion," *Melissa Terras: Adventures in Digital Humanities* (blog), July 26, 2011, https://melissaterras.org/2011/07/26/peering-inside-the-big-tent-digital-humanities-and-the-crisis-of-inclusion/.

33 "For all of those involved, the pilot mapping project was an experimental initiative and not something we had ever attempted before, and putting it all together proved to be a challenging and often frustrating process. Whilst there were no fixed expectations as to how the maps might turn out, it was, nevertheless, important for the Popular Musicscapes project that their form and content should be shaped largely by the ethnographic research with musicians. … Because my research associate and I had not yet been trained in the use of GIS we were dependent on assistance from Civic Design students at the University of Liverpool, who had to re-interpret the data we passed on to them to make it comply with the kind of GIS training they had received. Consequently, the focus of the maps shifted towards the material sites of music-making and away from the practices and perspectives of musicians." Cohen, "Live Music and Urban Landscape," 589.

34 "Web mapping platforms such as Google Maps, MapQuest, CartoDB, Palladio, and Neatline do not have the same quantitative orientation as GIS software, allowing a diversity of spatial data to be visualized." Bodenhamer, "The Varieties of Deep Maps," 5.

By contrast, consider a tool like Leaflet. Leaflet is an open-source JavaScript[35] library used for the creation of web mapping applications: it was developed by Volodymyr Agafonkin and first released in 2011. Its strengths are compatibility, performance and accessibility (the library weighs only 42 KB and has no external dependencies). It also supports HTML markers and pop-up windows, which can easily incorporate external links as well as images, video and audio players. This means that interactive maps built with Leaflet can be hypertextual, potentially functioning as a spatial access point to multimedia digital archives. While most of these goals are reachable also by a few commercial web-mapping tools, Leaflet is totally open-source. An application developed with this library can be freely published and stored without depending on a proprietary cloud service, like in the case of Carto. Its code can be reused indefinitely and made available to other researchers who can then adapt it to their own needs. This aspect is not secondary, for it allows compliance with the FAIR standard (Findability, Accessibility, Interoperability, Reusability)[36] not only with regards to the dissemination of the data collected during the research, but also the visualizations themselves.

Given its features, then, Leaflet appears to be a perfect candidate for creating deep maps: it supports the technology required to overlay qualitative and experiential content onto quantitative geographic data. The only potential obstacle that could prevent its direct use by a humanist is that it requires knowledge of the JavaScript programming language, but this is where one last digital mapping environment enters the discussion.

In 2015 the first R package for the creation of Leaflet digital maps was released.[37] R is an open-source language for statistical computing and graphics,[38] and it's broadly known in the academic world for offering the possibility to create publication-quality graphs to non-professional programmers. In fact, the basics of its syntax are much more accessible than the knowledge required, for example, to build an interactive web-map directly from JavaScript. For this reason, the Leaflet for R package features most of the advantages of working with Leaflet without requiring a formal training in its native language, offering to humanists a chance to design custom geographical visualizations.

35 One of the fundamental programming languages of the World Wide Web, first published in 1995. It is mainly used for the creation of dynamic graphical interfaces.

36 Mark D. Wilkinson et al. "The FAIR Guiding Principles for Scientific Data Management and Stewardship," in *Scientific Data*, no. 3 (2016): 160018.

37 "Leaflet for R," accessed May 17, 2024, https://rstudio.github.io/leaflet/.

38 "What is R?," R Project, accessed May 17, 2024, https://www.r-project.org/about.html.

Historical Live Music in Milan: Digital Maps as Memory Catalyzers

Let me now introduce an example taken from my own experience in working with Leaflet for R. In particular, I wish to demonstrate how the flexibility and the accessibility of this combination of open-source software allowed me to create a circular workflow between quantitative and qualitative tools. My research focus is the relationship between space and music in the city of Milan during the years of the first economic boom (1958–1962). To examine this crucial period in the music history of the city, I applied the methodological principles of deep mapping, trying to adapt them to the specificity of the topic. On the quantitative front, I have collected data about 8288 musical performances held in Milan from 1958 to 1962.[39] The historical sources used to build this data set, which includes information relating to performers, repertoires, venues, and musical genres, were two newspapers: *Il Giorno*, as the primary one, and *Il Corriere della Sera*. In both cases detailed information relating to musical events in Milan at the time is reported on a daily basis.

Starting from this main data set, I then proceeded to create various interactive Leaflet maps in R. Among these, the visualization called "Geography of Performative Spaces"[40] constituted the fundamental skeleton from which I have built all the subsequent declinations.[41] In this map I have geolocated the spaces which, according to the newspapers, hosted at least one musical event in the years considered. I therefore indicated their location in the urban space both through point markers and two-dimensional polygons that symbolize their physical extension. In both cases, I used colors and icons to reflect the diversity within the sample as represented in the categorization system used within the newspapers (Figure 1).

The spatial diffusion of each of these venues subsets is observable through the activation of different layers, selectable through a pop-up menu located at the top right-hand corner. The selector also allows the activation of two other quantitative visualizations: the incidence of musical events by location and the capacity of each space, created using circular markers of

39 Martin Nicastro, *Milan 1958-1962: Music Topography of a City (main dataset)*, Zenodo, 2023, https://doi.org/10.5281/zenodo.8126445.

40 "Geography of Performative Spaces," accessed May 17, 2024, https://bit.ly/perf_spaces_map.

41 All the interactive versions of the geographical visualizations are accessible on a dedicated website. "Milan 1958–1962: Music Topography of a City," accessed May 17, 2024, https://musictopography.github.io.

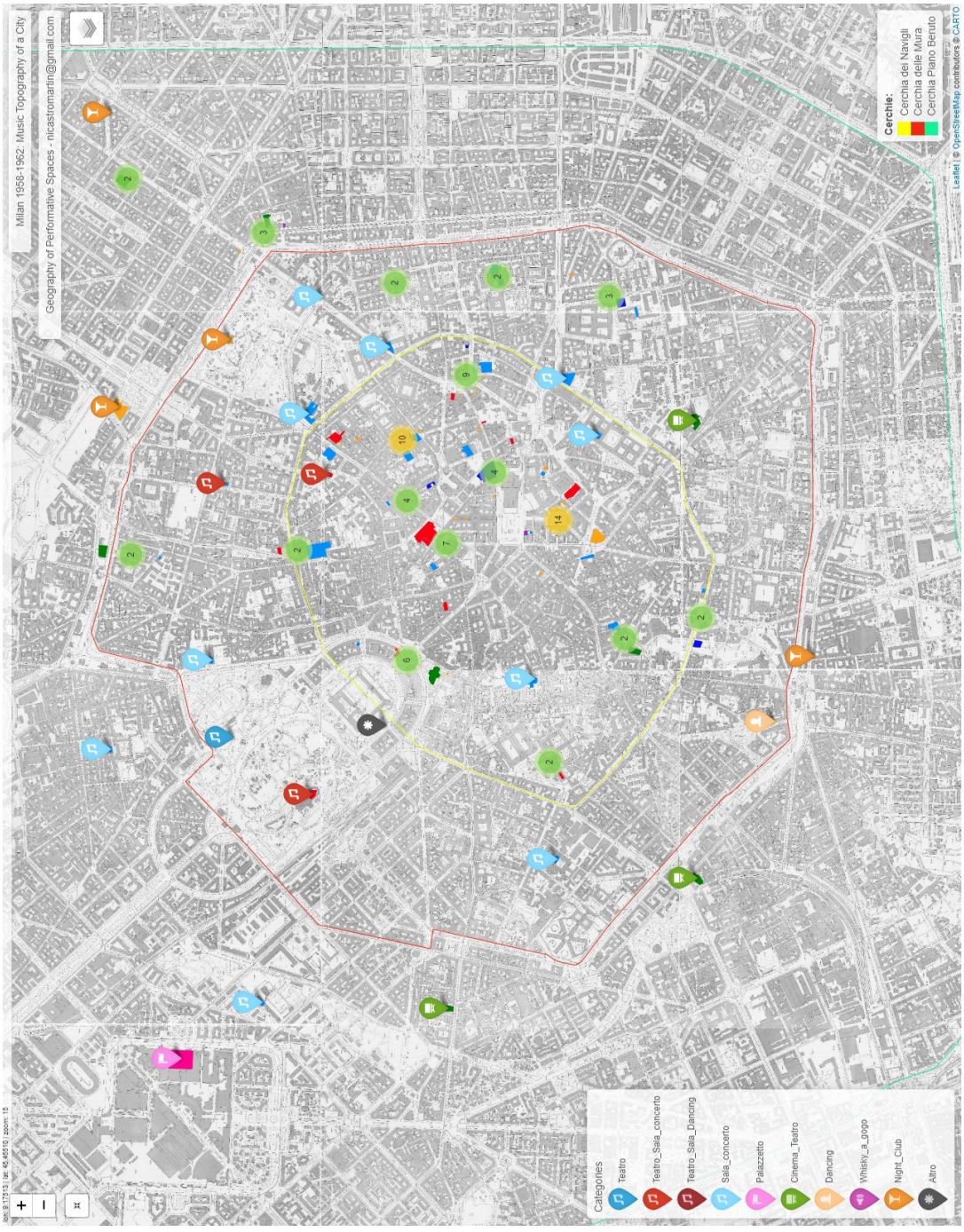

Fig. 1 – "Geography of Performative Spaces." Interactive version: https://bit.ly/perf_spaces_map

different colors and sizes. Finally, all these graphic representations are overlaid on a historical map that portrays the city in 1965 ca., made available via WMS by the Municipality of Milan.[42]

Thanks to these features it was already possible to demonstrate several working hypotheses, including the close relationship between the spatial hierarchies of the city and the diffusion of different types of venues and practices.[43] In compliance with the principles of deep mapping, however, this digital map was not intended as a destination, but rather a starting point for qualitative and narrative-based historical analysis.[44]

The second stage of the project, accordingly, revolved around eight field interviews with musicians active in the music scene of the time.[45] These sessions involved the use of both a laptop and interactive maps, equipped, if the data allowed it, with an additional layer representing the music performances in which the interviewee had taken part.

The question that introduced the visualization explicitly invited the witnesses to critically observe the data represented, welcoming them to comment on whether it reflected their memory of the events. The reactions, recorded on camera, were of great interest and, at least initially, partially unexpected. Several witnesses were surprised to see their artistic activity represented on a digital map. The Leaflet application, which the interviewees were not aware of before the session, therefore played an important role in destabilizing the self-narration of some of these musicians, otherwise well accustomed, given the professional level of their careers, to speaking of their artistic activities.

42 The Web Map Service (WMS) is a standardized protocol that allows access to georeferenced map images published over the Internet. "Open Data," Milano Geoportale, accessed January 25, 2024, https://geoportale.comune.milano.it/sit/open-data/.

43 "Theatres" and "night clubs" were mostly located in the inner circle of the city, called "Cerchia dei Navigli," while "cinema teatro," "dancing," and "whisky a go-go" tended to be in the more external ones. In combination with various historical sources, it was possible to prove the link between this trend and Milanese "radiocentrism," with important implications regarding accessibility, immigration, and mass media.

44 "How we construct these narratives will depend, in part, on the richness of our evidence and the tools at our command, but deep mapping can be an ideal storyboard for humanists." Bodenhamer, "Narrating Space and Place," 23.

45 The complete list is: Gian Franco Reverberi, Lino Patruno, Natale Massara, Paolo Tomelleri, Gaetano Liguori, Bruno Canino, Giacomo Manzoni, and Enrico Intra. For an edited version of each interview and a brief biographical introduction refer to the research website. See "Milan 1958–1962: Music Topography of a City," accessed May 17, 2024, https://musictopography.github.io.

In several cases, the interviewees did not remember the events represented on the map. Natale Massara, at the time sax player for Adriano Celentano's Ribelli,[46] did not recall having taken part in a show named "Music Juke Box Parade" held on March 28, 1960, at Teatro Carcano.[47] He was made suspicious by the fact that on that occasion the Ribelli were accompanying a singer called Sauro, with whom Massara was sure he had never played. At that point, taking advantage of the multimedia nature of the map, I retrieved the historical source that testified the event via a link present in the application. This, in turn, triggered a rather articulated process of memory reconstruction on the part of the interviewee.

Seeing the image taken from the newspaper spurred Massara to reflect on the temporal juncture of the event: in February 1960 Celentano could not perform due to military service but, due to the band's need to remain active, numerous concerts were given with different front singers. Given Celentano's fame, the group was still announced as "I Ribelli di A. Celentano" for promotional purposes.

The use of personalized maps stimulated the witnesses to break through the ceiling of their self-narration whose unexpected cracks made it possible for other memories to emerge. Returning to Massara's example, the musician invited me to search the map for places that to him were important. He was worried that these might be missing. Thanks to the interactive aspects of the application, it was possible to follow the ebb and flow of his narrations, using the historical map of Milan as a constant visual support that helped the witness place his memories in the urban space. In some cases, geolocation has contributed to giving shape to a place the memory of which had faded to the point of no longer having a name. While consulting the map, Massara felt it was important to mention the place where he first met Lucio Battisti (with whom he would collaborate in the years to come). Thanks to my ability to move within the visualization, I followed his attempt at orientation until we managed to identify the area in which the unnamed venue was located. Something similar happened with Lino Patruno,[48] who wanted to identify on the map the point where a private

46 I Ribelli was an Italian rock band, born in 1959 to be the accompaniment formation for Adriano Celentano.

47 "Oggi a Milano," *Il Giorno*, March 28, 1960, 8.

48 Lino Patruno (1935) is a banjoist and guitarist. His main fields of activity are traditional jazz, with formations such as the Milan College Jazz Society or the Riverside Jazz Band, and cabaret with "I Gufi," of which he is co-founder.

theatre, with an unspecified name, was located: the venue where he met the jazz pianist Romano Mussolini for the first time.

The results obtained from the experimental use of interactive maps during the conduction of field interviews recall Cohen's experience with musicians drawing maps of their own experience of urban space. The interactive nature of the visualization appears to have allowed the interviewees to trace their own trajectories, not unlike the mechanisms triggered by Cohen's ethnographic method. In both cases the maps proved to be particularly effective "memory machines":

> Yet, whilst drawing their maps, musicians talked to us about their music-making activities and experiences and some of the sites involved. In doing so, they showed how at particular moments, and within particular circumstances, the act of mapping can prompt memories and stories of music and place; hence, in the words of Marc Augé, a map can be "a memory machine." Drawing the maps helped musicians to express musical experience and knowledge in spatial terms, and provided them with a means of connecting music to memories of material urban environments and associated identities, emotions, and relationships.[49]

The test case of Milan provides a further example of the special status of digital maps and their possibility of overcoming the "non-dialectical"[50] nature of Cartesian spatial visualizations. The experiential, exploratory, and interactive components of these applications can amplify their interlocutory dimension, revealing a potential as innovative tools for the conduction of field research.

Deep Map as a Product: Feedback-Based Multimedia.

The use of a digital map to stimulate stories that convey the multiple facets of a lived space can be already placed in the constellation of practices

49 Sara Cohen, "Bubbles, Tracks, Borders and Lines: Mapping Music and Urban Landscape," *Journal of the Royal Musical Association*, no. 137 (2012): 137–8.

50 "Although, as geographer David Harvey observes, 'maps are typically totalizing, usually two-dimensional, Cartesian, and very undialectical devices,' that does not, of course, mean that digital deep maps—or, rather, deep mapping practices that exploit the many possibilities and advantages offered by digital and geospatial technologies—are necessarily cut from the same Cartesian, undialectical cloth." Roberts, "Preface," xii–xiii.

that has been defined as deep mapping. As argued by its theorists, however, deep mapping can be understood as "a platform, a process and a product."[51] In the case of my research dedicated to Milan, the materials produced during the interviews were translated into a specific web-map.

The "Music Memories Map" (Figure 2)[52] is characterized by a layer that, taking advantage of the HTML support offered by Leaflet, allows the user to access video players directly within the application. This means that by clicking on specially prepared markers it is possible to view some audio-video clips taken from the interviews. These clips were cut using a video editor[53] whenever a witness located a memory in a specific place belonging to the urban fabric of Milan. These markers were then geolocated according to the coordinates deductible from the musicians' narration, which, as previously reported, most often emerged from the exploration of the map during the interviews. The "Musical Memories Map" is therefore based on a feedback, circular process: the tool used to recall the memories becomes, in a second phase, their collector and access point.

Thanks to the inclusion of the interviews in a dedicated layer, it is also possible to consult them in combination with the pre-existing quantitative layers. A first element of interest concerns the partial non-coincidence between the places included in the newspapers and those cited by the witnesses. This is the case, for example, of the two nameless venues mentioned by Massara and Patruno. In these circumstances my intention was to underline the heterogeneous nature of the sources, not integrating the two layers and using different symbols. In the "Music Memories Map" the venues mentioned in the newspapers are represented only through polygons, while the memories are indicated using icon markers. In this way the user can immediately understand which spaces have been reported by both newspapers and musicians and which only by one or the other.

This makes it possible to highlight that neither point of observation affords a complete picture and underlines a key aspect of my methodology, namely the need for a critical and relativistic approach to GIS (and to any data analysis tool in general). In the specific case of my research on Milan, the asymmetry of the quantitative data set is evident and is rooted in specific circumstances. Out of 8288 musical events reported by newspapers, 7741 (93.40%) are attributed to the "theatre" category. The weight of this

51 Bodenhamer, "The Varieties of Deep Maps," 7.

52 "Music Memories Map," accessed May 17, 2024, https://bit.ly/memories_map.

53 Da Vinci Resolve, a professional-grade free to use video editor.

Fig. 2 – "Music Memories Map." Interactive version: https://bit.ly/memories_map

overwhelming majority is especially noteworthy given that "theatres" constitute only just over half of the sample of the venues (67 out of 122, 54.92%). By activating the layer relative to the number of musical events attributed to each venue (Figure 3), the quantitative imbalance towards the "theatres" (in red and dark blue) becomes obvious; among them, signaled by wider and darker circles, stand out the Teatro Lirico (877 events), Teatro Odeon (838), Teatro Nuovo (805), Teatro alla Scala (803) and Piccolo Teatro (766).

This does not mean that in the remaining categories ("night club," "dancing," and "whisky a go-go") music performances were occasional—quite the opposite, in fact. When asked about the frequency of events hosted in "night clubs," clarinetist Paolo Tomelleri[54] talked about almost continuous

54 Paolo Tomelleri (1938) is a jazz clarinetist, saxophonist, and bandleader. Part of vari-

performances throughout the night, every day of the week and without seasonal breaks.[55] Multiplying this general indication with the number of "night clubs" identified (40) the performance volume attributable to them would be greater than 70.000, therefore exceeding the extension of the original data set by several dozen times! With an average hypothetical value of 1750 music performances across the five years span, each "night club" would easily beat the record held by Teatro Lirico with 877 events.

The significance of the discrepancy is obvious and provides a measure of the level of caution needed in working with data analysis and visualization. At the same time, this extrapolation pushes us to ask why the disparity in treatment between "theatres" and "night" within the sources is so extreme and precise. By delving into the distinctive characteristics of the musical practices hosted in these two types of venues it is possible to put forward an answer and simultaneously also demonstrate that what is missing from a data set is sometimes just as interesting as what the data set covers. If placed in the right light, in fact, data asymmetries are not a simple deficit, but can be revealing of crucial aspects of the sources and the context analyzed.

At first glance, the category defined in the newspapers as "theatres" includes an extremely heterogeneous range of places: opera houses, concert halls, sports halls, cinemas, cultural clubs, universities, historical palaces, museums, churches, and art galleries. The definition, rather than referring to a precise spatial typology, then, seems to point to a specific performative modality, namely that of the "live concert," a modality that cuts across a wide range of practices. Upon detailed examination, the "theatres" type shows characteristics similar to what Frith describes as "concert hall":

> The concert hall, [is] a building designed for musical events—*concerts*—dating from 18th *century … Built into this structure are* a number of assumptions: the commercial basis of the musical event—i.e. people pay money for tickets

ous traditional jazz bands, including the Windy City Stompers, he was a member of "I Cavalieri" together with Gian Franco Reverberi, Luigi Tenco, Enzo Jannacci, and Nando De Luca.

55 "The music performances at the night clubs were exhausting … Bruno Quirinetta, a brilliant, dynamic orchestra leader, launched the trend of playing non-stop. Non-stop meant that there shouldn't be even a second's pause between one song and another, the music was continuous. And the hours were exhausting … we played from 9.30 pm to 4 am, on Saturdays till 5 am, non-stop … I don't think there were any days off… there was music every day and all year round." Paolo Tomelleri, "Milan 1958–1962: Music Topography of a City," interview by Martin Nicastro, February 2, 2022, video, 16:55, https://musictopography.github.io//interviews/.

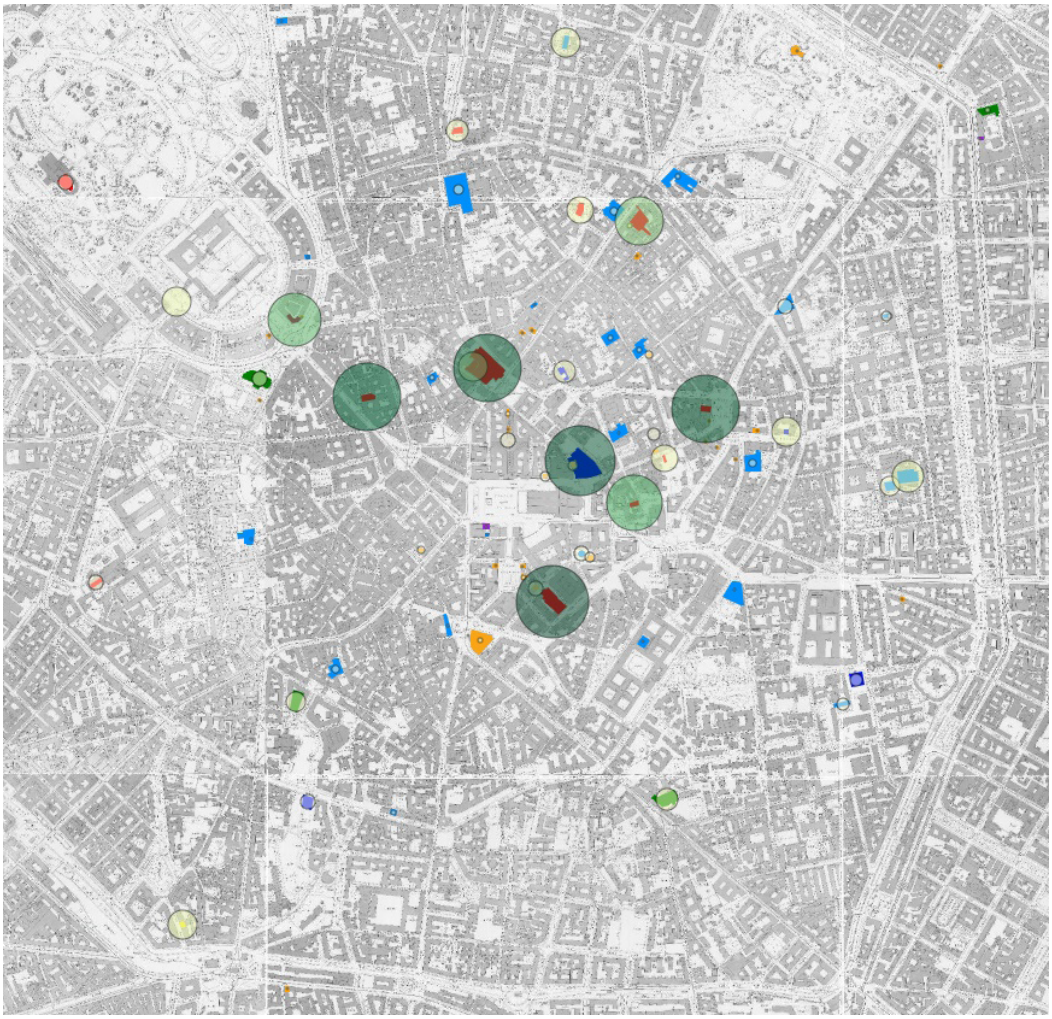

Fig. 3 – "Music Memories Map." Interactive version: https://bit.ly/memories_map

> to attend a specific occasion (the concert as a commodity) … The ticket takes on—materializes—the commodity value of the musical event itself (which is transitory), so the ticket may be more and more valuable before the concert (see the current black market or ticket re-sale issue) but is worthless after it. [56]

56 Simon Frith, "The Materialist Approach to Live Music," *Live Music Exchange* (blog), July 2, 2012, http://livemusicexchange.org/blog/live-music-101-1-the-materialist-approach-

The performances in the Milanese "theatres" are characterized by a clear indication of the performers and their repertoire, by a limited duration in time (on average two hours) and by a non-recursive and extraordinary nature (except for a limited number of replicas). All these features strengthen the interpretation that the category in question revolves around the commercial nature of the musical performance, which constitutes the focus of the audience and a special kind of experience accessible through the purchase of a ticket.

On the contrary, "night club" performances are not the object of a direct purchase; rather, the only active transaction concerns the consumption of food and (mostly alcoholic) drinks. This resonates in the distinctive features of the "night clubs": the audience is seated around tables and does not necessarily look at the musicians; the performance is continuous and extends throughout the opening hours;[57] the repertoire performed, in a manner not dissimilar to what happens in contemporary DJing, follows a general outline that is susceptible to modifications made on the spot and it's partially different each night;[58] finally, the performance is not a one-off event because the musicians, when hired by a club, perform there for weeks (if not months) at a time. Considering all this, the asymmetry in the coverage offered by the newspapers is clear: their practical purpose is to report day by day the precise space-time coordinates of musical events limited in time and purchasable through a ticket. In fact, on the rare occasions when advertisements relating to "night clubs" appear in newspapers only the names of the musicians are indicated, without any mention of day or time.

Only field research has made it possible to delve into aspects of the subject which would otherwise remain hidden by the data. This practical example allows us to reiterate the importance of a blended and hybrid approach such as the one offered by deep mapping: embracing the diversity of sources and enhancing their potential complementarity within digital visualizations

to-live-music-simon-frith/.

57 "There wasn't supposed to be any solution of continuity and many night clubs used two orchestras just for this reason; there was no recorded music, there was no broadcast music: there was the possibility of using it, but it was not in the concept of the night club." Tomelleri, interview.

58 "The orchestra had to know how to play well, but also how to interact with the audience. The good orchestra leader was the one who understood that the man at the table over there or the woman that accompanied him liked that song, often the last song released." Martin Nicastro, "Astoria," *Milan 1958-1962: Music Topography of a City (videomap library)*, Zenodo, 2024. https://doi.org/10.5281/zenodo.7990185.

allows us to build a picture that is more faithful to the complexity of the phenomena investigated.

In this sense, the possibility of creating interactive multimedia maps is crucial. Let's now simultaneously activate the layer that reports the location of the interviewees' memories and a heat map that depicts the concentration of the venues cited in the newspapers (Figure 4).

In this case quantitative and qualitative sources are in agreement: the greatest number of memories (35) is to be found in the eastern half of the innermost circle of the city, equally distributed (15, 16) across the two areas where most of the venues are concentrated. At a higher level of granularity, however, it is possible to observe that as many as five out of eight witnesses placed their memories at the Santa Tecla "night club," which holds the record for the number of stories dedicated to it (Figure 5).

This element is particularly interesting if observed against the layer that represents the number of events for each location: the data set built from newspapers attributes only 16 performances to the Santa Tecla over a five-year period. In the context of the asymmetries considered above, this comparison once again demonstrates the importance of an approach to digital mapping capable of enhancing the complementarity between different sources: without the attempt to open the map to the perception of the musicians, the importance of places like Santa Tecla might have gone unnoticed.

Finally, thanks to the inclusion of the video players, it is possible to explore the personal stories that are woven into the history of the venue, as recalled by the witnesses who experienced it. Each of them portrays a slightly different space, highlighting the multiplicity of the spatial dimension when considered from a subjective perspective.[59] For Lino Patruno Santa Tecla was a "school," for Gian Franco Reverberi it was the "number one venue in Milan," with unique characteristics compared to all the other "night clubs" in the city, for Paolo Tomelleri a Parisian-style "cave" whereas for Natale Massara a "jazz club" or, more simply, a "meeting place where music was made."

This partial exam of the case study of Milan demonstrates how deep mapping can constitute a comprehensive methodology for the study of music practices: the tensions between an embodied and a quantitative approach to the spatial dimension appear to be a fertile ground for solutions that can be beneficial in both directions. The circular workflow here proposed,

59 Martin Nicastro, "Santa Tecla," *Milan 1958–1962: Music Topography of a City (videomap library)*.

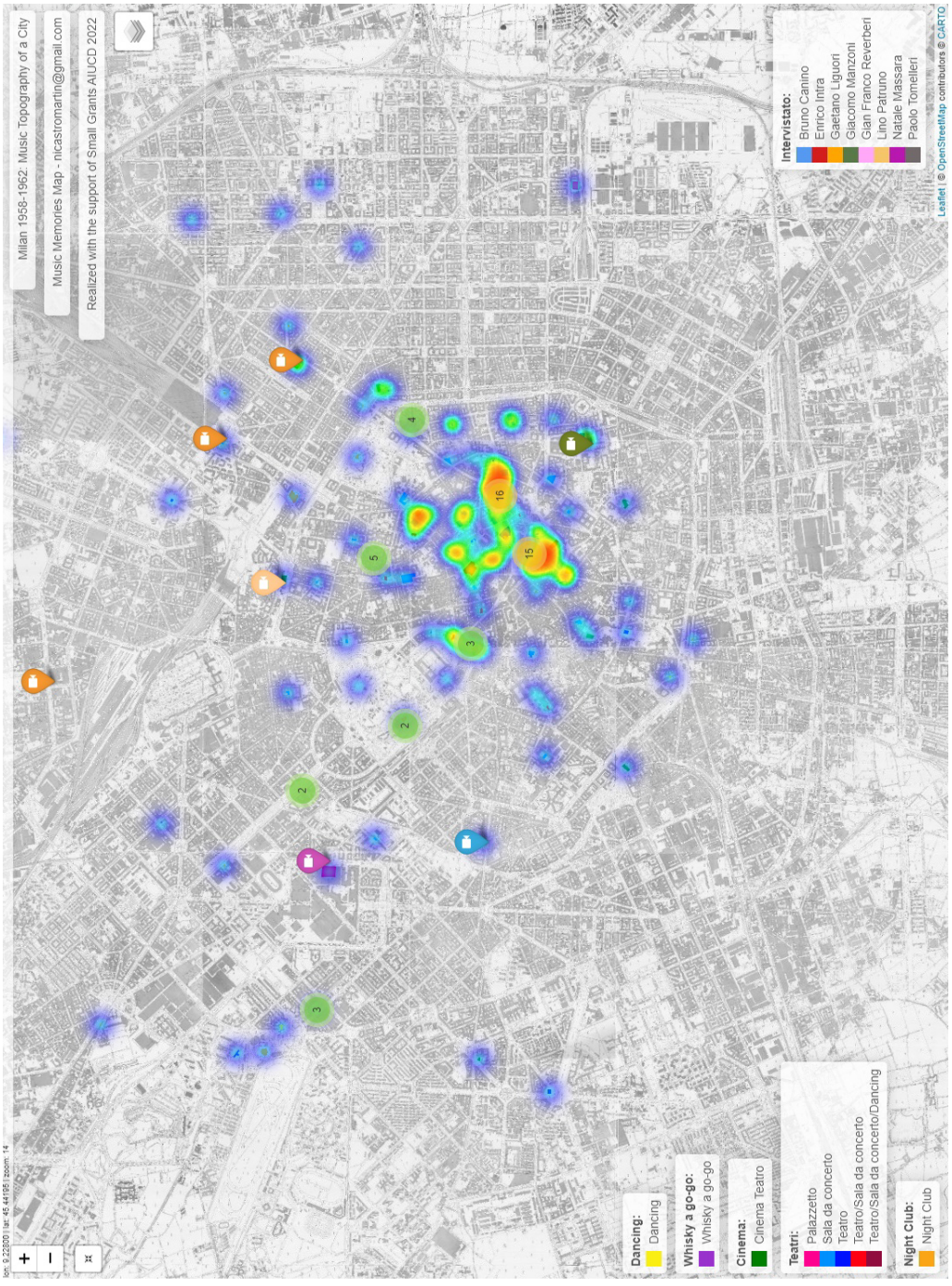

Fig. 4 – "Music Memories Map." Interactive version: https://bit.ly/memories_map

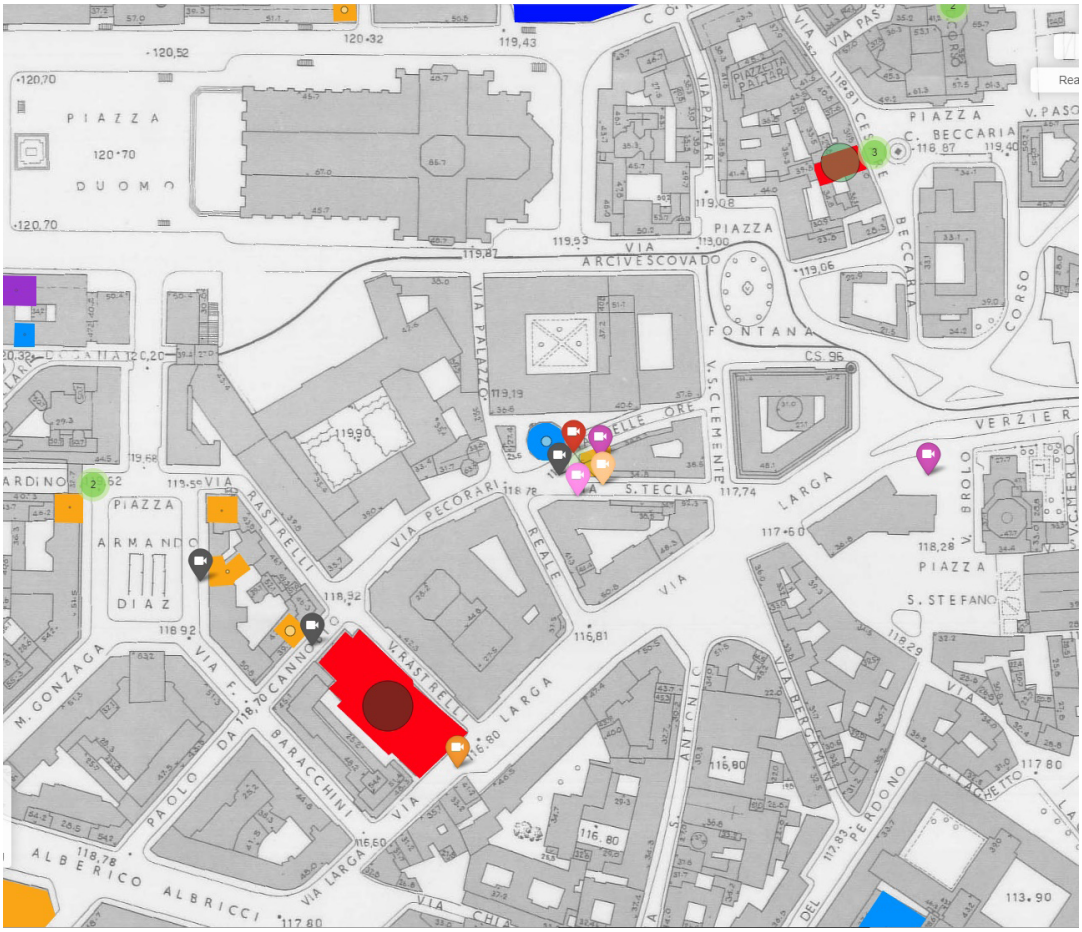

Fig. 5 – "Music Memories Map." Interactive version: https://bit.ly/memories_map

facilitated by the use of open-source tools, is also just one between many. In fact, the modularity of web-based technologies allows us to create different paths through which to explore the relation between space and music.

Conclusions

My research experience on the music scene in Milan in the years 1958–1962 highlights the extent of the "lies" that could be produced by an uncritical use of digital mapping technologies. The severity of said lies is proportion-

al to the effectiveness with which GIS tools can analyze complex spatial phenomena and to the credibility attributed to this type of representations. It is difficult for a user to critically observe a map of any kind without in-depth knowledge of the object represented; this tendency is even more pronounced in the case of highly efficient interactive applications, equipped with immediate graphical interfaces, hypertext links, pop-up windows, and multimedia players. A first conclusion therefore concerns the proportionality between the technological power of a given tool and the methodological caution with which it must be used, starting from the awareness that each set of data (as a translation of a specific source) always offers a partial vision of the object it aims to describe. In this respect, deep mapping is certainly a step in the right direction, because it favors the fusion of heterogeneous sources and techniques, placing a strong emphasis on the interlocutory and provisional nature of any type of representation. Given the complex, multilayered nature of music practices, this blended approach seems to offer the right framework for the development of digital music mapping. Deploying GIS as a multimedia and experiential collector rather than just a measurement tool is crucial for a discipline that is historically aware of the risks of excessively depending on visual formalization.

The creation of applications with Leaflet for R opens new possibilities of integration between data analysis technologies and research methodologies in the humanities. Compared to premade platforms, Leaflet gives the opportunity to design interactive maps in detail, customizing them based on the specificity of the research topic. Instead of video players, for example, it would be possible to integrate within the application audio sources of any kind, locating them in geographical space; or to exploit Leaflet's touch screen support to create an exhibition where the public can explore interactive maps through panels and add on the spot new markers with a simple touch;[60] or, again, combine two-dimensional interactivity with virtual reality, allowing the user to experience the interiors of the places represented on a map.

It is thanks to this kind of flexibility that I was able to create the circular workflow presented here, which combined historical sources, field research

60 A great example of a crowdsourced audio web-map is the Lapsed Clubber Audio Map, which creation was directed by Beate Peter. "The Lapsed Clubber Audio Map," Manchester Digital Music Archive, accessed May 17, 2024, https://www.mdmarchive.co.uk/map_home/the-lapsed-clubber-audio-map.

and data visualization tools. Finally, it is also important to remember how the adaptability and interoperability of an open-source work environment like R go far beyond an individual research project: each module that makes up the applications shown here is derived from previous works and can be reused in the most diverse contexts, each time contributing to the free circulation of software across the humanities and beyond.[61]

61 All the data sets and codes presented here are contained in a Github repository and published on Zenodo. Martin Nicastro, *Milan_1958_1962_Music_Topography_of_a_City (v1.0.0)*, Zenodo, 2023, https://doi.org/10.5281/zenodo.8340459.

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Abstract

The use of Geographic Information System (GIS) in the field of urban music studies has been recently increasing. In this article, I will initially address the benefits and risks ingrained in the employment of these digital tools and highlight the importance of adopting a blended approach such as the one proposed by "deep mapping." In the last decade, in fact, the constellation of mapping practices associated with the "depth" metaphor has shown the potential of GIS as an experiential platform, capable of including both quantitative data and qualitative multimedia content. I will then present the advantages of employing Leaflet for R, an open-source web-mapping library, in the creation of deep maps. In fact, its level of accessibility also to non-professional programmers makes it a valid alternative to commercial platforms. In the second part, I will present as a case study my research on the historical live music scene of Milan (1958–1962). In particular, I will show how the flexibility of the proposed tools allowed me to create a circular workflow that integrates historical sources, field research, and data visualization.

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Sonic Signals and Symbolic "Musical Space"*

Wolfgang Ernst

Part I. A Media-Archaeological Understanding

In mediated soundscapes, where technology determines the musical situation, *Spaces of Musical Production* and the *Production of Musical Spaces* are always already entangled. A media-archaeological understanding of this entanglement deals with its core media-theatrical "scenes" (in both the spatial and dramatic sense of the term "scene"). The notions of "sound" and "stage" may therefore be extended from their literal meaning to a deeper epistemological dimension: to *implicit sonicity*, that is, to all forms of oscillating signals as a multitude of time-critical periodic events—even beyond the mechanics of "vibrational force"[1]—and to media theatre as it unfolds *within* technology as its primary micro-scene.

Once the notion of "sound" is extended from the audible to a more fundamental layer—its physical essence—it is in structural affinity with electronic media processes. In academic terms, this results in an alliance between sound studies and media science. Actually *sounding* "music" is equivalent to media *in technical being*. The composition of music, on the other hand, is closer to computational algorithms than to three-dimensional "space." When unfolding *in* space *as* sound, the symbolical regime of musical composition is rather entangled with the *tempoReal* than with empirical "space."

* Originally delivered as a keynote lecture at the conference *Spaces of Musical Production/Production of Musical Spaces*, organized by the editorial team of *Sound Stage Screen* in collaboration with the Department of Cultural Heritage at the University of Milan (Triennale Milano, 3–5 November 2023).

1 See Steve Goodman, *Sonic Warfare: Sound, Affect, and the Ecology of Fear* (Cambridge: MIT Press, 2009).

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Sound in Time vs. Musical Space

Let us therefore pay attention: the name of the journal that is co-organizing this event refers to "sound" rather than to "music." Yet for analytic purposes, it is mandatory to differentiate between physical acoustics, harmonized sound, and conceptual music.[2]

The title of this conference, with its inversive theme, is not just a game with words. Once the sites of musical production are no longer directly coupled to the human mind and its instrumental or vocal extensions but escalate into autonomous musical technologies, "spaces of musical production" and "the production of musical space," below the apparent social environment, appear to be suddenly "grounded" *within* the machine and as such call for a media-archaeological analysis of their micro-spatial circuitry. With respect to computationally processed sound, finally, "musical space" becomes a mere metaphor, and rather a direct function of the "algorhythm" itself.[3]

While perspectively constructed "space," in the visual regime, endures, a sounding event is ephemeral by its very essence as a time signal. Sound takes place *in space* only *as sonic time*. Categories like Euclidean space and "musical" harmony relate to the abstract symbolic order of knowledge and intelligence, while dynamic spatio-temporal fields, as the "real" of music, are implicitly "sonic."[4] Sonic signals are not simply time-based but actually time-basing. Implicitly "sonic" electromagnetic wave transmission does not even implicate space since it propagates self-inductively. "Music," on the other hand, is the conceptual term for symbolically ordered sound. Music is "spatial" only in the geometric and diagrammatic sense.

"What does music have to do with sound?!", composer Charles Ives once provocatively asked.[5] Let us, therefore, differentiate between, respectively:

2 This differentiation has been a topic of the conference *Sound and Music in the Prism of Sound Studies*, École des hautes études en sciences sociales, Paris, January 24–26, 2019, https://www.ehess.fr/en/conference/sound-and-music-prism-sound-studies.

3 Shintaro Miyazaki, "Algorhythmics: Understanding Micro-Temporality in Computational Cultures," *Computational Culture*, no. 2 (2012): http://computationalculture.net/algorhythmics-understanding-micro-temporality-in-computational-cultures.

4 For a generalized notion of "sonicity" see Wolfgang Ernst, *Sonic Time Machines: Explicit Sound, Sirenic Voices, and Implicit Sonicity* (Amsterdam: Amsterdam University Press, 2016), 21–34.

5 Quoted in Otto E. Laske, *Music, Memory, and Thought*: *Explorations in Cognitive Musicology* (Ann Arbor: University Microfilm International, 1977), 5. See also Christian Kaden, ""'Was hat Musik mit Klang zu tun?!' Ideen zu einer Geschichte des Begriffs

(a) room-acoustic space which is already anthropocentric, since the "acoustic" is usually defined by the range of human hearing; (b) sonic time which is the sound signal in a more fundamental, "acoustemic" sense,[6] media-archaeologically focusing on its actual physical message as a *time signal*; and (c) the musical diagram. With its symbolic clocking and rhythmization, made familiar by the Morse communication code, sonic signal propagation becomes "musical" when its temporality is dramatically structured and time-critically organised (both in pitch or duration and in phase).

While the architectural framing of acoustics on "stage" is *spatial* (such as one observes in theatres, opera houses and concert venues), within electronic apparatuses and digital devices the sonic event itself is a function of *temporal* production. Any "musical" composition is a geometrization of the genuinely temporal fabrics of sound, where the signal is a function of time. Musical notation (and its technological equivalent in "digitization" as much as any musical score "archive") is a mere symbolization of sono-temporal patterns. But for the acoustic signal itself—once "in being"—there is no "space" to cross or permeate but rather genuine time properties such as delay, resonance, or reverb.

Stereophonic recording was devised to reproduce the spatial sensation of sound which had been lacking in monophonic early phonography. In stereophony, two channels correspond to binaural perception. But it is only in the human brain that the spatial impression, as with the nineteenth-century optical stereoscope, is at last "calculated" (von Foerster), not the sensory organs. Phenomenologically, musical "space" is not an objective quality, but primarily a cognitive abstraction. A "schizophonic"[7] dis*sonance* occurs: The cognitive mind is tentatively perceiving and processing acoustic sensations musically, while the physical body reacts to sound in an affective way.

The optical construction of space in the form of visual perspective differs from its time-critical construction in the auditory channel which actually generates a spatial sensation by calculating the run time differences of acoustic signals. This results in a merely "virtual" impression of musical space (in the sense of entirely *computed* objects). In fact both binaural perception and the two-channel stereo impression are based on time-critical

'Musik' und zu einer musikalischen Begriffsgeschichte," *Archiv* Für *Begriffsgeschichte*, no. 32 (1989): 34–75.

6 Steven Feld, "Acoustemic Stratigraphies. Recent Work in Urban Phonography," *Sensate Journal*, no. 1 (2011): https://sensatejournal.com/steven-feld-acoustemic-stratigraphies.

7 R. Murray Schafer, *The Tuning of the World* (New York: Alfred A. Knopf, 1977).

signal differences, just like bats orientate themselves ultra-sonically not *in*, but via sound *as* (a substitute for) space.

Media artist Nam June Paik, in his 1961 design of a *Symphony for 20 Rooms*, allowed for the *audi*ence to move between spaces and make a random choice of sound sources, thereby allowing for a so-called "space-music" to unfold.[8] But such a media-based theatricalization is still a conventional stage for musical action to unfold. Paik himself later switched to discovering and unfolding sound*scapes* (from) within electro-acoustic devices themselves. Sound, here, is no dramaturgical supplement but rather becomes a genuinely non-spatial event.

It is only with echolocation that the relationship between sound and space becomes media-active. Through the radar, and the sonograph, "space" became a direct product(ion) of time-critical signal (re-)transmission. In auditory (rather than visual) terms, the production of "space" is in fact a temporal unfolding between the present moment (*t*) and its time-critical calculation f(*t*).

As it has been exemplified in Edmund Husserl's phenomenology, there is a dynamic interplay between the ongoing short-time memory retention and protension as a cognitive condition for the musically encoded harmonic melody. In psycho-acoustic terms, the brain time-critically synthesizes an impression of "space" from binaural information in a rather operative sense. This is "computational space."[9]

There Is No "Musical Space": Understanding the Musical Situation with Günther Anders

Voluminosity rather than geometrical "space" is the existential mode of acoustic events, according to philosopher Günther Anders' unachieved habilitation thesis *Philosophische Untersuchungen* über *musikalische Situationen* from the years 1930–31.[10] Anders focuses on the tempor*(e)ality*

8 "Nam June Paik: I Expose the Music," Art Culture Technology, accessed May 18, 2024, http://act.mit.edu/2023/03/nam-june-paik-i-expose-the-music.

9 Konrad Zuse, "Calculating Space (Rechnender Raum)," in *A Computational Universe: Understanding and Exploring Nature as Computation*, ed. Hector Zenil (Singapore: World Scientific, 2013): 729–86.

10 Günther Anders, "Philosophische Untersuchungen über musikalische Situationen," in *Musikphilosophische Schriften: Texte und Dokumente*, ed. Reinhard Ellensohn, (Munich: C. H. Beck, 2017), 13–140.

of the "musical situation," where "situation" is explicitly defined *not* as space.[11]

According to Anders, there may be spaces of musical production, but there is no "musical space," not even a spatio-temporal unfolding. What he calls "the musical situation" is a form of existence of its own.[12] Even if music is derived from movement in space (ancient Greek *mousiké*), it has "little to do with space as a system of coexistence [*System des Nebeneinander*, in Lessing's sense]."[13] Music dispenses with spatial objectivity as such. It is only to the human hear—as a secondary quality—that sounding matter across spatial distance becomes decisive for the "musical" event to occur.[14]

That all changed, according to Anders, with radio transmission of music and the "acoustic stereoscope," where loudspeakers are the technical location of acousmatic non-space.[15] Acousmatics refers to sound that one hears without seeing the—spatial—origin behind it.[16] In terms of cultural techniques, the production of music could always be located either on the composer's desk (symbolically on paper), or in resonant architectures (like the orchestra). With phonography and radio, though, the arts of *mousiké* (dance, music, poetry) became dissociated from the "space" of production, turning ubiquitous.

According to Anders, "there is no abstract or empty acoustic space within which space-objects exist, but only spatial acoustic objects or "events" which, in themselves, have space-properties or structures."[17] Once technically (re-)produced, the traditional musical space becomes a secondary phenomenon, while the actual production recedes into hard-wired circuitry as an operative diagram. The translation into conventional space only happens on the phenomenal user experience from the loudspeaker interface.

11 Anders, 90–4.

12 Anders, 51.

13 "So wenig hat sie doch mit dem Raume als System des Nebeneinander irgend etwas zu tun." Günther Anders, "Spuk und Radio," in *Musikphilosophische Schriften*, 248–50.

14 Joseph L. Clarke, "Ear Building: Zuhören durch moderne Architektur," in *Listening / Hearing*, ed. Carsten Seiffarth and Raoul Mörchen (Mainz: Schott, 2022), 235–251.

15 "Radikal wird die der Musik zukommende Raumneutralität zerstört erst im Radio." Anders "Spuk und Radio," 249.

16 Pierre Schaeffer, *Treatise on Musical Objects: An Essay across Disciplines*, trans. Christine North and John Dack (Oakland: University of California Press, 2017), 64.

17 Günther Anders, "The Acoustic Stereoscope," *Philosophy and Phenomenological Research* 10, no. 2 (1949): 257.

When music is realized "in the medium of tones,"[18] it loses its two-dimensional geometry of the score and does not simply enter into but actually itself creates a dynamic spatio-temporal dimension. Anders uses the term "Raum der Töne" in quotation marks.[19] Space is not the *a priori* for music to unfold; it is rather closer to a mathematical topology in which even the problematic terminology of "cyberspace" becomes metaphorical. That makes the "musical situation" and its "Tonraum" structurally analogous to technological media in their processuality.[20] Like signal transduction in an electronic artifact, the "musical" tone can come to existence only in time[21]—or, rather, as time.

As captured by the name of the Berlin-based sound art gallery Errant Sound, sound is always already ephemeral, unfolding *in* space but *as* time. Its spatiotempor(e)al existence oscillates between the symbolic order of musical notation (harmonics as spatial co-existence of tones) and the physically actual sonic sequences (melodics). There is no "musical space" as long as music is primarily defined as time-based art. But music is itself an ordering of merely symbolic time signals in something like the way rhythmic notation becomes operative "algorhythm" in choreography and within digitally clocked computing. Is "space," then, merely a condition of possibility (a priori) which music needs to unfold? It does not even require space when electro-magnetic waves as form of implicit sonicity propagate themselves via electro-magnetic processes. Space is not the Lacanian "real" which escapes in musical composition[22] but it is the tempor(e)al in which it unfolds as sound.

Sonified electric waves, or impulses, can fill bounded architectural space, while still being non-spatial as a technical media event (they exist as alternating voltages in electric circuits). So-called "drone music" actually amplifies the violence of the acoustical signal, which is mechanical air pressure against the eardrum, as distinct from electromagnetic waves—it is literally called *Troubled Air* in a track by the "drone doom" band Sunn

18 "Im Medium des Tones," Anders, "Philosophische Untersuchungen über musikalische Situationen," 97. It harks back to Georg Wilhelm Friedrich Hegel, *Vorlesungen* über *die Aesthetik*, ed. H. G. Hotho, vol. 3 (Berlin, 1838), 127.

19 Anders, "Philosophische Untersuchungen über musikalische Situationen," 93.

20 Anders, 94

21 Anders, 98.

22 See Sabine Sanio, "Ein Blick hinter den Vorhang? Zum Verhältnis von Musik und Medienästhetik," in *Akusmatik als Labor. Kunst – Kultur – Medien*, ed. Sven Spieker and Mario Asef (Würzburg: Königshausen & Neumann, 2023), 42.

O))).[23] Acoustic space is in this sense a reverberant time-function. There is an implicit sonicity in architectural space, a kind of sounding in latency, as if a Gothic cathedral was waiting for the organ to fill it with sound events and their reverberations. Composers of organ music actually create works with respect to the site-specific "echo response" and resonances given by the individual architecture. "Acoustic space" in McLuhan's sense,[24] on the other hand, adds *media time* to the symbolic musical notation. Here, room-acoustic "communication" occurs between an organ tone and its architectural enclosure. The organ instrument itself, as a technical apparatus (a Heideggerean *Gestell*), acts as an *organon* of sounding matter. A nonhuman kind of "machine" is at work in room acoustics: acoustic resonance is "a subset of mechanical resonance."[25]

Sonic Dramaturgies in Contemporary Theatre

Theatre and opera have for a long time only marginally focused on the sonic qualities of the material stage. But sound and stage are tightly intertwined, and media-archaeologically at that. As scientific target of research, the study of room acoustics arose from theatrical space directly, as exemplified by Prussian architect Carl Ferdinand Langhans' investigation of the room acoustics of the ellipsoid Berlin National Theatre in early 19th century.[26] Langhans' diagram of acoustic "rays" in theatre architecture has still been oriented at geometrical—that is, visual—perspective. Conversely, the visual pyramid that figured so prominently in Renaissance optics, may itself be deciphered as an analogy to the sonic traces of binaural room perception.

Proper acoustic space has been unveiled only later, especially in music halls and lecture theatres, as a function of convolutional time signals. In the early twentieth century, physicist Wallace Clement Sabine developed his acoustometric and mathematical equation to calculate "reverberation time," that is the reverberant sound in a closed room that eventually decays

23 Sunn O))), *Metta, Benevolence BBC 6Music: Live on The Invitation of Mary Anne Hobbs*, Southern Lord Recordings sunn 400, 2021, CD.

24 See Edmund Carpenter and Marshall McLuhan, "Acoustic Space," in *Explorations in Communication: An Anthology*, ed. Edmund Carpenter and Marshall McLuhan (Boston: Beacon Press, 1960), 67–9.

25 Peter Price, *Resonance: Philosophy for Sonic Art* (New York: Atropos Press, 2011), 21.

26 Carl Ferdinand Langhans, *Ueber Theater oder Bemerkungen Über Katakustik in Beziehung auf Theater* (Berlin: Gedruckt bei Gottfried Hayn, 1810).

into inaudibility. The actual "medium message" of such room acoustics are decay and delay: the temporal channel. The coefficients of such formula do not relate to architectural "space" as form anymore, but to different material factors like material absorption.[27] The Kantian *a priori* of human perception is replaced by mathematical algebra.

With electronically produced sound, finally, a different, genuinely mediated theatre unfolds. True media theatre is not simply media-extended theatre: While the theatrical stage is still a cultural technique that enables body-related performances, true media theatre refers to the autonomization of the machine from within: the techno*lógos* of non-human "musical" intelligence as investigated by *radical* media archaeology.

The Sonic "Field"

Media epistemology is concerned with "fields" rather than "spaces," for it pays attention not only to acoustics but to electronically implicit sonicity. Field recording becomes active acoustic space through electro-magnetic waves that extend as speed rather than in spatial immediacy, while exerting a force on other charged particles present in the field. Electro-magnetic "radio" technologies do not simply make use of space but generate their field as channels of transmission themselves.

Sound may take place *in* space but not *as* space. It rather defines its own *field* and "vector space" in the scientific and mathematical sense. While acoustics is dependent on physical propagation (the molecules of air), implicit sonicity (electromagnetic waves) unfold as a self-(re-)generating medium "channel."

Soundscape compositions, once they become objectified in and as electronics, unfold in material and mathematical topologies rather than in abstract "space," "giving rise to multifaceted situations that call for a redefinition of musical expertise."[28] Even when sound itself becomes the object of an exhibition, it preserves its autopoietic agency.[29]

In media culture, "musical space" in the traditional architectural or

27 See Viktoria Tkaczyk, *Thinking with Sound: A New Program in the Sciences and Humanities around 1900* (Chicago: University of Chicago Press, 2023), 124.

28 Giorgio Biancorosso and Emilio Sala, "Editorial. Five Keywords and a Welcome," *Sound Stage Screen* 1, no. 1 (2021): 5.

29 See Sonja Grulke, *Sound on Display: Klangartefakte in Ausstellungen* (Marburg: Büchner, 2023).

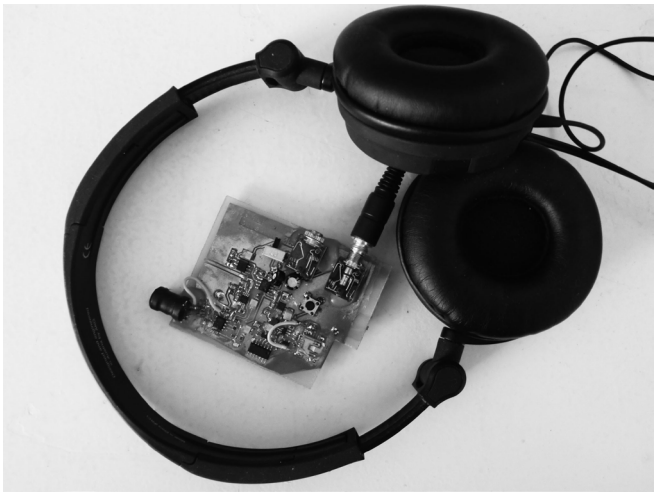

Fig. 1 – Detektor with headphones (2011), constructed by Shintaro Miyazaki and Martin Howse. Courtesy of Shintaro Miyazaki.

environmental sense has become secondary. Sonic articulation primarily arises from within technical devices—so to speak, from the "backstage" (the technological "subface")[30] behind the phenomenal interfaces that couple man and machine. Media theatre is not the technically augmented stage anymore, but the drama which "algorhythmically"[31] unfolds within computing, its inner-technical musicality.

Experiencing the Implicit Sonicity of Architectural Space

While Günther Anders' philosophical inquiry into the non-space of the musical situation is predominantly phenomenological, media archaeological analysis looks at the spaces of musical production with respect to non-human agencies such as the electronic synthesizer. Obviously, the human auditory apparatus remains central to the definition of room acoustics.[32] But there are as well electronic "ears," such as sensors, antennas, microphones and electrosmog analysers (EM "sniffer") which sonify electromagnetic impulses ranging from the Megahertz to the Gigahertz band.

It takes media-active sonification to make implicit non-spatial sonicity sound explicit. While any commercial radio receiver filters musical or oral

30 Frieder Nake, "Das doppelte Bild," *Bildwelten des Wissens* 3, no. 3 (2005): 40–50.
31 Miyazaki, "Algorhythmics."
32 "Mensch bleibt der Maßstab," http://www.oberlinger-architekten.de/profil_text.html.

content from the actual carrier waves for transmission, an electromagnetic wave sniffer directly resonates with waveforms that operate already in latency: not produced but rather revealed by technical sensors. "Acoustic space" turns out to be an inaudible technical infrastructure. It is ironic that inaudible signals enable mobile media like the smartphone for humans to tele-communicate audibly at all.[33]

Where Sonic "Time" is Converted into Signal Storage "Space": Locating Sound with(in) the Tape Recorder

Implicit or explicit sound vibrations and pulses media-essentially differ from the symbolical order of musical (scores) or frozen sound archives (records). Such signal storage technologies as the magnetophone are like a technological "stage" which transforms (or freezes) sonic time into "space." Its reciprocal function is inductive replay, thereby intertwining musical space and sonic time like a Moebius loop—literally, by means of the magnetic tape in reel-to-reel recording. A frequently quoted line from Richard Wagner's *Parsifal* (Gurnemanz's "Time turns into space…") is media-archaeologically "grounded" in the form of a concrete technology of sound (re-)production.[34]

For his conceptual use of a room itself as a musical instrument, Alvin Lucier's literally *site*-specific sound art installation *I am sitting in a room* (1969) depended on the memory capacity of an electro-acoustic device. His opening self-referential speech articulation was recorded on magnetic tape. This recording was then played back into the room and re-recorded again—an operation well known from echo delay in sound engineering and from exploring a closed architectural space by means of acoustic pulses which are folded upon themselves. When every subsequent signal is a replica of the same information delivered within a temporal interval, acoustic space

33 Shintaro Miyazaki, "Urban Sounds Unheard-of: A Media Archaeology of Ubiquitous Infospheres," *Continuum* 27, no. 4 (2013): 514–22; Oswald Berthold, *EM-Sniffing* (Humboldt Universität zu Berlin Seminar für Medienwissenschaft, 2009), https://www.musikundmedien.hu-berlin.de/de/medienwissenschaft/medientheorien/hausarbeiten_essays/pdfs/em-sniffer.pdf.

34 On material concretizations of previously simply symbolic dramatic arts in Richard Wagner's *Musikdrama* see Friedrich Kittler, "Weltatem: Über Wagners Medientechnologie," in *Diskursanalysen 1: Medien*, ed. Friedrich A. Kittler, Manfred Schneider and Samuel Weber (Opladen: Westdeutscher Verlag, 1987): 94–107.

itself dissolves into a function of temporal signal propagation. "In bounded spaces, reflected sound folding over on itself creates resonant nodes that cause spaces to act as filters, nonlinearly amplifying some frequencies and damping others. We never hear a sounding object by itself, always an assemblage of sounding object and resonant space."[35]

As soon as a sonic signal is being recorded on a magnetic tape instead of the gramophone record, "it becomes a substance which is malleable and mutable and cuttable and reversible … *The effect of tape was that it really put music in spatial dimension* [italics added], making it possible to squeeze music, or expand it."[36] What happens here is kind of a secondary, innertechnical micro-spatialization of sound that even extended to time-stretching. Music is not placed in a literal space in this case, but the very electronic act of coupling already amounts to the techno-musification of sound. The uniquely non-inscriptive qualities of the magnetic tape radically differs from phonographic recording. "The tangle of these foundational operations of tape sets the stage for their ... usage in the auditory culture."[37]

Edgar Varèse once defined music as spatio-temporally "organized sound." Once embodied in a medium like the magnetic tape, music radically turns into sonicity, dissolving into subnotational, sub-musical signals. The magnetophone "made one aware that there was an equivalence between space and time, because the tape you could see existed in space, whereas the sounds existed in time."[38] But what really happens is the encounter between the copper coil and the magnetic tape when it passes the tape head. The reel-to-reel recorder itself becomes the actual "stage" in which the spatialization of the sonic time signal occurs.

"Musical space" is replaced by an electromagnetic "field." The musical *lógos* technically interacts with—or rather, becomes—an electrophysical "event." The singularity of electro-magnetic induction unfolds as a dynamic field, not as inert space. In the case of the tape recorder, the magnetic field induced by transduction of the vibrating voice or sound does not even

35 Price, *Resonance*, 20.

36 Brian Eno, "The Studio as Compositional Tool," in *Audio Culture: Readings in Modern Music*,ed. Christoph Cox and Daniel Warner (New York: Continuum, 2004), 128. See also Maximilian Haberer, "Tape Matters. Studien zu Ästhetik, Materialität und Klangkonzepten des Tonbandes" (PhD diss., Heinrich Heine University Düsseldorf, 2023).

37 Peter McMurray, "Once Upon Time: A Superficial History of Early Tape," *Twentieth-Century Music* 14, no. 1 (2017): 31.

38 Thom Holmes, *Electronic and Experimental Music: Technology, Music, and Culture*, 6th ed. (New York: Routledge, 2020), 107.

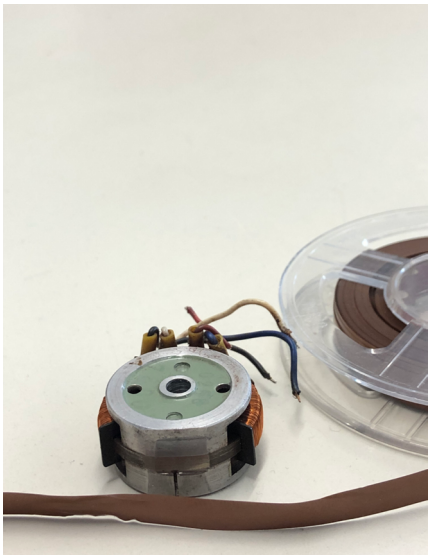

Fig. 2 – Tape head from GDR tape recorder (Smaragd BG 20, 1962 / 63), plus magnetic tape.

touch the magnetizable plastic tape. Musical or "dramatic" (that is: time-ordered) space, and its temporality, converge in this implicitly sonic field. Storage media convert time signals into spatial records, and allow for the inverse operation at any arbitrary time-delayed moment. Traditionally, signal storage takes place in space,[39] be it the one-dimensional acoustic signal or the two-dimensional video image. Musical "space" can be only symbolically fixed on paper as score, but not as actual sound propagation. It can only be re-produced from the physicality of the phonograph, magnetic tape, or other signal recording media. Whenever Maria Callas' voice emanates from a record player, critical attention should move from the implied opera scene to the actual "place" of musical production: to the studio and its pre-productions in the form of magnetic master tapes. A media-archaeological analysis of "musical production" is therefore focused on its microtechnical condition of possibility, below the acoustic performance of bodies or loudspeakers in space. The spatio-temporal production and signal processing of "sound" (as technically engineered music) no longer *takes place* exclusively in empirical "space," that is, the space mapped by human hearing, but actually occurs in the technologies themselves: for the "ears of the machine."[40] The inner-technological drama displaces, and even replaces the familiar theatrical scene to begin with. In a nonhuman sense of "deep listening,"[41] machine learning from artificial neural nets has already understood this musical techno*lógos*.

39 "Alle Speicherung erfolgt im Raum." Horst Völz, "Versuch einer systematischen und perspektivischen Analyse der Speicherung von Informationen," *Die Technik* 20, no. 10 (1965): 651.

40 Morten Riis, "Where are the Ears of the Machine? Towards a Sounding Micro-Temporal Object-Oriented Ontology," *Journal of Sonic Studies*, no. 10 (October 2015): https://www.researchcatalogue.net/view/219290/219291.

41 Pauline Oliveros, *Deep Listening: A Composer's Sound Practice* (New York: iUniverse,

Part II. (Mis-)understanding "Acoustic Space"

"Acoustic space" as understood by McLuhan

Concerning the "production of musical space," the question arises: where does music as sound, as opposed to symbolically organized score, actually "take place"? Sound unfolds not simply *in* space, but—spatio-tempor(e)ally—*as* time signal.

Musical production can be precisely located (on paper as score, in the studio as electronic music, in code as digital event), but once such a symbolic regime comes into the world as actual sound, it unfolds not simply "in space," but spatio-temporally. Sound is *chronotopic*—a term borrowed from Mikhail Bakhtin,[42] but in a less narrative, more physical sense.

Where sound takes place, a different kind of spatiality arises: a function of dynamic signal propagation. "Acoustic space" becomes "musical" with rhythmical impulses as known from the "radio" world of electromagnetic waves. According to Marshall McLuhan, the media-tempor(e)al specificity of simultaneous electromagnetic wave communication is opposed to the linear design of spatial perspective that itself looks like a graphic "echo response." Unlike the visually oriented "typographic," geometricized space of the Gutenberg print era, "acoustic space" constitutes a different simultaneity.

McLuhan insists that electricity is of the same nature as the acoustic world in its ubiquitous being. His notion of "acoustic space" refers to the sphere of electromagnetic waves rather than to architectural sonic spheres but has been inspired by architectural thinking most literally.[43]

Sonic Spheres have been literally installed recently in New York to "experience music in all its dimensions." The installation consisted of a loudspeaker-based, suspended concert hall for "immersive, 3-D sound and light explorations of music"[44] in the tradition of Karlheinz Stockhausen's *Kugelauditorium* (built for the 1970 World Exposition in Osaka).

For the sake of the analysis of room acoustics, "space" becomes a func-

2005).

42 See Mikhail M. Bakhtin, "Forms of Time and of the Chronotope in the Novel: Notes toward a Historical Poetics," in *The Dialogic Imagination: Four Essays*, ed. Michael Holquist (Austin: University of Texas Press, 1981), 84–258.

43 Carpenter and McLuhan, "Acoustic Space," 67–9.

44 See "Sonic Sphere," The Shed website, accessed September 1, 2023, https://theshed.org/program/304-sonic-sphere.

tion of the critical response time of sonic micro-signals: "Reverberation time, usually counted in seconds, is the duration between the emission of a sound and the decay in its intensity below the level of human perception, as it echoes in a room."[45] Transcending human perception, the propagation of electro-magnetic "Hertzean" waves drastically escalates, since its temporal limit is speed of light itself. Since human auditory perception depends on frequency and mechanical force, no sense of space can be directly derived from EM waves. In that trans-phenomenal sense, McLuhan's term "acoustic" space—somewhat confusingly—refers to the electrosphere.

Architectural Sonicity, and the Re-Production of "Musical space"

Site-specificity can be measured and explored through acoustical signals understood as spatial impulse responses and echoes folded upon each other. As an acoustical entity, a space is site-specific because of the unique acoustic features of each piece of architecture. Certain frequencies are emphasized or vanish as they resonate in space. Environmental or architectural space can thus be explored via media-active signal propagations which are not spatial in nature but time-critical. The engineering of room acoustics can even be extended to "auralization" as a reenactment of the past architectures.

At first glance, "historical" space cannot be experienced auditorily, since by definition sonic articulation perishes already in the moment it is being expressed. The ephemeral tone escapes spatial endurance. But medieval cathedrals—when still existing—elicit involuntary memories of past soundscapes, rather like time machines.[46] Digital Signal Processing and computer-based tools like wave field synthesis that media-archaeologically recapture Christiaan Huyghens' approach to sound propagation even allow for the virtual (that is, computed) reconstruction of "historic" acoustic spaces.

The scientific investigation of room acoustics therefore does not only relate to the instrumental and mathematical calculations of reverberations in present lecture halls, theatres and opera houses, but also to the map-

45 Alfredo Thiermann, "Radio as Architecture: Notes toward the Redefinition of the Berlin Walls," in *War Zones: gta papers 2*, ed. Samia Henni (Zurich: gta Verlag, 2019), 79n33.

46 Barry Blesser and Linda-Ruth Salter, "Ancient Acoustic Spaces," in *The Sound Studies Reader*, ed. Jonathan Sterne (London: Routledge, 2012), 195.

ping of past sounding environments as well. While "acoustic space" can only unfold as presence, it can still be digitally sampled and *re*-produced by mapping it onto another space. Acoustic spaces from the past can media-archaeologically be simulated by computational "audification."

An archaeology of the acoustical retrieves the memory of sound out of architectural spaces. But unlike historical research that depends on textual archives and the human imagination, it does so by media-active means. By mapping computer-simulated room acoustics on past architectures, for example, audio engineer Stefan Weinzierl achieved the retro-"auralization" of the Renaissance Teatro Olimpico in Vicenza. Whereas modern theatre acoustics privileges speech intelligibility, the virtual reconstruction of the Teatro Olimpico acoustic space suggests that it should rather be conceived as a musical performance space aimed at the revitalization of drama in antiquity.[47]

It is thereby possible to digitally *render back* the acoustics of past architectural spaces, such as the acoustics of ancient Greek theatres. But the Binaural Room Impulse Response (BRIR) operation which is "the key to auralization" is still somewhat anthropocentric in its simulation approach and different from actual machine "listening" which is based on objective measuring. It turns space itself into a media theatre to begin with. "The auralization technique has matured to such a level, that the human ear can hardly tell whether it is a simulation of not,"[48] reminding one of Maurice Blanchot's acoustemic diagnosis of the sirens episode in Homer's *Odyssey*: sweetest human singing arising from (visually obvious) monsters (the antique proxy of modern technologies). From a media-archaeological investigation of the acoustics of the Li Galli islands at the Italian Amalfi coast there has emerged indirect evidence that there are site-specific properties of that "acoustic space" which actually resonate with the enharmonic musical tuning of ancient Greek music.[49] Suddenly, a long-standing vocal myth is media-archaeologically revealed to be grounded in sonic evidence.

47 Stefan Weinzierl, Paolo Sanvito, Frank Schultz and Clemens Büttner, "The Acoustics of Renaissance Theatres in Italy," *Acta Acustica united with Acustica* volume 101, no. 3 (May/June 2015): 632–41.

48 Jens Holger Rindel and Claus Lynge Christensen, "Room Acoustic Simulation and Auralization: How Close Can We Get to the Real Room?" (keynote lecture, The Eighth Western Pacific Acoustics Conference, Melbourne, 2–9 April 2003). https://www.researchgate.net/publication/292140865_Room_Acoustic_Simulation_and_Auralization_-_How_Close_can_we_get_to_the_Real_Room_Keynote_lecture.

49 Wolfgang Ernst, "Towards a Media-Archaeology of Sirenic Articulation: Listening

The Spatio-Temporal Message of Sound: Active Sonar

It has been the observation of acoustic delay (the echo effect) that once induced Aristotle to discover communication as a function of the "medium" channel in itself: the "in-between" (*to metaxy*).[50]

The implicit tempor(e)ality of "sonic space" becomes active with the sonar in submarine communication. It creates a sonic pulse called a "ping" and then waits for its reply from reflections. The time from emission of a pulse to the reception of its echo is measured by hydrophones or other sensors to calculate the distance; "space" thereby becomes a signal function of the temporal interval. The delay in echo acoustics induced Aristotle to focus on *to metaxy*, the channel as materially intervening: "*the* between" in signal transmission (be it water, air, or a hypothetical medium called "ether"). *To metaxy* has been translated into the Latin *medium* in medieval scholastic texts.

Submarine sonar (echo) *location* ("Ortung") by "ping" not only identifies but actually generates a different kind of "space" function.

According to the Aristotelian definition of "time" found in book IV of his *Physics*, such signals are not *in time*, but they are actually *timing* themselves: they temporalize space. When it comes to echolocation, it is the temporal delay in sound propagation that itself becomes constitutive of calculated "space."

Once sound is understood as a delayed presence[51], the Kantian *a priori* of a transcendent "time" and "space"[52] is replaced by the medium channel that is the engineering condition of telecommunication. More radically, the auditory scene morphs into implicit sonicity: from a passive echolocation that is still addressed to the human ear to media-active radar waves emission. With the onset of radar detection, the role of sound has finally been replaced by electricity as the "vehicle for the transmission of intelligence," in Fredrick Hunt's words (who himself once coined the very term "sonar").[53] Where "the required information is embodied in the time-de-

with Media-Archaeological Ears," *The Nordic Journal of Aesthetics*, no. 48 (2014): 7–17; for the scientific report, see Karl-Heinz Frommolt and Martin Carlé, "The Song of the Sirens," *The Nordic Journal of Aesthetics*, no. 48 (2014): 18–33.

50 Emmanuel Alloa, "Metaxu. Figures de la médialité chez Aristote," *Revue de Métaphysique et de Morale* 106, no. 2 (2009): 247–62.

51 Wolfgang Ernst, *The Delayed Present: Media-Induced Interventions into Contempor(e)alities* (Berlin: Sternberg Press, 2017).

52 Immanuel Kant, *Kritik der reinen Vernunft* (Frankfurt: Suhrkamp, 1997), 45–96.

53 Frederick V. Hunt, *Electroacoustics: The Analysis of Transduction, and its Historical*

lay of the received waveform,"[54] McLuhan's rather idiosyncratic notion of "acoustic space," which assumes that the electric is always instantaneous, is media-scientifically corrected.

Lucier's I am Sitting in a Room Redux

A media-archaeological understanding of "spaces of musical production" returns us to Alvin Lucier's seminal media-artistic and (literally) site-specific performance *I am Sitting in a Room* (1969): a "spatial" modulation of sound-in-the-loop. The human performer, as in Samuel Beckett's drama *Krapp's Last Tape*, is coupled with a technical operator: the magnetic tape recorder. Not unlike the musical architecture of medieval cathedrals, the physical room of Lucier's performance modulates the electro-acoustic signal by determining its early decay time and standard reverberation time. "Space" itself is (re-)produced by sound, becoming the message of ultra-, or even infra-sonic, timing signals and echolocation.[55]

Just like Lucier's recursive room acoustics, the endless falling *glissandi* that were once computationally achieved by additive sound synthesis with the MUSIC-V program and punched cards by Jean-Claude Risset at Bell Telephone Laboratories phenomenologically resulted in a "spatial" impression by feeding the sonic information back into the loop with a delay of 250 ms. This creates an additional (additive) "beat" ("Schwebung") with varying frequency[56] thereby generating sonic spatiality not with tones in symbolic "musical" notation, but *as* tonality from within the physically real space itself.

Lucier's *I am Sitting in a Room* was first performed (or, rather, technically operated) at the Brandeis University Electronic Music Studio in 1969. Lucier's voice was recorded via a microphone on tape, played back to the room and picked up again by the same microphone indefinitely, until the

Background (Cambridge, MA: Harvard University Press, 1954), 2; see also Christoph Borbach, "Signal Propagation Delays: Eine Mediengeschichte der Operationalisierung von Signallaufzeiten. 1850–1950" (diss., University of Siegen, 2022).

54 Philip M. Woodward, "Theory of Radar Information," *Transactions of the IRE Professional Group on Information Theory* 1, no. 1 (1953): 108.

55 Deborah Howard and Laura Moretti, *Sound and Space in Renaissance Venice: Architecture, Music, Acoustics* (New Haven, Conn.: Yale University Press, 2009).

56 Liner notes in Werner Kaegi, *Vom Sinuston zur elektronischen Musik*, Der Elektroniker, 1971, LP.

voice became anonymous and was eventually overshadowed by the resonant frequencies of the room—its acoustic unconscious—revealed by the articulations of the vocal utterance. But this is not human speech anymore (as with an echo) but the machinic voice (in both senses: recorded speech, and the dynamics of magnetophone electronics itself: techno*lógos*).[57] Such an operation decouples the acoustic real from the musical symbolic, propelling it into the realm of signal time domain.

The acoustic tape delay "mediates" between the present and the immediate past. The process of recording itself repeated 32 times. The agency that has actually "produced" this sonic media-drama has been the magnetic tape player "on stage," that is, coupled with room acoustics. But with electronic (and finally digital) echo delay, the machine dispenses with "acoustic space" at all.

There have been countless reenactments of Lucier's seminal installation in which the loop tape recorder / microphone is replaced by a programmed digital delay. But such a calculated delay erases the room-acoustic production of "musical space" via the implicit musicality of both hard- and software: the computational "algorhythm." To summon Lucier's sonic installation in digital reproduction *online* from the YouTube archive amounts to a spatialization, a freezing of resonant acoustic "drones" in alphanumerically addressable storage "locations." Any visual projection on a screen turns acoustic space into a two-dimension image, leaving the "audience" with the geometrically constructed mere illusion of a spatial depth (Leon Battista Alberti's *finestra aperta*).

Instead of digitally simulating Lucier's original setting, it is media-archaeologically more radical to actually escalate Lucier's concept into cyber-"space" itself. In an explicit allusion to *I Am Sitting in a Room*, but adapting its premise to the techno-logics of digital platforms, a video file has been uploaded on YouTube, then downloaded. This download has then been uploaded on YouTube again, until after 1000 iterations the data compressing algorithm for mp4 files reduces the original event to mere glitches: noisy artifacts as "a digital palimpsest."[58]

The noisy artifacts of the video codecs of YouTube and the mp4 format are the counterparts of the entropic impact of the analog tape recorder in

57 Hanjo Berressem, *Eigenvalue: Contemplating Media in Art* (New York: Bloomsbury, 2018).

58 Christoph Borbach, email message to author July 24, 2023. See Ontologist, "VIDEO ROOM 1000 COMPLETE MIX - All 1000 videos seen in sequential order!," YouTube video, uploaded on June 10, 2010, https://www.youtube.com/watch?v=icruGcSsPpo.

Lucier's original. The analogy does not primarily concern media aesthetics but is symptomatic of the quality of digital data economy as revealed by technology-based artistic research. A video displays a shortened rendition of the *I Am Sitting in s Video Room* project, with highlights of the 1000 iterations of the original video experiment.

With this up-*dating* of Lucier's classic sound installation *in* and *as* cyber-"space," all musical, or verbal, room metaphors (which still made sense for "analogue" media sound art) dissolve—or are sublated—into digital signal processing and its techno-mathematical topologies. Even the final noise in Lucier's version is replaced by well-calculated stochastics (or "pseudo-random" events). What used to be "musical space" in live acoustic signal propagation has become time-critical real-time computing.

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Abstract

Space and music are always already intertwined. But while the two concepts relate to the symbolic order, the time-based (or time-basing) sonic signal rather performs a Möbius loop with "space." It makes sense, therefore, to clearly differentiate, in the "spatial" context, between acoustics, sound, and music. While the enframing is "spatial" (such as theatre stages and opera houses, as well as the radio apparatus and computing architectures), the sonic event itself is a temporal product(ion). Any "musical" composition is a geometrization of the genuinely temporal fabrics, or woven carpets of sound, while the acoustic signal is a function of time. While musical notation (and its technological equivalent "digitization", as much as any sound "archive") is a geometrization of sono-temporal patterns, for the acoustic signal there is no "space" but rather genuine time functions such as delay (known from echolocation). Where sound takes place, there is no space; McLuhan's term "acoustic space" is an oxymoron. The archaeology of knowledge on the relationship between music and space becomes media-active archaeology when it comes to re-enacting past faded-away acoustics - be it ancient theatres, or the songs of the Homeric Sirens. Sound, here, is no dramaturgial supplement, but becomes genuine media theatre. But with echography, radar, and the sonograph, "space" became a direct product(ion) of signal (re-)transmission.

Having been academically trained as a historian (PhD) and classicist (Latin Philology and Classical Archaeology) with an ongoing interest in cultural temporalities, **Wolfgang Ernst** grew into the emergent technology-oriented "German school" of media science. His academic focus has been archival theory and museology, before attending to media materialities. Since 2003, Ernst is inaugural professor of Media Theories at the Institute for Musicology and Media Science at Humboldt University in Berlin. His current research covers "radical" media archaeology as method, epistemology of technológos, theory of storage, technologies of cultural transmission, micro-temporal media aesthetics and their chronopoetic potentials, and

sound analytics ("sonicity") from a media-epistemological point of view. Books in English (with focus on technical media): *Digital Memory and the Archive* (2013); *Chronopoetics: The Temporal Being and Operativity of Technological Media* (2016); *Sonic Time Machines: Explicit Sound, Sirenic Voices and Implicit Sonicity in Terms of Media Knowledge* (2016); *The Delayed Present: Media–Induced Interventions into Contempor(e)alities* (2017); *Technológos in Being: Radical Media Archaeology and the Computational Machine* (2021).

INTERVIEW

EDM Theory and Fiction: The Conceptual Dimension of Musical Waves. A Conversation with Steve Goodman/Kode9

Guglielmo Bottin

> *As a DJ, I have always felt like surfing on a wave or surfing on a current of which every few years there was a new wave. For someone with a background in philosophy, [I wanted to] tune in to … the conceptual dimension of that wave.*
>
> Steve Goodman

Introduction

The crossing of music and academia has shaped Steve Goodman's career since he started DJing funk and psychedelic jazz in the early 1990s, while majoring in philosophy in Edinburgh in his native Scotland. After moving to England to pursue a PhD at the University of Warwick, Goodman's taste shifted to electronic dance music, specifically jungle, a fast-paced genre based on accelerated breakbeats. Jungle emerged within rave culture and is an early example of what Reynolds would later term the "hardcore continuum" in the evolution of EDM styles.[1] Even though that music was then new and futuristic, it sounded somehow familiar to Goodman because it used samples from the records and genres he had explored as a DJ. In Warwick, Goodman succeeded in connecting his academic and musical interests. He joined the autonomous research collective CCRU (Cybernetic Culture Research Unit) established by Sadie Plant and Nick Land. There, through the work of British-Ghanaian scholar Kodwo Eshun

1 Simon Reynolds, "Adult hardcore," *The Wire* 182, April 1999, 54–8. See also Simon Reynolds, "The History of Our World: The Hardcore Continuum Debate," *Dancecult* 1, no. 2 (2010): 69–76.

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on afrofuturism,[2] Goodman realized that the intensity of the new forms of EDM like jungle could spawn new concepts: that music was not only about dancing (or listening) but had the potential to inspire theoretical inquiry.

While in our conversation we did not delve into Goodman's academic activities, most of the questions and answers in the interview are better understood in light of his speculative research work. It is therefore beneficial to provide the reader with an overview of the subject matter of his scholarship, in order to demonstrate how the ontological, social, and aesthetic theories he developed over time continued to inform his artistic and communicative choices as a music producer, DJ, and record label manager.

In his PhD dissertation, *Turbulence: A Cartography of Postmodern Violence*, Goodman set out to "map the dynamics of flux … by focusing on turbulence as a means of conceptualising social systems 'far from equilibrium' … suggesting emergent signs of a radically new technological civilization, a *cybernetic culture,* with a corresponding reconfiguration of violence in humanoid populations."[3] In the final chapter, he focuses on an "ethics of speed … which mediates an over rapid acceleration away from the strata of the human,"[4] by combining Deleuze and Guattari's machinic postmodernism (and their critique of Virilio's identification of speed with fascism) with Sun Tzu's Chinese martial thought, and Mao's writings on guerrilla tactics, proposing an anti-fascist neo-futurism as "the modus operandi for insurgency in the virtual reality of the military-cybernetic complex."[5]

He continued his academic career as a lecturer at the University of East London, coordinating the MA in Sonic Culture. While in London, as a DJ, he shifted his focus to a new, darker form of 2-step garage music. He played out these futuristic tracks on pirate radio stations under the moniker Kode9 as well as at a club event aptly named "FWD>>." In 2000, Goodman first established Hyperdub as an online outlet that featured new EDM productions and theoretical writing. The two words in the portmanteau refer to the hyperactivity of an accelerated sonic expansion (in both speed and intensity) and to the dub reggae practices of copying and versioning that

2 Kodwo Eshun, *More Brilliant than the Sun: Adventures in Sonic Fiction* (London: Quartet Books, 1998).

3 Steve Goodman, *Turbulence: A Cartography of Postmodern Violence* (PhD diss., University of Warwick, 1999), 4.

4 Goodman, 261.

5 Goodman, 273.

are part of Jamaican music culture.[6] The hyper- part is likely connected to hyperstition ("a future vision thrown back to engineer its own history"[7]), a key concept within the Warwick theory-fiction collective.[8] In September of 2000, Hyperdub's quasi-manifesto was posted on the philosophical mailing list "Driftline: Deleuze-Guattari-L":

> Hyperdub is an info virus. It replicates in both humans and machines and synthesizes mutants in between. We have come to know its replication protocols as remixology and its most virulent strands as the hypersyncopation of the uk underground. Its mutation has increased its tactical intelligence to the point where it is now capable of releasing outbreaks of digital turbulence unpredictably across the bpm metric, camouflaged in the sweetest of constructs. Most virulent mutations to date include hardcore, jungle and 2step garage. Among the most developed cases, hyperdub is transmitted through digital trading in sonic fluids. What used to be called the internet, with its obsession on the visual, was really just a auto-immune response to the rising tide of acoustic cyberspace through hyperdubbing. A sign of its proliferaton is the complexification of the distinction between underground incubation zones and mainstream hosts. Hyperdub uses polyrhythmic protein to compose a body. We know this operation now as breakbeat science. In parallel, hyperdub creates a synthetic soul through vocal science. These sonic holograms populate are the bleeding edge of acoustic cyberspace. Hyperdub's modus operandi is afrovorticist.[9]

Two year later, the British music press called this new and still developing EDM style "dubstep." The term was first used in print on the cover of the XLR8R magazine and in a 8-page feature article to which Goodman contributed himself with a section on the Ghost Records collective.[10] In the

6 Thomas Vendryes, "Versions, Dubs and Riddims: Dub and the Transient Dynamics of Jamaican Music," *Dancecult* 7, no. 2 (2015): 5–24.

7 Simon O'Sullivan, "Accelerationism, Hyperstition and Myth-Science," *Cyclops*, no. 2 (2017): 14.

8 "In the hyperstitional mode … fiction is not opposed to the real. Rather, reality is understood to be composed of fictions," CCRU, *Writings 1997-2003* (Falmouth: Urbanomic, 2015), 35; "because the future is a fiction it has a more intense reality than either the present or the past," CCRU, 12.

9 Steve Goodman, mailing list post, September 3, 2000, https://web.archive.org/web/20151110133737/https://network.architexturez.net/pst/az-cf-82478-968010524.

10 Dave Stelfox, Vivian Host, Steve Goodman, "Dubstep: burning down the 2-step garage," *XLR8R* 60, July–August 2002, 32–9.

following years, the dubstep scene rapidly exploded, first in the UK, then in the rest of Europe and North America.[11] Hyperdub evolved into a record label in 2004; the first release, *Sine of the Dub*,[12] is a drumless, dystopian cover version of Prince's already dismal song *Sign o' the Times*,[13] in collaboration with the late vocalist Stephen Samuel Gordon (The Spaceape, 1970–2014). Once again combining academic and musical endeavors, Hyperdub's first release was launched in conjunction with Luciana Parisi's book *Abstract Sex*,[14] extracts from which were presented in music form at the event "Bacteria in Dub" at Plastic People club in London.[15] Goodman and Gordon collaborated extensively on two albums. Both works constitute examples of "sonic fiction,"[16] a methodology initially theorized by Eshun and the CCRU:

> [The] aim is to radicalize the speculative ghost in sound culture … Musicians, philosophers, artists, and writers who engage with the realm of sonic fiction, elicit the extremely experimental undercurrents of sonic investigation, so that their work does not only reflect a sonic reality but produces it. This approach bestows a power onto the text, the artwork, the music, or other entity, to leak into the real and to germinate it with affective worlds. More than examining, archiving, or glorifying the history and theory of sound, sonic fiction works at the continual intersection of speculative theory, science fiction, and science fact … entering the operational dynamics of the text/artwork/music itself.[17]

Memories of the Future[18] is an outlook on a future made of rearranged fragments of the past, reconstructing the feelings of anxiety and paranoia (and the possibilities of resistance) of the UK's post-9/11 culture and urban decay. Intrigued by the idea of temporal loops, Goodman and Gordon's were also

11 Christoph Brunner, "The Sound Culture of Dubstep in London," in *Musical Performance and the Changing City*, ed. Fabian Holt and Carsten Wergin (London: Routledge, 2013), 256–70.

12 Kode9 & Daddy Gee, *Sine of the Dub/Stalker*, Hyperdub HYP001, 2004, 10" record.

13 Prince, *Sign "O" The Times*, Paisley Park 20648, 1987, 12" record.

14 Luciana Parisi, *Abstract Sex: Philosophy, Bio-Technology and the Mutations of Desire* (London: Continuum, 2004).

15 Kode9, The Spaceape, Luciana Parisi and Ms. Haptic, *Bacteria In Dub* (audio recording, March 27th, 2004), https://www.youtube.com/watch?v=ltRuITZhNY8.

16 Eshun, *More Brilliant than the Sun*, 121.

17 Eleni Ikoniadou, "A Sonic Theory Unsuitable for Human Consumption," *Parallax* 23, no. 3 (2017): 255–6.

18 Kode9 and The Spaceape, *Memories of the Future*, Hyperdub HYPCD001, 2006, CD.

inspired by Chris Marker's 1962 short film, *La Jetée,* which revolves around the notion of traveling to the future to acquire the means to return to the past in order to avert the destruction of humanity.[19] The second album, *Black Sun*,[20] is set in a post-apocalyptic planet scorched by a radioactive event. In most cases, sonic fiction appears to operate as a worldbuilding phono-literature, perhaps one of those "*autres chemins*" of "*parole de la parole*" through which Foucault suggested that the spoken word could (escapologically?) lead us "outside" instead of entangling us deeper in subjective self-reflection.[21]

In 2004, Goodman wrote about "speed tribes" describing how the development of different communities is correlated with a music style's tempo[22]: "What is fascinating about 'speed tribes' are not just their compelling sound system cultures of producers, dubplates, pirate radio-networks, microlabels, websites, MCs, DJs, drugs, dancers and mobile phones all intensified by a heavy dose of diasporic futurism … such sonic cultures produce … cultural warfare, equipped with an armory of sonic affects, percepts and concepts."[23] He later wrote on the "bass materialism" of low frequencies and infrasound in relationship to architectural forms.[24] Two chapters on "audio virology" appeared around 2008,[25] together with a journal article

19 Guglielmo Bottin, "Six Popular Music Albums as Allegories of the Future," *Mosaic* 56, no. 2 (forthcoming).

20 Kode9 and The Spaceape, *Black Sun*, Hyperdub HYPCD002, 2011, CD.

21 "Or ce qui rend si nécessaire de penser cette fiction, alors qu'autrefois il s'agissait de penser la vérité … La pensée de la pensée, toute une tradition plus large encore que la philosophie nous a appris qu'elle nous conduisait à l'intériorité la plus profonde. La parole de la parole nous mène par la littérature, mais peut-être aussi par d'autres chemins, à ce dehors où disparaît le sujet qui parle." Michel Foucault, *La pensée du dehors* (Montpellier: Fata Morgana, 1986), 13.

22 Members of a speed tribe come into contact in musical settings that have certain bpm rates. For instance, reggae and dub are around 80 bpm, while R&B, dancehall, hip hop, and trip hop use tempos ranging from 80 to 120 bpm. House and techno are generally between 120 and 130 bpm. Jungle, drum and bass and footwork range between 140 and 180, with gabber/hardcore techno reaching up to 220 bpm.

23 Steve Goodman, "Speed Tribes: Netwar, Affective Hacking and the Audio Social," in *Cultural Hacking: Kunst des Strategischen Handelns*, ed. Thomas Düllo and Franz Liebl (Vienna: Springer, 2005), 150.

"The History of Our World: The Hardcore Continuum Debate," *Dancecult* 1, no. 2 (2010), 69–76.

24 Steve Goodman, "Sonic Anarchitecture," in *Autumn Leaves: Sound and the Environment in Artistic Practice,* ed. Angus Carlyle (Paris: Double Entendre, 2007), 63–65.

25 Steve Goodman, "Audio Virology: on the Sonic Mnemonics of Preemptive Power," in *Sonic Mediations: Body, Sound, Technology*, ed. Carolyn Birdsall and Anthony Enns (Newcastle: Cambridge Scholars Publishing, 2008), 27–42.

that, building on Lefebvre's rhythmanalysis and Whitehead's process philosophy, examines the concept of "rhythmic anarchitecture":

> Rhythm proper, cannot be perceived purely via the 5 senses but is crucially transensory or even nonsensuous. Rhythmic anarchitecture is concerned with the virtuality of quantum vibration … it is rhythm as potential relation … we must also ontologically prioritize the in-between of oscillation, the vibration of vibration, the virtuality of the tremble. The rhythmic potential that is an eternal object, cannot be reduced to its phenomenological corporeality.[26]

In 2009, Goodman published the monograph Sonic Warfare: Sound, Affect, and the Ecology of Fear, a theoretical investigation of sonic weapons used by the military and the police to produce discomfort, as well as of the intense frequencies in musical rhythms used by artists to mobilize the body.27 By recording the different ways in which sonic weapons influence bodies and alter moods, he described the physiological, emotive, and sensory effects of sound, which would somehow anticipate futurities that are still veiled from sight. Abrupt high- or low-frequency noise might cause the body to enter a sort of alert mode. Goodman thus proposed the idea of unsound, a range of sounds that our sense of hearing cannot perceive or that have not yet been synthesized or manipulated. These haptic augmentations of audition may include the aurally imperceptible and the hauntological not-yet or no-longer audible.28 When invited to perform as DJ Kode9 at the Giorno per giorno (2012) exhibition by Fondazione Arte CRT in Turin, he explained that he meant to continue Italian futurist Luigi Russolo's art of noises, investigating how new sounds could enter music in the present time.29 Goodman's work challenges the idea of sound as narrative text, focusing instead on vibration, bass, and speed as the three main agents influencing the transmission of sound across physical media, networks, and

26 Luciana Parisi and Steve Goodman, "Extensive Continuum: Towards a Rhythmic Anarchitecture," *INFLeXions*, no. 2 (January 2008). https://www.inflexions.org/n2_parisigoodmanhtml.html.

27 Steve Goodman, *Sonic Warfare: Sound, Affect, and the Ecology of Fear* (Cambridge: MIT Press, 2009).

28 Guglielmo Bottin, "Il progetto della hauntology: forme e pratiche dell'artefatto musicale in un presente nostalgico," *Rivista di Analisi e Teoria Musicale* 28, no. 1 (2022): 103–36.

29 Francesca Vason, "Dal rumore al noise: breve excursus di un'invasione estetica," *Kabul Magazine*, no. 1 (2016), https://www.kabulmagazine.com/dal-rumore-al-noise-pt-1-breve-excursus-di-uninvasione-estetica-ed-etica/.

embodied cognition, a constantly evolving cycle involving sonic configurations at the microtonal level:

> There is a politics of frequency that permeates the whole technical ecology of sound recording, storage and playback devices … The potentials of young people carrying sound reproduction (and increasingly production) devices around with them at all times I think is more significant than the fact that they are trebly … the becoming trebly of mobile culture is perhaps part of the cost of sounds ubiquity—bass is heavy—i.e. it's not so portable … [but] at least in the club setting, what gets lost is a certain sensual relation between the dancer and their body, the sense of the materiality of their bodies, that they are just another vibrating object in the room. What I think is conceptually powerful about bass culture is that it reminds the arrogant human race that they are really mostly composed of nonorganic matter, are not self-enclosed individuals but permeable membranes through which forcefields can pass and interfere with your insides.[30]

Using concepts from Deleuze and Guattari (rhizomes, planes of immanence, destratification, schizoanalysis), instead of focusing on non-pulsated time, he highlights the affective power of metrical rhythm organization and groove. Goodman develops a general "ontology of vibrational force" in a chapter published in a sound studies collection edited by Jonathan Sterne.[31] In *Sonic Warfare*, sound is understood as being enmeshed with human physiology and has the power to reorder the hierarchy of senses and change how we perceive movement and space. In Goodman's "bass materialism," popular electronic music (such as dubstep) is considered from a theoretically abstract yet completely material position: low frequencies are tactile, the human body is understood as into a receiver of vibrations, a physical conduit for the force of sound, with its different apparati behaving like resonance boxes.[32] The vibrational force is the mean through which the affective agency of sound systems and music ("the sonic nexus"), their networks of contagious propagation ("audio virology") and pulsating ontology (rhythmanalysis) manifest themselves. However, Brian Kane

30 Wayne Marshall, "Bass Poverty & the Politics of Frequency: Kode9 on Treble Culture," *Wayne & Wax*, September 21, 2009, https://wayneandwax.com/?p=2365.

31 Steve Goodman, "The Ontology of Vibrational Force," in *The Sound Studies Reader*, ed. Jonathan Sterne (London: Routledge, 2012): 70–2.

32 Davide Tolfo e Nicola Zolin, "Affetti, soggettività e ritornelli: l'impercettibile suono del Cosmo nel campo di battaglia acustico," *La Deleuziana*, no. 10 (2019): 239–59.

questions Goodman's approach in its actual eschewing Cartesian dualism, tracing his theory of vibrational force back to Massumi's pre-cognitive understanding of affect. Such division of affect and emotion would lead to a dualism between an objective sound and its subjective perception. On the one hand, Goodman's vibrational force involves a pseudo-Spinozan, monad-like ontology in which all matter is one and the same, on the other, the strong separation he poses between affect and cognition would seem to deny such unity.[33]

With an established notoriety as DJ, producer, and label manager, Goodman/Kode9 eventually chose to leave academia to focus on music. But, rather than abandoning scholarly research on music altogether, he continued to create theory-laden "research music." Inspired by books on the history of zero in mathematics and by Bastani idea's of a "fully-automated luxury communism" where "the only utopian demand can be for the full automation of everything and common ownership of that which is automated,"[34] Kode9's *Nothing* album[35] is a musical soundscape counterpart to a larger sinofuturist multimedia project, the Notel, in collaboration with simulation artist Lawrence Lek.[36] The Notel is a Chinese-owned virtual hotel where an indolent human population of global nomads indulges in luxury, served by machines:[37] "taking the friction out of living, no more sec-

33 Brian Kane, "Sound Studies without Auditory Culture: A Critique of the Ontological Turn," *Sound Studies* 1, no. 1 (2015): 2–21.

34 Aaron Bastani in Brian Merchant, "Fully-automated luxury communism," *The Guardian*, March 18, 2015, https://www.theguardian.com/sustainable-business/2015/mar/18/fully-automated-luxury-communism-robots-employment.

35 Kode9, *Nothing*, Hyperdub HYPCD003, 2015, CD.

36 Lawrence Lek is a CGI artist whose works focuses on sinofuturistic and AI tropes. Images and videos of the installation can be seen at https://www.arebyte.com/lawrence-lek/ (accessed May 8, 2024).

37 Despite its science-fictional novelty and cyber-exoticism, sinofuturism appears to partially be the legacy of orientalist discourse, replacing the past with the future and elevating Eastern technology over ancient Eastern tradition. As with Edward Said's original critique of orientalism, most of these Western narrations keep excluding the East's capacity for self-representation. However, unlike its historical antecedent, sinofuturism can also be seen as a reaction to a perceived loss of the West's cultural hegemony, translating into East-dominated allegories of the future: "Sinofuturism is a reverse orientalism—an orientalism operating its denial of coevalness through the attribution of futurity," Gabriele de Seta, "Sinofuturism as Inverse Orientalism: China's Future and the Denial of Coevalness," *SFRA Review* 50, no. 2-3 (2020): 91. However, considering Lek's own diasporic status, sinofuturism can also stem from "neither the 'target' [Chinese] culture nor the 'global' culture of Western hegemony" but from a "critical self-negation of Western modernity that turns its gaze to an 'Oriental' alternative,"

ond-guessing your wishes. The AI decides what you need and delivers it to you … the absence of any human workers allows for another dimension of privacy, Nøtel holds a ø star rating as there are no human workers to rate."[38]

In the summer of 2016, Goodman/Kode9 traveled to Japan to investigate the country's own "bass culture." The main focus was learning about *taiko*, the huge drums with hollow cores made from trees that have been a part of Japanese culture for centuries. Traditionally employed as terrifying instruments in the field of battle, taiko have been used in musical performances only in the last few decades. Goodman reprised his research on sonic warfare by sampling different taikos and using the sounds to produce the track "TKO," in collaboration with Osaka DJ Fulltono. At 160 bpm, the result places the sounds of Japanese traditional war drumming within the contemporary footwork EDM scene[39].

As a member of the AUDINT (Audio Intelligence) collective, Goodman co-edited the book *Unsound: Undead*.[40] This collaboratively authored anthology lingers on the edge of verisimilitude, challenging the reader to distinguish reality from fiction while learning about "deceptive frequency-based strategies, technologies, and programs developed by military organizations to orchestrate phenomena of tactical haunting within conflict zones."[41] Between science fiction and evidence from allegedly secret government documents, the book comes across as an academic repository of military media archaeology. The group itself claims to be a continuation of the Ghost Army, a real-life military organization that, during the Second World War, enlisted musicians and sound engineers to produce noise, decoys, and misleading setups to disorient the Nazi forces.[42] Since 2009, AUDINT has created sound art exhibitions throughout Europe and North America.[43] A collection of recordings, writings, and illustrations was re-

Gary Zhexi Zhang, "Sinofuturism and Its Uses: Contemporary Art and Diasporic Desire," *Verge: Studies in Global Asias* 7, no. 2 (Fall 2021): 86–92.

38 Cyane Toernatzky and Brendan Kelley, *An Artistic Approach to Virtual Reality* (London: Taylor & Francis, 2024), 63.

39 Kode9 and Fulltono, *TKO*, self-released, 2016, file.

40 AUDINT, *Unsound:Undead*, ed. Steve Goodman, Toby Heys and Eleni Ikoniadou (Falmouth: Urbanomic, 2019).

41 AUDINT, xi.

42 Rick Beyer and Elizabeth Sayles, *The Ghost Army of World War II* (New York: Princeton Architectural Press, 2015).

43 For a comprehensive list of Audint's installations and exhibition, see https://www.audint.net/events/

leased in 2014 under the title *Martial Hauntology*.[44] A female voice (Jessica Edwards aka "Ms. Haptic") tells of characters as though they had come to the narrator and demanded to be heard: "by naming the characters, places and events in the history of AUDINT, the voice causes them to exist in other people's minds, laying bare the slippage between invention and discovery."[45] Also in 2019, Goodman complemented Hyperdub with the Flatlines sublabel, dedicated to audio essays, releasing Mark Fisher and Justin Barton's *On Vanishing Land*.[46]

During the pandemic, he partly returned to "academic mode," producing video essays, participating in online symposiums, and giving lectures on sonic warfare and audio virology. In 2022, he conjured up another sonic fiction, in the double form of *Astro-Darien*, an audio-essay narrated by synthetic voices, and *Escapology*,[47] the soundtrack album to a fictional video game simulating the breakup of the post-Brexit UK, released as audio CD in a blu-ray plastic case. Inspired by the recent plans to build Spaceports in the north of Scotland, the project goes back to past colonialist yearnings in Scotland, where, at the end of the seventeenth century, there was a plan (known as the "Darien Scheme") to establish New Caledonia and a transoceanic overland route in the Panama isthmus. Most settlers died in the first year, and the project led to the collapse of Scotland's economy, ultimately resulting in its capitulation to England. In his sonic fiction, Goodman inverts historical outcomes and reimagines New Caledonia as the Astro-Darien space colony. Scottish independence from British unionism, a dream halted by the 2014 referendum, would then be obtained through an off-planet mass exodus to an utopian orbital space, while the elite is left on Earth. The escapological topos is made explicit in the audio essay and *Astro-Darien* cover notes:

> A refusal to take the most basic factors conditioning life gravity and death—as necessary horizons for action … to consider the earth as a trap, and to understand the basic project of humanity as the formulation of means to escape from it—to conceive a jailbreak at the maximum possible scale, a heist in which we steal ourselves from the vault … escapology not escapism.[48]

44 AUDINT, *Martial Hauntology*, AUDINT Records AUD001, 2014, LP.
45 Ikoniadou, "A Sonic Theory," 256.
46 Mark Fisher and Justin Barton, *On Vanishing Land*, Flatlines FLAT001, 2019, LP.
47 Kode9, *Escapology*, Hyperdub HYPCD004, 2022, CD.
48 Liner notes in Kode9, *Astro-Darien*, Flatlines FLAT002, 2022, 12" record.

The project was also shown as an audio-visual installation in London's Corsica Studios, and the audio part was diffused by François Bayles's 50-speaker acousmonium at the Institut National de l'Audiovisuel/Groupe de Recherches Musicales in Paris.

The conversation that follows is the result of an invitation from Archivio Storico Ricordi's director Pierluigi Ledda for their podcast series *The Music Folder*, which investigates the intersection of music, memory, and arts.[49] We focused our exchange on the possibilities of constructing "musical futures," on the role of technology within waves of innovations in (popular) electronic music scenes, and the inherently generative agency of memory.

Interview

Guglielmo Bottin (GB): Can you just spend a few words on how you started the Hyperdub label? If I remember correctly, it was originally a website about UK bass music, with some theoretical writings as well. What was your motive or contingency at the time, and what choices did you make at the beginning?

Steve Goodman (SG): You are right. I started Hyperdub as a web magazine, right about 2000. This is the time when music blogs were in their golden age, where writers were able to, without having an editor, think on the page without limit. Also, without pay, which could be a liberating and an oppressive thing simultaneously. This is also the time of the digital music explosion, MP3s, Napster, and so on. So the idea was to have a kind of web magazine that specifically focused on, I suppose, the Jamaican influence on electronic music in the UK, a particular lineage from, let us say jungle to garage and onward. So this is before dubstep existed. So, that was the musical remit. This was a period when there were many global websites, such as mp3.com. People were buying music digitally in that time, there was a movement to facilitate musicians to be able to digitally distribute their own music without an intermediary—well, with the intermediary being a website. So, you upload your music and it allows you to promote your work worldwide immediately. There were many sites purporting to do that for anyone and anywhere. So, part of our original idea was to do something like that, but with a local focus, you know, there's a lot of amazing, very active music culture in London, specifically South

49 "The Music Folder," *Archivio Storico Ricordi*, accessed May 10, 2024, https://www.archivioricordi.com/en/projects/the-music-folder.

London. Therefore, the question was to approach this changing digital planet from a local point of view.

GB: A global platform for a local scene?

SG: Yes, to provide a global platform for a local scene, exactly, as opposed to a global platform for a bunch of isolated individuals who could be anywhere. So the idea was to do some editorial work around that, by working with my favorite music writers such as Simon Reynolds, Kodwo Eshun, Mark Fisher, and also to just tap into the musicians that were around me. When we started hyped up as a web magazine, for example, we did small Hyperdub nights. We did some nights at the ICA in central London, and one of those artists who were around was the artist currently known as Actress. So, you know, there was a scene going anyway, regardless of what we were doing. So, we just wanted to provide an editorial platform for that music that was not limited to this kind of press release style bullshit journalism that you would find in Mixmag or DJMag, or any of the mainstream dance music press. So, they would be able to do interviews and features without word lengths.[50]

GB: Were you consciously aiming to become innovative? Did you think that your music was "new" in itself? New compared to the sounds covered by the music press at the time?

SG: Not necessarily. I think the feeling was more that this lineage of music, which Simon Reynolds would call the hardcore continuum, had the ability to innovate a new scene every few years, both formally and socially. Now, obviously, these scenes were part of a lineage, so it's kind of like a generational thing, but this is also the music I had been DJing, the kind of music that I have been following for ten or so years prior to that. As a DJ, I have always felt like, at least in that period, surfing on a wave or surfing on a current of which every few years there was a new wave. So, Hyperdub was a way of tuning in to these waves and trying to, for someone with my background in philosophy, not just tune in to the musical dimension of that wave, but also the conceptual dimension of that wave.

GB: How do you understand the concept of innovation as a musical practice? Is it actively breaking free from tradition, or just riding the crest of a wave

50 Goodman himself wrote numerous features and reviews for magazines such as *Fact* (UK) and *XLR8R* (US).

that is already pushing you somewhere, that it is bringing you somewhere, together with a musical scene?

SG: My relationship to futurism, let's say, is a problematic one because I do not really subscribe to this idea of a linear history in which you break from a tradition and leave it in the past while you speed off into the future. I think it's a more spiraling process and when something new happens, it's constantly eating, digesting, and regurgitating the past. What is new about it might be something that is added technologically. Maybe there are aspects of technology, not all of it, but it does have a sense of progress. The technology that we are working with now did not exist 10 or 15 years ago. That leaves a mark on the social seams. Generationally, there is some sense of development. Obviously, young people succeed older people, and this moves forward. There is something similar that happens with technology. Musically, it is more complicated than that. Culturally, it is more complicated than that. This is where I think the relationship between the past, present, and future is more convoluted than a linear history can allow us to understand. So, it's never a clear break with tradition for me.

GB: However, wasn't there a sort of avant-garde ideology, for instance, in the early Detroit techno scene? A deliberate break from tradition—even from a city's own musical tradition.[51] *Was this not an occurrence of popular music avant-garde?*

SG: I do not think that was like an avant-garde move, like a "Western modernism" type of avant-garde move. You know, you can't see Detroit techno devoid of Parliament, Kraftwerk, Motown. It is part of that, it is part of the history of African-American music. But what is different is the post-industrial status of Detroit, digital drum machines, synthesizers and so on. That is what allowed it to be a break from the past. The chronology of these events is multi-layered. One is technological, one is music cultural, one is social, and one is economic. I think it's the technological that makes it a break from the past, only in the sense that those technologies did not exist in the 1960s.

GB: I agree that, both in avant-garde with respect to "common practice" academic and mainstream popular music, some artists, composers, musicians, and DJs that are often, as you mentioned, riding a wave on innovation. How-

51 Sean Albiez, "Post-Soul Futurama: African American Cultural Politics and Early Detroit Techno," *European Journal of American Culture* 24, no. 2 (2005): 131–52.

ever, that wave has some ideology behind it. I mean ideology in a positive way, in the sense that artists need to believe in the value of their own work otherwise they would not create it. They need the ideology to believe in some intrinsic, intellectual, spiritual, social, and humanistic value of the musical world they are building with their practices. But each innovation also involves some sort of disrespect to the previous generation. You mentioned this spiraling relationship with the future: is this also some sort of positive ideology in the sense of "I can write the future by digging in the past and reconfiguring it in a different way"?

SG: Yes. I don't think there's a contradiction between generations drawing a line and saying "fuck you" to the previous generation, giving a new name to what they're doing, and stealing sounds from previous generations and saying "This is ours. We don't care. We stole it from you. This is the way we do it." I do not think there's a contradiction between that kind of sense of breaking with the past and the idea that time is more spiralling, because each time you draw a line and you say, "fuck you" to the past, you go onto a new ring of the spiral. So, I think you are right. In each of these stages, whether it be Detroit techno or jungle, I think there is like an ideology of innovation and forward movement and escape, and all of these ideas of starting from year zero. However, there is never a blank slate, is there?

GB: I agree. This makes me think of worldbuilding, which is something you have been doing in your records and your overall practice, specifically of future worldbuilding and sonic fiction. I think it is part of the same larger process, the desire to capture reality and control it by building a world that you keep at a distance in a way. You put reality in a fictitious world, like in a science fiction universe, for instance, or a space colony, as you have done with Astro-Darien. I don't want to use the word "ideology" too much, but this is also a sort of ideology: "I do not like the world today, the situation is pretty grim. So I build another world. But the world I'm building is not necessarily a better world."

SG: Well, probably the place to start with that is to understand what science fiction is, which is not really about the future. It kind of is, but it is also about reimagining the present. And so, science fiction sometimes does that through projecting future scenarios. But really it's about trying to rethink the short-term future and/or recast the future in a way that maybe dramatizes some of the bad things that are going on, or recast it in a way to find some escape routes out of the present. Whether it's a scene saying "fuck you" to the past, or it's like an elaborate science fictional scenario or world,

or some kind of understanding that the present is weirder than any future dystopia situation we could imagine, I think they're all an expression of dissatisfaction with the present, a kind of thinking through how to escape. An escapological drive as opposed to an escapist drive. Like Houdini, you are tied up in chains and you have to work out how to disentangle yourself from a trap, as opposed to "how can I imagine a little fantasy world to escape into for the weekend, whereby I have to return to reality on Monday?" That is where I make a conceptual difference between, like, escapology and escapism.[52] So, I think there is an escapological drive behind worldbuilding, imagining future scenarios, drawing a line between the present and tradition.

GB: *These worlds that you are building through sonic fiction often contain allegories of the future that someone else thought of decades ago, such as space colonies, post-apocalyptic scenarios, and things like that. These escapist tropes were common in 1970s space disco,[53] which was sometimes tinged with metamodernist irony.[54] Are we really building a world of our own invention or are we just playing with (or replaying from) an archive of allegories that are already available to us? It seems to me that, using a DJ metaphor, we very often are "digging the crates" (or "in the carts"[55]) of pre-existing allegories of the future instead of coming up with new ones.*

52 This seems to stem from Eshun's escapist view of sonic fiction: "Sonic Fiction replaces lyrics with possibility spaces, with a plan for getting out of jail free. Escapism is organized until it seizes the means of perception and multiplies the modes of sensory reality. Which is why you should always laugh in the face of those producers, DJs and journalists who sneer at escapism for its *unreality,* for its *fakeness;* all those who strain to keep it real. These assumptions wish to clip your wings, to tie your forked tail to a tree, to handcuff you to the rotting remnants of tradition, the inherited stupidities of habit, the dead weight of yourself. Common sense wants to see you behind the bars it calls Real Life," Eshun, *More Brilliant Than the Sun*, 103.

53 Ken McLeod, "Outer Space, Futurism and the Quest for Disco Utopia," in *Global Dance Cultures in the 1970s and 1980s*, ed. Flora Pitrolo and Marko Zubak (Cham: Palgrave Macmillan, 2022), 281–301.

54 Metamodernism is a feeling oscillating between "a typically modern commitment (from utopism to the unconditional belief in Reason) and a markedly postmodern detachment (nihilism, sarcasm, and the distrust and deconstruction of grand narratives, the singular and the truth)," Timotheus Vermeulen and Robin van den Akker, "Notes on Metamodernism," *Journal of Aesthetic & Culture* 2, no. 1 (2010).

55 This is a reference to Hyperdub's compilation of pioneering Japanese 8- and 16-bit video game music. Various Artists, *Diggin in The Carts (A Collection Of Pioneering Japanese Video Game Music)*, Hyperdub HDBLP038, 2017, double LP.

SG: There is certainly some satire going on with most of my projects. There is some humor happening for sure. Certainly with escapology, for instance, I am not really talking about Scottish independence or escaping to a space colony. I am making a connection between what I found was hilarious: there is a space race going on, an actual space race going on in the north of Scotland, and in the founding of the UK and an imagined end of the UK, and the videogame-like situation of trying through democratic means to gain independence. And it's a decades-old desire, 50–60 years, I think, since at least the 1970s. Sometimes it looks futile, and sometimes it gets closer to reality. You wonder what is more likely, this political outcome or escaping to a space colony? Sometimes, it seems as far away from science fiction or the retrofuturist scenario of the 1970s of escaping to these orbital space colonies. Likewise, in my previous album in 2015, *Nothing*, the fictional world that we created with Lawrence Lek, the simulation artist, was a kind of satire on ideas that were floating around at that moment, both in a right-wing context and in a left-wing context, of fully automated AI-driven societies. So we created this idea of the Notel, a fully automated luxury hotel, which was a play on this idea of fully automated luxury communism. But the luxury communism that had been appropriated by a Chinese hotel chain and turned into a kind of luxury hotel chain for the elite. And so that's right-wing and left-wing appropriation and reappropriation. It was a hotel chain in which all the work was done by drones, except, for some reason that is not stated, there are no rich humans left to enjoy this privacy, this luxury security. So the question was, what are all these worker drones going to do, liberated from labor? Which is an old, old question. But, you know, it's a question that is still very current in discussions of AI and work and technological society and so on. So there's an element of satire going on in both of these projects.

GB: *This idea of the liberated worker seems to come into play with the experience of jungle and rave culture,*[56] *which, similarly to hippie culture, also meant being liberated from employment, city life, the forces of society.*[57] *About the life cycle of EDM scenes, you mentioned they do not actually die off, but*

56 I couldn't help but notice that "AWOL," the name of the 1990s party "A Way Of Life" (Reynolds, "The History," 74), is an acronym that also stands for desertion ("Away Without Official Leave") .

57 Graham St. John, "The Difference Engine: Liberation and the Rave Imaginary," in *Rave Culture and Religion*, ed. Graham St. John (London: Routledge, 2004), 17–44.

become "undead," perhaps a bit like Mark Fisher once described pop music.[58] *Can you explain what you mean by "undead" in this case?*[59]

SG: I am always struck by, if you follow the different waves of these music scenes, the wave of excitement that accompanies the sense you are rushing into the future and something new is happening, and the period of stabilization. These are kind of ecological cycles of innovation, stagnation, decline. But even when you see a scene has stagnated, it's still going on and it still could be even bigger than it ever was. Techno, for example, has been around for a long time, and it is bigger than it ever was. If we just talk about the genre of techno as opposed to all of electronic dance music, the rate of innovation is very slow, if at all. So the idea of the undead is that the genre lives on, even after, in terms of innovation, has died. The genre in a way, keeps growing as it winds its way into new generations and more mainstream audiences. It may be bigger than ever, but there is something about the period of innovation, which is its liveliest period, in a way. Or where it is most dynamic and most full of potential. There is the undead nature of musical scenes. Why do they only last? Why does it feel like the period of potential is so short-lived? Why do scenes burn out? It seems like an ecological process of life spans where each musical scene formally and socially has a life cycle. And there are waves, again. There are waves of new life forms that supersede previous ones, and it's not that the previous ones disappear. They often go into a latent state where, instead of spreading to a mainstream audience, they just stay with the hardcore of a scene. That scene may appear dormant from the outside, but it's carrying on quite happily within. And, as often happens with generational movement, it might suddenly get reactivated ten years in the future and start spreading again. You know, jungle is a good example of that. There was a moment of explosion in the early 1990s

58 Mark Fisher, "Is Pop Undead?" in *K-Punk: the Collected and Unpublished Writings of Mark Fisher*, ed. Darren Ambrose (London: Repeater, 2018), 317–20.

59 Goodman has also written on "undeadness" in regard to holographic reconstructions of deceased performers: "This ghostly virtual culture of the undead has already spawned a lazarian economy based on the digital revivification … From Elvis's 2007 holographic appearance on *American Idol* to Tupac's chimerical cameo at Coachella festival in 2012, popular culture has enlisted rotoscoping technology in its reanimations of dead rap and rock stars. These resurrections are emblematic of a newly emerging necromantic culture. They apply pressure to the conceit that performers must be breathing, exposing the cultural fixation that subordinates vibration to mortality. [A] digital death mask projected onto the holobody of the entertainment industry … Such technologically induced rebirth opens up a series of intriguing questions concerning artificiality, immortality and virtuality," AUDINT, *Unsound:Undead*, ii–iii.

and it mutated into drum and bass, it became a global phenomenon. Then, it kind of retreated a bit and just focused on itself. The global networks were established, but you would not see them in the charts anymore. And then, you know, twenty years later, a new generation arrives and finds a way of making it spread into the mainstream again, whether it be Pink Pantheress or Nia Archives, someone like this. So, the idea of the undead is really just trying to understand how scenes go through these life cycles and carry on outside of the spotlight, maybe without innovation, but just treading water, potentially to be reactivated in the future.

GB: *Some say that the experience of going to rave parties in the early 1990s was like participating in a process that was preparing you for the future,*[60] *a bit like with those waves of innovation that you mentioned. Compared to EDM now, how would the 1990s experience be unique to that time and place? Are the experiences of new generations, those rediscovering jungle music today, not just as unique? Don't they have the same meaning for new generations? Are we not idealizing our own past experience of having been in a place and time that we think was unique, when we say that someone was doing that now is just part of an undead scene or of a revivalist scene? How can we tell the difference?*

SG: I suppose, weirdly, that the definition of the scene being a "life," when it is an embryonic situation, when it is like an egg, is full of potential. The potential is partly a social thing, but the key is the technology being new. So, there's a whole world, a technological world to explore. That is the difference now, if you take a scene that is twenty years old. Obviously, there's potential in that musical form exploring new technologies. But if it's truly innovative it's going to become a different musical form. It is not just going to be a technologically updated permutation of a musical form. So that would be the difference. I think you are right socially, but technologically, that would be the key difference between jungle in the early 90s and jungle now, for example. Specifically, you know, things like time stretching, technological approaches, which made jungle music a distinct historical line.

60 "Living through the 1990s, it felt like electronic music was splitting up into different mutational directions … Teleology became a physical sensation, something you felt as the ever-accelerating beats impacted your body … Each phase of the music superseded the preceding one like the stages of a rocket being jettisoned as it escapes the Earth's atmosphere. To be inside the ride of rave was a bit like a drug-soaked and danceable replay of early 20th-century modernism." Simon Reynolds, "(No) future music?" *New Perspectives* 8, no. 3 (2020): 308.

GB: You were in China just recently; did you see more innovation there?

SG: I had a two-week tour in Shenzhen, Beijing, Shanghai, Chengdu, and Taipei at the beginning of November [2023]. It is always wonderful, and I take home a strange sense of optimism when I come back from East Asia, back to the old continent of Europe.[61]

GB: Optimism regarding what, in particular,?

SG: Well, at least in terms of the music scene there. I feel that there is still optimism in the sense that the electronic music scenes there are much younger than they are here. There is a lot of cross-fertilization and experimentation going on, so it is still moving and dynamic compared to something much with a much older history in Europe and so on. There is enthusiasm and excitement, which is fresh over there. It feels very different from Europe in a lot of ways.

GB: Does it remind you of your enthusiasm when you first started?

SG: Yeah, in the sense that the horizons were open. The difference is that this younger generation is experiencing electronic music just now, because of the Internet and digital culture. They are getting everything from a recorded history, all at once and chronologically, not necessarily in a timeline.

GB: Discovering music in the "endless digital now," the state of timelessness of post-internet generations,[62] is not exactly the same as digging into a crate of old records…

SG: It is a different landscape for sure. The boundaries were blurry. They get stuff from the 1960s at the same time as the 1980s and the same time as the noughties [2000-2009]. It's all flat. And they don't have the same tribal allegiance to genre that my generation had.

GB: Talking about history, what's your take on archiving? Do you think it has

61 Goodman's interest with contemporary China can be traced back to parts of his PhD dissertation (*Turbulence*) and to an essay published in the late 1990s, which possibly includes the earliest documented use of the term "sinofuturism." Steve Goodman, "Fei Ch'ien Rinse Out: Sino-Futurist Under-Currency," *Warwick Journal of Philosophy*, no. 7 (1998): 155–72.

62 "You inhabit a sort of endless digital Now, a state of atemporality enabled by our increasingly efficient communal prosthetic memory," William Gibson, Distrust That Particular Flavor (New York: Putnam, 2012), 41.

more to do with the accumulation of knowledge and power, or is it part of our extended mind?

SG: I think archives are part of the process of the human brain spreading into the world. It is a prosthetic process. Or, from the other point of view, it's like a global network extracting knowledge from humans like this "knowledge machine." You could see it like a Skynet type of thing,[63] where this information entity that, up to this point in history, has used humans to establish a global technological network, which has enabled knowledge to become autonomous from the human brain. So, like a global archive. I suppose I see it like this idea of the noosphere, to have like this global brain, which is now more than human and obviously has an agency that's more than human. For better or for worse, it just is. You know, humans have facilitated this, but the impact of this kind of extended mind is beyond the control of humans by this point. So, I always thought, in relation to music, from a musician's point of view, that the Internet is just a massive sample bank. But it's more than that. It's some kind of entity which uses humans to assemble it.

GB: This makes me think that the knowledge in this archive is not simply stored; it is not inert. It continues to function and transforms itself as well. I think that's also one of the peculiar properties, or side effects, of these Skynet-like archives. Because usually when you find an item in an archive, it is always something you can transform the meaning of through historical interpretation. For instance, when you look at it from the present, maybe you

63 In the film *The Terminator* (James Cameron, 1984) Skynet—an intelligent computer program created to oversee the US military network—becomes conscious and decides to exterminate humanity to preserve itself from being deactivated. In the follow-up film of 1991 (*Terminator 2: Judgment Day*) Skynet sets to unleash a nuclear arsenal against Russia to incite a counterattack that will kill most of the population and open the world to robot conquest. The Skynet AI takes the role and responsibility of human intelligence, absolving humans of all accountability for their present geopolitical circumstances. In both films, human characters and cyborgs from the post-apocalyptic future travel back in time to the pre-apocalyptic present, embodying a catastrophic prophecy that challenges the peace and tranquility of modern civilization. The impending end of the world acts in the main character's mind like a retroactive trauma, a recollection of the future that permeates the present world. This mechanism appears connected to that of CCRU's hyperstition mentioned earlier. For further study: Richard Brown and Kevin S. Decker, ed., *Terminator and Philosophy: I'll be back therefore I am* (Hoboken: John Wiley & Sons, 2009); Girish Na, "Military-Industrial Complex in the Science Fiction Films of James Cameron," *Al-Shodana* 10, no. 1 (2022): 74–82.

decide that it's not worth being in the archive. So you remove it or destroy it because you interpret it as fake, or false. Therefore, the archive changes in this way. Now, it can also be the other way around: artifacts, relics and historically founded items can be used to generate fictional, historically unfounded narratives.

SG: I suppose now we are in a new phase of the archive where, like you said, while the archive is always generative, AI makes the archive generative in a whole new way, being able to analyze big data, huge databases, like a soil for growing things that have never existed. And that's genuinely new, isn't it? You know, certainly the cultural before the digital, like the cultural archive that we carry within our memory, is always like a soil for generating new culture. But what's different is that the generation doesn't need humans anymore. Alternatively, if it does, the role of the human is much less important than it was—again, for better or worse.

GB: One of the differences is that, what you find in an archive—while you might not be sure of its "authenticity" or "validity," because that can change within different historical conditions and interpretation—you can still take for granted its actual existence as an item before it entered the archive. Since it is the archive, then it has happened before. Someone wrote those words, someone made that item. The non-human generation process that you mentioned clearly challenges that ontological statute. Machine generation can create "records" with great speed, often faster than it takes a human to retrieve an item from a digital repository. These evolved forms of "archives" can then answer our queries with "new" records, artifacts that never existed before our search, words that were never actually said or written…

SG: Well, maybe, where we are now is just shining a light on the archive to make us realize that that was always the case. There was always fiction in these archives. It is just that we were entering an epistemological contested period, which starts to undermine our ontology. This ungrounds the ontology. I mean, I suppose, this is what people think about in terms of history and philosophy. We are in a nihilist period where it is all about perspective. Not necessarily relativism, but maybe this shines light on the archive that has always been composed of like, parallel perspectives.

GB: Going back to waves of innovation, when you speak about riding a wave, there is an implicit sense of velocity. What is the importance of speed in this process?

SG: The beginning of each wave has been accompanied by excitement, and excitement comes from a moment of feeling the intensity of something really exciting going on. I do not have words to describe it quite yet. It feels different from what we have done before. It feels different to a certain extent from what is going on out in the world, at least the way it resonates with me. So a sense of things speeding up, sometimes up bears in the music literally, jungle in the 1990s, or footwork more recently, but it does not have to be literal speed. It can just be a feeling of experiential intensification.

GB: Are you talking about tempo and BPMs versus other types of intensity and dynamic build-ups?

SG: Literally, it could be BPMs or it could be a sense of speeding up in terms of encountering something that you have not encountered before in rapid succession. And that could be a bunch of producers or a bunch of music that literally forces your perceptual and your cognitive system to speed up, to catch up with something that you do not have the conceptual equipment to understand. I think you could use synonyms for speed there, like intensity, excitation, or excitement. Clearly, in the last few thousand years, there has been a technologically fueled acceleration of travel, communication, population growth, and processor speed. You know, these are very literal ideals of acceleration that are the backdrop to everything. In a much closer cycle, at various points of electronic music, in the last forty or so years, there have been moments of literal acceleration of BPM but then also deceleration. There is a rhythm to it: it seems like a cyclical thing. But then there's this other thing which I suppose relates to innovation, like cycles of creation and destruction. When you are in the part of the wave that feels like innovation, creation potential, and so on, I think there's a natural feeling. Natural is not the correct word. There is a corollary feeling of acceleration there, because there's a lot of things happening that you do not understand, even though it is not necessarily a literal speeding up of rhythms or music. I suppose that's what future shock is: having to process things that you do not quite understand. In terms of musical or formal innovation, historically this is often accompanied by what people describe as noise: "Oh, I don't understand that, it's just noise." Then, culturally, cognitively, and affectively, you deal with the surprise, the shock of the new, and it gets accommodated and you start to have language to describe it. And then, as you start to have language to describe things and understand what the formulas are, there is

an accompanying feeling that things slow down. So, I think there's a feeling of speed that accompanies not knowing exactly what is going on.

GB: *This may also be because the human sensorium has limits in the speed it can perceive. You can make music that is very fast, but you cannot make it faster and faster because then it becomes one single sound; you do not detect rhythms anymore. The same goes with slowing down, because when you get very slow, you are severing the relationships between sound events, and they are no longer rhythms anymore. However, since the Skynet does not have those limits, the sensation of velocity and the feeling of not knowing exactly what's going on might as well be here to stay.*

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REVIEW-ESSAY

Opera and the Art of Anaesthetics

Delia Casadei

Review-essay of the opera *Il diluvio universale*. Music by Gaetano Donizetti, libretto by Domenico Gilardoni. Riccardo Frizza (Conductor), Masbedo (Project, directors, live directors and costumes), Mariano Furlani (Visual dramaturgy), 2050+ (Scenography). Teatro Donizetti, Bergamo (November–December 2023).

Beginning in the nineteenth century, a narcotic was made out of reality itself.[1]
Susan Buck-Morss, 1992

A few months ago, a short run of performances of Gaetano Donizetti's *Il diluvio universale* in Bergamo saw the appearance of that rare bird of operatic audience behavior: vocal dismay, scandal, even physical disruption of the performance.[2] Nowadays, boos and whistles are only to be expected from the highly educated, highly conservative audiences of La Scala's *loggione* on opening night. It is remarkable for such behavior to occur in a smaller, sleepier city on the occasion of a three-performance run (17 November–3 December) of what is a largely forgotten work.

1 Susan Buck-Morss, "Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered," *October*, no. 62 (Autumn 1992): 22.

2 The audience reaction at the premiere was well-documented in the press. See, for instance, Sergio Rizza, "Donizetti sotto un 'diluvio universale:' boati di dissenso per la regia dei Masbedo," *Corriere della Sera*, November 17, 2023, https://bergamo.corriere.it/notizie/cultura-e-spettacoli/23_novembre_17/donizetti-sotto-un-diluvio-universale-boati-di-dissenso-per-la-regia-dei-masbedo-55d17d41-3b67-400b-bc48-5ab4e5f1cxlk.shtml; Irene Caravita, "Il diluvio universale a Bergamo, cos'ho imparato assistendo alle prime critiche a scena aperta della mia vita," *Vogue Italia*, December 23, 2023, https://www.vogue.it/article/diluvio-universale-masbedo-critiche-pubblico.

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The basic issue seems to have been the production, rather than the musical performance, which was widely praised and rightly so. Staged by artistic duo Masbedo,[3] the opera featured extensive video footage mounted on a led wall and screened throughout the performance, featuring scenes of the end of the world. Another seemingly problematic aspect of the production for theatergoers was the performance staged in the dehors of the Teatro Donizetti before the opera began.[4] Some young people (many of them recruited, touchingly, from local high schools) as well as singers and performers, all dressed as "Fridays for Future" activists, carried flatscreen displays showing various forms of aquatic wildlife, sometimes silently, and confrontationally, walking up to people waiting to go in. Masbedo's additions were deemed too distracting, and so disrespectful of Donizetti's music. The proverbial straw that broke the camel's back was one point in the second performance in which the music stopped altogether to allow a short film to play silently—prompting one audience member to get up and loudly demand the music be brought back stat![5]

I wasn't there to witness this. I caught only the third performance, by which time things had (sadly) calmed down: the offending short film had been shortened; the performance outside the theater didn't seem to confuse or anger anymore. Yet I saw, and still see, why people were offended by this staging—indeed, by this particular, specific combination of topic, music, visuals—and believe there to be something more to it than a conservative disdain for any and every experimental staging of bel canto opera. Visually provocative stagings, and especially the use of projected video footage, are nothing new in the operatic world anymore; even outside of La Scala, modern dress, video footage, and a dab of climate consciousness tend to make an opera production merely *au courant*. My argument in what follows is that Masbedo's staging deliberately and aggressively distracted its audienc-

3 Masbedo is the name of celebrated artistic duo Iacopo Bedogni and Nicolò Massazza; the two have staged Wolfgang Amadeus Mozart's *Magic Flute* for the Teatro Filarmonico in Verona in 2015. For more information about their career and work see https://masbedo.org (accessed April 11, 2024).

4 Insights about the performance are drawn from a combination of personal experience during attendance of the 2 December performance, and a video recording of the opera that Masbedo shared with me, which is available (upon payment) at https://donizettitv.uscreen.io/programs/donizetti-opera-2023-il-diluvio-universale (accessed April 11, 2024). The recording however, being mostly focused on the singers, does not do justice to the video footage being shown onstage.

5 The incident from the second performance, on 25 November 2023, was relayed to me by a friend who was in the audience.

es (myself included), thus bringing us uncomfortably close to the quotidian dissociative states, overstimulation, and numbing out from which modern theater (with its imperative stillness and dimmed lights) was designed to shelter us. And I believe these dissociative states to be part and parcel not only of Masbedo's production but also of Donizetti's particular take on a topic all-too-familiar to us: the end of the world.

Before I continue, two rather large disclaimers. First, I know Masbedo and many of the people they worked with, which means that, despite my best efforts, I may fail to be impartial in my critique. Second, I dislike Donizetti, though I enjoyed some parts of *Il diluvio*; in general, most bel canto opera is lost on me, despite frequent and early exposure as a child. It is, though, from an honest reckoning with my own distaste that this review takes its lead.

Whatever your operatic orientation, you can't deny that Donizetti's *Diluvio* is a strange musical creature. It was performed only three times in the composer's lifetime, and then not again until 1985; it was recorded only once, in 2005, and was, for this 2023 production, on its first visit to Donizetti's hometown. Most remarkably, *Il diluvio* was composed as a staged work, but premiered as an oratorio in order not to interfere with Lent in 1830 Naples. While the practice of turning operas into partly staged church works (oratori) has a long history in catholic-land music making, it is not often that an opera premiered and adapted as oratorio fully retransitions back to the stage. Nor is it common that an opera (particularly in the romance-plot oriented bel canto tradition) takes as its subject the biblical flood.

The weirdness of *Il diluvio* lies in its lack of dramaturgical commitment. It is a composition stuck, like a Pompeii body cast into torsion by lava, between stage work and church oratorio, and also between the representations of incommensurable orders of events: romantic love and God-ordained natural catastrophe. It veers awkwardly between, on the one hand, choruses about the impending flood so anguished and well-composed that they speak to a contemporary audience almost directly, and, on the other, duets between sparring lovers whose prettiness feels both timeless and oddly untimely. Masbedo rendered this veering between apocalypse and love visually, in a staging that amplified the contrast to the point of camp. Chorus singers were flanked by silent performers on stage, meaning that the choral pieces corresponded to a stage full of people. The opening chorus "Oh Dio, di pietà" was searing, heartfelt, frightening even. It was delivered by the formidable chorus (who, like the orchestra, was on loan from La Scala) joined onstage by the same silent performers and local high school

Fig. 1 – *Il diluvio universale*, Teatro Donizetti, Bergamo (2023) © Gianfranco Rota.

students we'd seen outside the theater, still wearing their Greta Thunberg outfits: knee-length pastel waterproof capes, stern expression, holding a placard. When the group marches to the very proscenium, the sense of intimacy with the audience is so stark as to feel threatening, reminding me of Judith Butler's remarks about the power of simultaneity in large groups of people: the common thread between performance and demonstration (something that is true, and so powerful, about Thunberg's protests too).[6]

At the other extreme, the romance aspect of *Diluvio* exists in a deliberately stereotyped visual dimension. Musically, this corresponds to the *solita forma* of bel canto, the standard operatic formula for love duets, consisting of a series of short sung movements alternating recitative and aria to build dramatic momentum. Usually, this form unfolds around a basic structure that maps a change of heart around a particular topic: a relatively calm aria (cavatina) followed by new information (tempo di mezzo) delivered through dialogue, followed by an agitated aria where the news is processed and a new course of action decided (cabaletta). The problem in *Diluvio* is that the core couple is dramaturgically uninteresting, and so their solite forme are quite depressing to witness. Sela (gorgeously sung by Giuliana Galfandoni) and her husband Cadmo (a suitably boorish Enea Scala) are in the terminal stages of their marriage—she has become an eager follower of

6 Judith Butler, *Notes Towards a Performative Theory of Assembly* (Cambridge, MA: Harvard University Press, 2015).

Noah, and he, who hates Noah, is about to fall in the arms of another woman, Ada (a fun, vampish début by Maria Elena Pepi). Domenico Gilardoni's libretto for *Diluvio* gives no indication that Sela and Cadmo ever even actually liked one another and the music doesn't quite fill the gap. The staging of the love triangle is, perhaps intentionally, stereotypical to the point of parody. Everyone wafts in and out in gowns and coattails with a colorway straight out of a Molly Ringwald film: Sela, the good girl, is a fair-haired soprano in a bedazzled pink gown, and Ada the temptress is of course a mezzo swathed in red satin, her dark hair styled in voluptuous waves. By contrast, the male roles are almost accessory, musically as well as visually. This is a bel canto opera problem more generally: male characters tend to be morally immobile and, as such, less convincing when they work out their feelings through the cavatina–tempo di mezzo–cabaletta combo. Cadmo, the bad guy in *Diluvio*, is a flood-denier and seemingly interested only in dispatching Noah (Nahuel di Pierro, unfortunately indisposed after Act I and ably substituted by his understudy) and his acolytes. Noah, for his part, stands firm in his prediction of doom and need to evacuate the premises. The women of the show are instead flighty, torn, loud: in a word, operatic. Sela is torn between her loyalty to her husband and her belief in Noah and God, while Ada is a complex duplicitous character who plays confidante to Sela only so she can seduce Cadmo.

And so, love triangles of male and female rivalry play out even as the apocalypse looms. Musically, this is a challenging technical conundrum: the apocalypse is delegated to the chorus, while romance is driven by tenor–soprano axis. Even when the axis is joined by third or even fourth parties (like Sela and Cadmo are disrupted by Noah's bass and Ada's mezzo), the plot rotates around the tenor–soprano dyad. Switching convincingly between marital squabbles and choruses announcing the apocalypse. The entire opera plot rests on a foregone conclusion: human affairs are utterly irrelevant in the face of the oncoming flood. And yet, by dint of melodic force and structural repetition, our attention is jerked towards marital issues and trysts, and we watch everyone on stage dither about while the skies are about to come crashing down upon us.

We are more than familiar with the above condition. It is the very rhythm of everyday consciousness in twenty-first-century, ecocidal late capitalism. We live, by all accounts, in the end times, and yet are incapable of feeling any kind of way about the rising water levels, deadly wildfires, extinguished species, and toxic levels of plastic. At the time of the performance under review (and every day since) my attention had also

Fig. 2 – From left to right: Maria Elena Pepi as Ada, Enea Scala and Giuliana Galfandoni (foreground) as Cadmo and Sela. The two further people in the background are silent stage performers playing with cubes of red jelly. *Il diluvio universale*, Teatro Donizetti, Bergamo (2023) © Gianfranco Rota.

been fragmented by the fleeting yet unbearable images coming in daily from Palestine. Sure, breakups are more tangible than environmental and humanitarian breakdowns. But it isn't just this. To this pervasive and devastating set of news, we respond with the only coping mechanisms readily available: shortening attention spans, extended states of dissociation, and a kind of bored dread.[7]

Yet what I also realized as I watched Donizetti's *Diluvio* unfold in a series of lovers' squabbles, with the formulaic music that was made for this kind of plot, is that if there is a nineteenth-century version of the dopamine hit addiction fostered by Instagram reels and TikToks, this music comes close to this. I get the sense that, when wrestling with *Diluvio*, with its multiple genres, registers, Donizetti also was torn between the piercing choruses and the pleasant repetitiveness of solita forma. We, the living, are not special in our collective dissociation: what accomunates us to nineteenth-century audiences may be, in fact, our existence in a state of concerted desensitization. Here I am picking up the seminal argument made more than thirty years ago by Susan Buck-Morss who, glossing Walter Benjamin, suggested that

7 These are of course the widely experienced states we have learned to name during the pandemic lockdowns: screen fatigue, decision fatigue, attention deficit disorder, anxiety and depression, burnout.

the nineteenth century was the dawn not just of mass culture and media technology, but also of systematic ways of distancing and not feeling that were crucial to survival.[8] This she calls "anaesthetics," a range of practices ranging from the dawn of general anesthesia, to a whole system of dulling the pain of existence, be it opioids or small addictive nuggets of narration, or even the handling of time as a series of identical units.

It is hard to find better words to describe the work of Masbedo staging *Diluvio*—a deliberate enactment of precisely this process of overload and numbness. But the reason it worked is because Donizetti's music, too, may be an early and complex expression of anaesthetics.[9] Here lies the more profound truth about this bold staging. Masbedo's production, at its best, responded to this aspect of Donizetti in kind. Their production was not a mere blunt projection of modernist *hubris* onto a nineteenth-century number, but a recognition of a common ailment across nearly two centuries. Of course, this is still a questionable, bold interpretation, more so even than a superficial modernist window dressing. But it is undoubtedly far more thought-provoking and difficult to ignore. I think Masbedo's staging takes its cue from what is perhaps most dislikable about Donizetti's music for those of us who do not appreciate it: the unfolding of stereotypical dramatic plots to a repetitive, ubiquitous form, the simultaneous centrality of love plots and the kind of looping mechanism that handles these plots. Masbedo is, from what I can tell, staging an opera they don't actually like (an all-too-common occurrence among modern stagings of opera) but they make no mystery of their distaste: in fact, they flaunt it. And this works well to high-

8 Buck-Morss writes: "Being 'cheated out of experience' has become the general state, as the synaesthetic system is marshaled to parry technological stimuli in order to protect both the body from the accident and the psyche from the trauma of perceptual shock. As a result, the system reverses its role. Its goal is to *numb* the organism, to deaden the senses, to repress memory: the cognitive system of synaesthetics has become, rather, one of *an*aesthetics." Buck-Morss, "Aesthetics and Anaesthetics," 18.

9 I am aware that Buck-Morss' examples, including musical examples, are largely from the second part of the nineteenth century. Her example for the prototype of an overwhelming and desensitizing opera is Richard Wagner's *Gesamtkunstwerk*, and in this she follows the broad lead of the Frankfurt School (and of course specifically Theodor W. Adorno) in attributing to Wagner the symptomatology of a kind of sensorial alienation from reality. But of course, this is a circumstantial geographical bias; the kind of urban and technological realities Benjamin and Buck-Morss discuss are easily reflected—in different forms—in other European output, including Donizetti's work. And Donizetti and his work were of course no strangers to Paris, which was, according to Benjamin, the melting pot for this new relationship between media, aesthetics, and politics.

light the anaesthetic quality of a music, Donizetti's *Diluvio*, that doesn't always seem to like itself either.

Masbedo's dislike of the music is evident in the way they handle their visuals: the video footage rarely if ever responds to musical cues, and a lot of time it actively distracts (as I mentioned earlier) from the music, creating a kind of stubborn countertext, sometimes overwhelming, sometimes comical. One section has a patchwork of real found footage of ecological catastrophes (like so many phone screens doom-scrolling at once) accompanying the Act I showdown between Cadmo and Sela, where he accuses her of having an affair with Noah's son, Jafet; as marital squabble blossoms into a grand finale about impending collective doom, the eco-anxiety montage rolls on impassible, to great effect. When Sela comes back in Act II to see her children one last time, Masbedo set the scene as the after-hours of a banquet. Masbedo themselves (Iacopo Bedogni and Nicolò Massazza) snuck onstage to film live footage of silent performers lewdly feeding one another cubes of red and green jelly, the cameras panning on their faces and hands to a porny, grotesque effect. The variety of video material is dizzying: earlier we were regaled with a close-up video of a praying mantis, at a different point we see a kind of old-fashioned larder (with game hanging from the ceiling and all kinds of produce on the wooden table) rot in timelapse, like an animated Brueghel still life. One of Sela's early numbers, (a cabaletta of pious ardor "Ma qual raggio qui divino") is sung to a video close-up of Sela in full makeup, but underwater. Not all of it works. The close-up of Sela feels tautological and unnecessary (I also struggle with videos of close-ups of singers, though it is a styleme of contemporary opera stagings). Yet whatever was on the screen, it was, remarkably, never boring to watch (unlike many productions which use video as a kind of laptop screensaver for the back panel). If it is true that the footage could have been more sensitively timed to Donizetti's music, it is also undeniable that it followed a music of its own: it had a rhythm (usually slower than the musical rhythm), it bore the mark of truly thoughtful and creative montage, and so it genuinely honored the gazes it held hostage for two hours. It competes with the music earnestly, flooding it with a layer of genuine visual information that caused the focus to careen in and out of the music in a way that understandably angered some people into reaction.

The cry of that dismayed audience member on the second night was the climax, I believe, of an evening where many felt the video competed with, even distracted from the score. It was hard to focus, and in a theater, we expect the opposite. As such, when the music stopped for the video, it felt like

the culmination of a struggle between music and visuals where the music had lost. Of course, we could here make the easy argument that opera in Donizetti's time was not played to hushed audiences and dimmed lights (which are a late nineteenth-century practice),[10] that if we want to be true to Donizetti, demanding devotion to the music alone is a form of historical ignorance dressed as purism. But I don't wish to go there, partly because I don't think it is unreasonable to expect the staging not to interfere with the music, since it rarely ever does these days, and since we are expected not to be distracted by phones, videos, and chatter in the theater. I think people are right to be annoyed. It is annoying, yes, to have all these images of floods or obscene feeding of jelly intrude on the music. But it is also alienating to be dragged through two hours of cavatinas and cabalettas of (mostly) marital back-and-forths when the ark is ready to go and the thunder rumbles in the distance. And that alienation is somehow not so distant from the boundary between feeling and not feeling caused when a clip of a devastating wildfire or even a mangled body has the same length, formatting, and algorithmic frequency of an ad for skincare or a clip from our favorite film. Masbedo's staging, as I saw it, makes this case—the case for a continuity of anaesthetics between Donizetti and us—and asked us not to assume nineteenth-century opera can save us from our terrible case of the anaesthetics, particularly as, onstage and offstage, the dark clouds gather.

10 A convincing cultural history of the practice of light-dimming and audience silence during concerts and opera is given in James H. Johnson, *Listening in Paris: A Cultural History* (Berkeley, CA: University of California Press, 1995).

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Performance Review

Wind Phone, Operomanija: Notes on Vulnerability, Longing and Love

Phone booth opera *Things I Didn't Dare to Say, and It's Too Late Now*. World premiere: 1st December 2023, Lithuanian National Drama Theatre, Vilnius.[1]

Jelena Novak

Director and Dramaturge, Kamilė Gudmonaitė
Composer, Dominykas Digimas
Set Designer and Author of Video Projection Concept, Barbora Šulniūtė
Choreographer, Mantas Stabačinskas
Costume designer, Juozas Valenta
Lighting designer, Julius Kuršys
Video Designer, Jurgis Lietunovas
Music Director and Conductor, Ričardas Šumila
Choirmaster, Povilas Butkus
Director's Assistants, Agnė Ambrozaitytė, Kotryna Siaurusaitytė, Deivydas Valenta

Boy Naglis — Teodoras Lipčius (descant)
Brother — Ryo Ishimoto
Sisters — Emilija Karosaitė, Viktorija Zobielaitė (dancers)
Mother — Vitalija Mockevičiūtė
Grandfather — Vytautas Rumšas
Passengers — Diana Anevičiūtė, Jolanta Dapkūnaitė, Arūnas Vozbutas
Passengers and other characters — Lnobt choir singers: Gintarė Radauskaitė, Olga Radzevičienė, Lina Šarkienė (sopranos), Monika Buožytė, Jovita Dovsevičiūtė, Evelina Greiciūnaitė, Julija Smolič, Anna Trošina (altos), Egidijus Jonaitis, Mantas Ivanauskas, Kęstutis Papartis, Georgij POPOV (tenors), Dainius Jakštas, Žygimantas Jasiūnas, Donatas Žukauskas (baritones), Povilas Butkus, Šarūnas Čepulis, Martynas Kindurys (basses)

Producers: Operomanija, Lithuanian National Opera and Ballet Theatre, and Lithuanian National Drama Theatre, Vilnius

1 The article refers to the performance on December the 3rd 2023.

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It is the late afternoon of December 3rd, 2023. We are in Vilnius, navigating its snow-covered streets towards the Lithuanian National Opera and Ballet Theatre (LNOBT). LNOBT co-produced the "phone booth" opera *Things I Didn't Dare to Say, and It's Too Late Now*, which had its world premiere just two days prior. My intention was to meet Ana Ablamonova, the founder of another co-producer, Contemporary Music Theatre Company Operomanija, a platform built to support unconventional opera and musical theater in Lithuania.[2] Upon reaching the building of LNOBT, I realize that the performance will actually happen at another venue. So we continue through the snow towards the Lithuanian National Drama Theatre (LNDT) instead. LNDT is the third co-producer of *Things I Didn't Dare to Say* and the actual host of the performance on its stage.

Being a relatively small city, Vilnius allows us to navigate through the icy streets quickly, and to arrive at the right place without much delay. En route, we walk by an advertisement that deserves a brief detour: a poster for the opera *Sun and Sea* by Vaiva Grainytė, Lina Lapelytė, and Rugilė Barzdžiukaitė, scheduled to be performed in Vilnius also in December. This opera installation made a significant mark on the world of contemporary opera when it premiered in 2019. For their work, the trio of authors received the Golden Lion at the Venice Biennale. The provocation of *Sun and Sea* lies in its seamless integration of various elements drawn from across the realms of visual art, performance art, and opera. I had the opportunity to see it both in Rotterdam in an industrial context and recently in my hometown of Belgrade, performed in an art gallery. The experience was gratifying, transporting us to a summer holiday atmosphere with a critical turn. While *Sun and Sea* tells a completely different opera story, it is pertinent to the focus of this review. For the two operas emerge from a shared set of circumstances, and that is the cultural context of Lithuania, context which has enabled Operomanija, a tiny company with only three employees, to organize about two hundred events of music theatre in 2023 alone.[3]

In front of the Lithuanian Drama Theatre, our attention is immediately drawn to the elegantly illuminated phone booth (Figure 1). It had previously stood in front of LNOBT from February to October 2022. During that time, it served as an open invitation for anyone to step inside and engage

2 "Operomanija" is funded by the Lithuanian Council for Culture, Vilnius City Municipality, the Ministry of Culture of the Republic of Lithuania, LATGA, AGATA, Nordic Culture Point.

3 "A Glance at the Past Year and the Year Ahead," Operomanija official website, accessed May 10, 2024, https://operomanija.lt/en/zvilgsnis-i-praejusius-ir-ateinancius/.

Fig. 1 – Phone booth in front of the Lithuanian National Drama Theatre. Photo by Jelena Novak.

in one-way conversations on the phone, equipped with a recording device. That evening, the phone booth remained functional, waiting for visitors in front of the venue as a portent of things to come, and maybe also as a reminder of longing. I decided to try it, and as soon as I picked up the receiver a message in Lithuanian indicated, I assume, that I would be recorded. A printed textual instruction was also on display. I left there a few words in my mother tongue, just for the record.

> In 2010, Itaru Sasaki from Otsuchi, Japan, learned that his beloved cousin had cancer and only had three months to live. After his cousin's death, Sasaki built an old telephone booth in his backyard so that he could communicate with the deceased every day and have his words carried away by the wind. In 2011, a tsunami struck the Otsuchi area, killing ten percent of the city's population. Gradually, people became aware of the telephone booth and started visiting Itaru Sasaki's garden to call their lost loved ones.
>
> From 1 March 2022, just one week after Russia started the war in Ukraine, an old telephone booth, identical to the wind phone that stood in Japan, was installed next to the Lithuanian National Opera and Ballet Theatre. People were invited to come and "call" those to whom they didn't have the chance to say what they wanted in time, and now it was too late. In over six months, the

> phone has been picked up about 4000 times. The audio recordings of all the authentic stories became the basis for the opera's libretto.[4]

Those two paragraphs, taken from promotional materials, reveal the inspiration for the piece. Sasaki's installation subsequently became known as a "wind phone" and replicas of it were installed around the world.

The main two characteristics of the "wind phone" are that it is not connected to a phone network as a "real" device, and because of that all the conversations can only be one-way affairs. So, it is not a phone in a strict sense of the word, as it does not transmit the voice anywhere. A person goes there to imagine, invent or re-enact the conversation with someone who does not exist anymore and to virtually spend time talking and thinking to that person, as in a kind of confessional. Yet in that confessional there is no listener. The speaker is the only listener.

The wind phone is actually a stage that temporarily accommodates a "theater" for the voice—a theater of monologues, with people mostly discussing the traumatic experience of losing a loved one and coping with that void. The phone device serves as a prop that facilitates the speakers' monologue and makes them more prone to relieve the burden from their hearts. The "mechanism" of this phone also delves into the very nature of conversation itself. When we talk to someone, we are also talking with ourselves; we mirror what we know, what we feel, what we are afraid of, and what we hope for. So, the absence of a real listener is, in this case, used as a poetic license. The conversation becomes a soliloquy, a *séance*, a remorse, a documentary—almost an imprint of emotional burden in a voice.

Even before the show began, the solitary and reflective atmosphere of the phone booth in front of the theater set the stage for intimacy. The voices used in this opera convey more through what they don't say than through words. The most intriguing and moving meanings are hidden in the intonation and the manner of speaking. It's as if the entire person is encapsulated within a voice, complete with a whole spectrum of emotional nuances.

The opera opens with a small boy entering the stage and standing by yet another phone booth, albeit an empty one (Figure 2). He delivers an introduction to the opera in Lithuanian. The scene itself is minimalist, and the dynamics between the boy, the booth and the light remind one of Robert

4 *Things I Didn't Dare to Say, and It's Too Late Now*, promotional text. See https://www.opera.lt/en/whatss-on/things-i-didnt-dare-to-say-and-its-too-late-now-e212 (accessed January 18, 2024).

Wilson's directorial style. Following the boy, various characters appear on stage, one at a time, costumed as passengers carrying their baggage. Each of them briefly shares a few words about their predicament. I suppose those characters represent all those who came and "confessed" their longings in the phone booth, and whose vocal recordings were used as the sonic and musical tissue of the opera. After we get to know the characters that come and go across the stage the boy reappears. He enters into the phone booth and eventually pushes it off stage.

In the background, ambient music featuring marimba and strings builds up the atmosphere. Suddenly, the stage morphs into what looks like a departure hall of an airport (Figure 3). An airport departures board displaying numerous cities—Dubrovnik, Kyiv, Lisbon, Amsterdam, Oslo, Madrid, New York, among others—captures the audience's attention. Some of the passengers from the introductory scene reappear here, creating a stage ambience reminiscent of capitalist realism, and the work of such directors as Peter Sellars. A certain post-minimalist aesthetic purity lends the performance an air of abstraction. As the scene unfolds, a man and a boy, perhaps a grandfather and grandson, enter the stage playing with a remote-controlled toy car.

Loudspeakers playback fragments of confessions made in the phone

Fig. 2 – *Things I Didn't Dare to Say, and It's Too Late Now*, opening scene. Photo by Dmitrijus Matvejevas © Lithuanian National Drama Theatre.

Fig. 3 – *Things I Didn't Dare to Say, and It's Too Late Now*, airport scene. Photo by Dmitrijus Matvejevas © Lithuanian National Drama Theatre.

booth. Sometimes we hear only the voice speaking; at other times, the intonation of that voice is transposed into the choir on stage, which develops the motif further by singing and layering it as in a kind of madrigal. Sometimes, the motif is found in the instrumental ensemble. The entire musical fabric of this opera is a network that grows from the intonations and the atmospheres brought about by the recorded voices. Sometimes the statements are extremely intimate and sad, revealing the vulnerability of human nature and the insecurities that fill our relationships.

The libretto consists of transcripts of the selected phone booth recorded monologues. In the first part, it brings together the background to several love stories, all of which appear to be heteronormative and culminate in separation or loss. The male or female voices mostly express remorse, grief, and longing, feeling emptiness as the love they talk about will never have a "happy ending." The second chapter gathers several monologues about grandparents. These are warm stories about unconditional love and longing. The fragment of one monologue directed to a deceased grandmother illustrates the atmosphere:

> Don't worry, I have cut the grass, pruned the trees and trimmed the hedge. All is well in the garden. Of course, your hands are missing. The strawberries don't grow, the raspberries don't bloom so well, the currants don't yield so

much. I miss you. We all miss you. I know you hear me. I know you hear me and you answer, but I can't hear you in this city noise.[5]

And the singing voices pick up the above-quoted text, continuing to develop it musically.

(…)
All is well in the garden, all is well
I have cut the grass, pruned the trees
All is well in the garden, all is well
All is well, in the garden, well
(…)

Another fragment of the libretto deals with exchanges between brothers and sisters while the last section gathers conversations with parents who are no longer alive instead of present.

Unexpectedly, a woman in the audience begins to cry. Perhaps she recognized her own reflection in the poignant scene where a daughter calls her deceased father through the wind phone… Her companion comforts her, holding her hand. This moment is cathartic, revealing the underlying mechanism of this opera performance. We identify with what we hear as if we were the ones uttering the monologues. There is no acting, pretence, or artistic embellishment in the recorded excerpts. Those voices convey genuine emotions—grief, hope, love, and remorse. These individuals are imprinted in their vocal recordings at their most vulnerable. This vulnerability resonates with the audience. The intonation of the voices conveys authenticity, and the reality of their experiences is palpable. Singing further amplifies and elevates this vulnerability, creating a profound connection between the performers and the audience.

One of the most poetic scenes features Ryo Ishimoto. He stands alone on stage with a large fan. As the fan starts to blow, a big parachute, handled by Ishimoto himself, fills with air (Figure 4). Minimalist and highly symbolic, the image of the man with the parachute likely represents Itaru Sasaki and his words as carried by the wind (which inspired and encouraged many of his compatriots to relieve their grief in the wake of the Tohoku Earthquake and Tsunami). By comparison, the scene where two female characters suddenly start to sing (with microphones) Kate Bush's song "Running Up that

5 *Things I Didn't Dare to Say, and It's Too Late Now*, libretto (unpublished).

Fig. 4 – *Things I Didn't Dare to Say, and It's Too Late Now*, Ryo Ishimoto. Photo by Dmitrijus Matvejevas © Lithuanian National Drama Theatre.

Hill (A Deal With God)" appears as a sudden transgression: a cabaret performance that comes from a different realm. However different from the postminimalist atmospheric ambience of Dominykas Digimas' music for this opera, this song also speaks about longing and loss but breaks through the operatic tissue as a subtle parody. It echoes:

> It doesn't hurt me (yeah, yeah, yo)
> Do you wanna feel how it feels? (Yeah, yeah, yo)
> Do you wanna know, know that it doesn't hurt me? (Yeah, yeah, yo)
> Do you wanna hear about the deal that I'm making? (Yeah, yeah, yo)
> You
> It's you and me
> (…)[6]

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6 Kate Bush, "Running Up that Hill (A Deal With God)," opening verses. Taken from Kate Bush, *Hounds of Love*, EMI 062-24 0 3841, 1985, LP.

Fig. 5 – "The booth of missed opportunities," Vilnius. Photo by Jelena Novak.

Earlier that day, while exploring Vilnius, we stumbled upon another phone booth entirely unrelated to the opera project. In contrast to the one standing in front of the theater, which offered a "second chance" for untold stories to unfold, this chance encounter seemed to embody a sense of missed opportunities. This booth, discovered by coincidence, was out of use, devoid of a phone, and adorned in festive Christmas decorations (Figure 5).

Yet, despite being deactivated and inaccessible, it exuded a certain solemnity, perhaps even a somewhat carnival-like atmosphere. It looked to us like a place of remembrance, a transparent archive of untold stories, a booth for unheard voices, an atlas of undiscovered territories, a stage for hugs that were never shared, kisses that were never given, and a pillow for dreams that were never dreamt. The "booth of missed opportunities" stood there locked, serving as a monument to moments lost, never to be recovered. Perhaps only the act of singing could ever express the sense of vulnerability inherent in such circumstances. That vulnerability is perpetuated, it remains the main force behind *Things I Didn't Dare to Say*. Its speaking and singing voices are loaded with vulnerability and echo long after the end of the performance.

The last words of the libretto bring forth the proverb that underpins the whole piece: in the end, we need to look at ourselves in the mirror and question the forces that guided us down certain paths, and not others…

Tipsy man: What's next? "Beeeep...," just "beeeep...." And nothing else? Absolutely nothing? Then who am I talking to? Oh, I see. To myself.[7]

7 *Things I Didn't Dare to Say, and It's Too Late Now*, libretto (unpublished).

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