

The Ethnography of Enchanted Listening: How Sonic Beings Become Social Facts

Victor A. Stoichiță



All content is licensed under a Creative Commons Attribution 4.0 International License.

Received: 11/07/2022

Accepted: 08/04/2024

ORCID iD Victor A. Stoichiță:  [0009-0003-5901-1310](https://orcid.org/0009-0003-5901-1310)

Institution (Victor A. Stoichiță): Centre national de la recherche scientifique (CNRS) / Université Paris Nanterre, Centre de recherche en ethnomusicologie

Published: 13/12/2024

Last updated: 13/12/2024

How to cite: Victor A. Stoichiță, The Ethnography of Enchanted Listening: How Sonic Beings Become Social Facts, 'Listening: Cultural Histories and Comparative Phenomenologies,' special issue, Musicologica Austriaca: Journal for Austrian Music Studies (December 13, 2024)

Tags: [Agency](#); [Auditory scene analysis](#); [Enchantment](#); [Greece](#); [Imagination](#); [Makam](#); [Materiality](#); [Ontology](#)

The author is grateful to Ourania Lampropoulou and to the participants of her masterclass on Greek popular music for their collaboration during the ethnographic phase of this project. He also thanks Bernd Brabec, Alexander Wilfing, and the four anonymous reviewers, for their insightful comments on previous versions of this paper. Its key concepts greatly benefited from discussions at the Annual Meeting of the Österreichische Gesellschaft für Musikwissenschaft (Austrian Musicological Society) 2020/2021, where it was first presented.



Abstract

Enchanted listening is what happens when listeners perceive in external sounds qualities that can't normally be heard. They might, for instance, describe "shapes," "colors," "resolutions," or "attractions." Animistic descriptions are also frequent, with sounds being ascribed their own emotional "characters," "personalities," spiritual "drives," and other kinds of intrinsic agencies. Enchanted listening is what people do when they listen to something as "music," but accounts of enchanted auditory experiences are also frequent in cultural contexts where "music" is not a meaningful concept. What kind of evidence can we gather about auditory beings that have social existence without being "normally" heard? As an empirical example, this paper analyzes references to Ottoman *makam* during a class of Greek music in southern France. To all participants, *makam* was a distinctly "foreign" concept. Moreover, most of them played instruments in equal temperament, while the Ottoman theory is predicated upon the use of untempered intervals. Yet something that the participants called *makam* became obviously "real" for them in the interaction. What was it, and how did this happen?



[previous article](#)



[back to index](#)

How Real Are Sounds?

Auditory Streams: One Wave Fits All

In the introduction to *Auditory Scene Analysis*, Albert Bregman draws a sharp distinction between acoustic waves and auditory streams. Auditory streams are perceptual groupings “of the parts of the neural spectrogram that [seem to] go together.”^[1] Confronted with a complex wave, the brain forms several representations of it, in parallel or in close succession. Each of them segregates the complex wave into streams. One (and only one) of these representations becomes conscious. In most ecological settings, that should be the one that most adequately fits the “real world”: each stream should reflect the activity of one physical source, and vice versa. Auditory stream segregation is largely unconscious and (at least in Bregman’s view) obeys principles that have been selected in evolution and are now pretty much hardwired in the brain.^[2]

It remains, however, a “heuristic” process, and as such, it can fail. When it does, writes Bregman, “the emergent perceived shapes will not correspond to any environmental shapes. They will be entirely chimerical.”^[3] Researchers have found many recipes to produce “chimeras” in audition. Some of them are quite simple. Consider, for instance, the six tones experiment.^[4]

1. Choose six tones, three in a lower register, three in a higher register; the two registers should be at least one and a half octaves apart.
2. Make a sequence where each tone from the lower register alternates with a tone from the higher register.
3. Loop the sequence and play it back.
4. At low speed, listeners hear one sequence of six tones. At higher speed, listeners hear two sequences of three tones each. Furthermore, reports Bregman, “it was impossible for the listeners to focus their attention on both streams at the same time.”^[5]

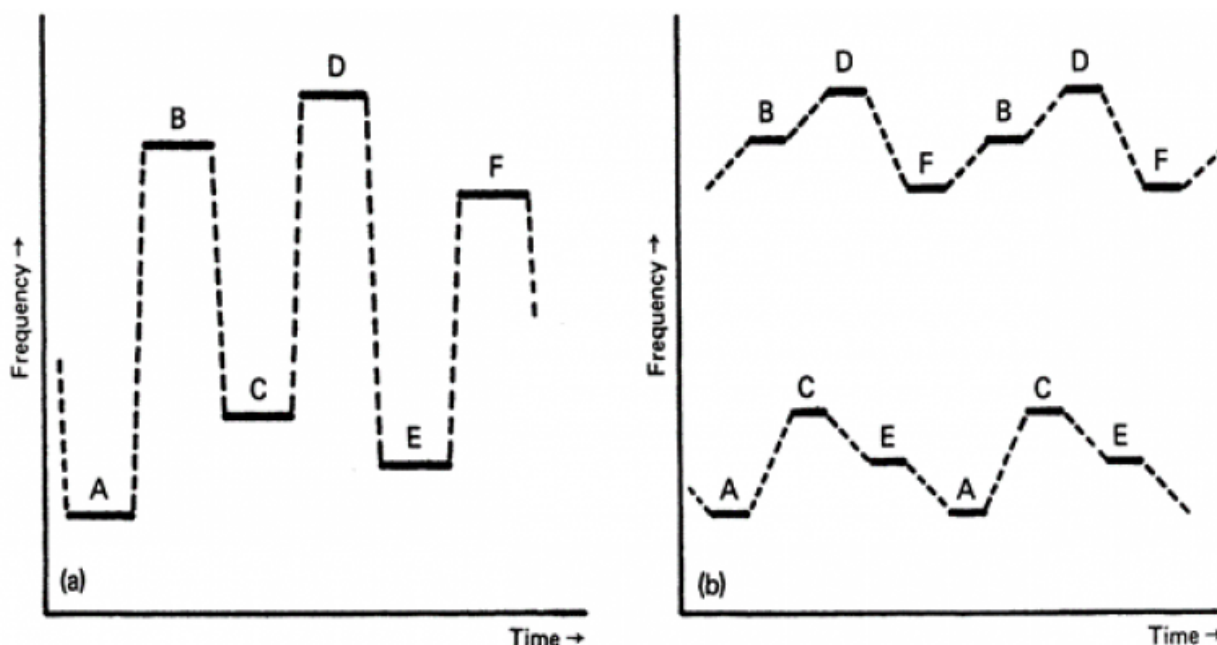


Figure 1, from Stephen McAdams and Albert S. Bregman, “Hearing Musical Streams,” *Computer Music Journal* 3, no. 4 (1979): 27: “A repeating 6-tone sequence composed of interspersed high and low tones can result in different percepts. In figure 1a, with high and low tones alternating at a tempo of 5 tones/sec., one perceptual stream is heard. In figure 1b, at a tempo of 10 tones/sec., the high tones perceptually

segregate from the low tones to form two streams.”

Two sequences for one environmental shape is an illusion or a chimera, in Bregman’s terms. If the point of listening is to inform us ecologically about the world, then perception should not change with playback speed, especially not when, quite obviously, the number of sound sources in the experiment room remains unchanged. But not only does the listeners’ perception change; the transformation is also unavoidable, as long as playback speed is sustained. At high speed, the listeners *can* no longer listen to one sequence. They are *forced* into a world where “a single rapid sequence of tones seems to ‘break up’ perceptually into two or more parallel sequences, as if two or more different instruments, each restricted to a certain class of sounds or range of frequencies, were playing different but interwoven parts.”^[6]

How Real Is Music?

“Chimeras” are frequent in musical experience. The experiment reported by McAdams and Bregman, for instance, resembles techniques used by Baroque composers to produce the impression that a monodic instrument plays two intertwined musical voices.^[7] But to say that this is an auditory illusion implies a sense of “reality” from which it departs. In the experimental study of auditory scene analysis, “reality” is taken to mean ultimately the world of physical sources. Musical experience, however, comes with—and might actually be defined by—a very different sense of what is “real.”

In many musical settings, the correct attribution of streams to physical sources is easily achieved: listeners swiftly segregate the sounds of that cello from those of that singer or that guitar. This recognition is trivial and does not appear to play a very interesting role in listeners’ accounts of their musical experiences. Their accent is more often on the apparent perception of things that can’t normally be heard. There might be colors, shapes (not the shapes of the sound sources), movements (not the movements of the sources), and even person-like beings endowed with emotional “characters,” “agencies,” and sometimes “will.” To which reality can these reports be said to pertain? How does auditory scene analysis work in musical experience?

Stoichiță and Brabec de Mori argue that listening to something as music depends on a broader attentional mode that they call “enchanted listening.”^[8] According to them, humans adopt at any time one posture of listening, out of at least three which are universally available. Alternative postures are alternative modes of focusing auditory attention, which result in alternative auditory ontologies.

- In “indexical listening,” sounds are related to their physical sources;
- in “structural listening,” sounds are searched for abstract patterns;
- in “enchanted listening,” sounds are split from their physical sources and seem to form an autonomous realm “where sounds interact primarily with each other.”^[9] These perceived interactions constitute peculiar auditory objects. Although listeners describe them along dimensions that are not normally audible, Stoichiță and Brabec de Mori hold that such descriptions are not just metaphors. In their terms, enchanted listening is an auditory practice that reflects “collective auditory schemes pertaining to distinctly auditory ontologies.” To experience sounds as music would mean to apprehend sounds according to collective schemes that are proper to the auditory realm.

The “reality” of “enchanted” things remains debatable, however. First, the two terms stand quite obviously in tension. Stoichiță and Brabec de Mori refer to Alfred Gell’s “techniques of enchantment,” but Gell’s project is significantly different from theirs. Gell seeks to identify the

commonalities of “art” and “magic,” two kinds of practices that have sparked some debate in anthropology. He proposes that both are techniques designed to alter the way in which other beings perceive social reality, in short, “techniques of enchantment.” This description applies readily to magic, while also addressing the “essential alchemy of art, which is to make what is not out of what is, and to make what is out of what is not.”^[10] For Gell, techniques of enchantment have real effects, but this does not mean that the enchantments themselves are “real” in any sense. Quite the contrary, they exploit “innate or derived psychological biases,”^[11] and prototypical examples that Gell studies are traps.^[12] Back to chimeras then: music as an illusion of the senses, the art of making sounds into things that they are not.

On a similar line, Jérôme Dokic challenges Stoichiță and Brabec de Mori’s assertion that enchanted listening has ontological consequences. For Dokic, enchanted listening involves simply “the ability to hear something as something else.”^[13] It is a way of “listening-as,” as if the objects of auditory perception had non-auditory properties. It does not follow that they *actually* have these properties:

The point of hearing-as is that it can superimpose a non-perceptual ontology onto the proper objects of auditory experience ... For instance, one can construct a narrative according to which sounds are moving, even intentionally, but the narrative will be *necessarily* false.^[14]

In Dokic’s view, the proper objects of auditory perception are not physical sources either, but rather “monadic events happening to material objects.”^[15]

Interestingly, the theory of “enchanted listening” has also been criticized in the reverse direction by Tim Ingold. For him, the problem is not that it confuses enchantment with reality but rather that it implies an objective reality that is largely an illusion. In Ingold’s view,

the relation between the listener and sound is not—as Gell would have it, and after him, the authors of [that] paper—between an agentive subject and an auditory object, as though you could draw a line connecting the two. It is rather the affective correspondence of concurrent and ongoing movements, that of the listener’s auditory attention, and that of things resounding.^[16]

With this important correction added, Ingold holds that “all listening is enchanted.”^[17] For him, sounds are intrinsically and literally en-chanting because they exert a force on the listener: they capture one’s attention, and then,

you are drawn inexorably along the same auditory path ... The song is not an object. It is not left behind, precipitated from the flow of its production. Nothing is left behind. The song exists only for as long as it is carried on, continually swelling in its advance while simultaneously fading on the retreat. ... Listener and sound literally go along together, caught up in each other’s resonance, and in a direction orthogonal to the connection between them—just as the river flows orthogonally to the connection between its banks. In this affective correspondence, surely, and not in the relation between agent and object, lies the real meaning of enchantment, and the genesis of sound.^[18]

This comes very close to another argument that is now widespread in ethnomusicology, namely that music should not be studied as an object but as the process of mediating relations in sound^[19] or, in short, “musicking.” In Christopher Small’s words:

Music is not a thing at all but an activity, something that people do. The apparent thing “music” is a figment, an abstraction of the action, whose reality vanishes as soon as we examine it at all closely.^[20]

The “reality” of the objects of enchanted listening—and of music in particular—appears then to be questionable from at least two different angles. Its ontology might not be a real one (we might be simply “listening-as”). Or there might not be an objective reality at all: instead of sounds and music, there might only be processes of sounding and musicking.

Despite these critiques, the concept of enchanted listening remains interesting to me for at least two reasons. First, it is part of a theory that describes the *choices* inherent in the act of listening. Such a theory stands apart from others that state what sounds or music *are* or *are not*. Enchanted listening describes one way in which they *could* be for a particular listener at a particular moment. In other words, the theory of enchanted listening claims simply that this listening posture is *available* to all human beings and *evidenced* in all human societies. It differentiates between “music,” a culturally defined set of acoustic behaviors, and the kind of listening that we typically associate with these behaviors. One can listen to “music” in non-enchanted ways, and enchant in the act of listening acoustic productions that are not considered “music.”

Second, the ontology of listening is not some abstract preoccupation; it is a question that arises when people report hearing things like lines, textures, attractions, or gods. How can anthropology and musicology make sense of these reports? If one treats them as metaphors, what non-metaphorical reality do they stand for? And if one holds that “music is not a thing at all but an activity,” how to account for the fact that so many musicians, music lovers, and traditional theorists all over the world just don’t see it that way? They examine the matter just as closely as we do, and yet they come up with descriptions of musical “things” like songs, cadenzas, *makams*, *ragas*, riffs, beats, notes, and so on. In practice, enchanted listening produces auditory *matter*, a fact that theories of music-as-action tend to underestimate.

Enchantment and Materiality

Materiality has sparked some debate in anthropology. On the one hand, the distinction between subjects and objects has become notoriously untenable. Anthropologist Daniel Miller traces this view back to Hegel’s discussion of “objectification.”^[21] Hegel considered humanity and materiality to be constituted reciprocally in a common process. Subjects become what they are by seeing themselves in a mirror of things that they create. Humans are molded in material cultures that they inherit from previous generations, and that they partially shape in their own turn. Bodies, objects, laws, artworks, or dreams reflect their originators and shape them in return. In objectification, analyzes Miller,

all we have is a process in time by which the very act of creating form creates consciousness or capacity such as skill and thereby transforms both form and the self-consciousness of that which has consciousness, or the capacity of that which now has skill.^[22]

This idea runs through Bruno Latour’s critique of the modernist “constitution,” Karen Barad’s theorizing of “entanglement,” and Anna Tsing’s call for a “more-than-human sociality.” It is also foundational to Steven Feld’s “acoustemology” and is echoed in Tim Ingold’s critique quoted

above.^[23]

On the other hand, the ultimate truth that subjects and objects are constituted relationally cannot be a resting point for anthropology. Simply put, although it might be philosophically true, it is not how people think of their worlds. As anthropologists, writes Miller again,

we will have at some point to descend from this place of ultimate revelation at the mountain's peak. We will have to return to the mass populations who consider themselves to be, in fact, people using objects. It is important therefore to explicitly map the downward path back to ethnography.^[24]

If we start from the ultimate view that sounds and listeners are constituted relationally, there are at least three paths down the mountain (along the three listening postures outlined above). Each of them takes us to different auditory realms. Related to these ontological differences are differences in how listeners constitute themselves as subjects. In different worlds live different kinds of beings, and that applies not only to the auditory things but also to those who apprehend them in listening.

How can non-physical worlds emerge in listening? How can those worlds become social realities to which people relate collectively? How are people affected when they inhabit those worlds? These are questions for an ethnography of enchanted listening. It describes how a group of people refer to an auditory ontology that is, at the same time, free from the physical world, and a fact that they take for given. It reflects as well on the subjective and interactional possibilities of this world: how people use it to do things that they could not do otherwise.

Let us illustrate this with a real example. And to make the example really concrete, let us suppose that we have crashed down from the top of the mountain, straight into the ethnographic setting. We have lost most of our theoretical baggage along the way; we do not really know where we are or what to expect. As in a tale perhaps, we do not even know whether reality in that world is the same as what we know it to be.

An Affair with Degrees

Once upon a time, in a faraway country, there was a room. In that room, there were eight people. It was ten o'clock in the morning on a nice spring day. The room was large, with gray walls. Heavy-duty linoleum lined the floor. Some posters and kids' drawings were pinned here and there onto the walls. There was a grand piano under a tarp, a whiteboard, part of a drum-kit in a corner, and another piano (electric) against a wall.

In the room were eight people, me included: three male and five female, ages ranging roughly between twenty-five and fifty. Seven of them were seated on chairs placed in a semi-circle and facing the whiteboard. Each of these people had an instrument close to them: violin, Greek *bouzouki*, Iranian *târ*, clarinet, Bulgarian *kaval*, Anatolian *kaval*, accordion. The eighth person's seat faced the semi-circle. She had a Greek *santouri* close to it. The eighth person did not use the seat so much, however. Most of the time she stood in the space between her chair and the whiteboard.

The windows to the yard were opened; the rumble of the street came in occasionally. Somewhere nearby, things were being cut with an electric grinder. One could also hear a big hammer nailing

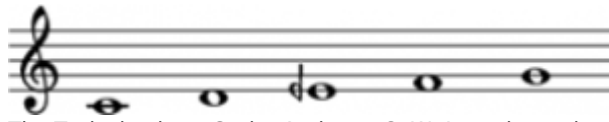
things intermittently.

Introducing Rast

Ourania, the woman near the whiteboard, spoke French with a slight accent. She said:^[25]

We lay the Rast on C. That way, we don't have too many alterations when we write.

[Writes on board:]



The Turks lay it on G, the Arabs on C. We're going to lay it on C. But this doesn't mean that—Rast is merely a position. We put it on C only for writing.

In Ottoman theory, said Ourania, the reversed flat would indicate that E is lowered by a comma, which is one-ninth of a tone.

Ourania: We could say that a comma is not a great difference, is it? We could say this.

[Participants nod. Sophie: "I'm not sure that I really can hear a comma ..."]

Ourania: One comma is not a great difference, true. But what's interesting for us is its meaning. It means suppleness.

When we see notes with intervals of eight or five [commas], that is, things that are a bit supple, we're not interested in the commas, because in tempered musical practices, there is no comma. And yet we play the same tune, with different instruments, and one hears the mode.

What's interesting is that [when it's supple] the degrees move (*les degrés bougent*). You see? The degrees are not fixed. Whereas when it's hard, they are more stable.

Ourania said that the same intervals played "hard" would be a Çârgâh pentachord.^[26] The difference between Rast and Çârgâh, she added, is a matter of "attractions." She explained that attractions happen when the pentachord is "supple," but not when it is "hard." To illustrate, she sang two contrasted examples.^[27] First:



Second:



What was the difference, she asked? Someone said: "the attraction, it creates an attraction."

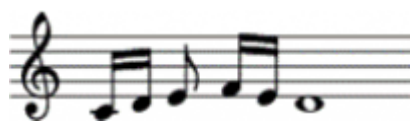
Ourania: Yes, the degrees are mobile. When we say “attractions,” it means that there is a force that appears between two positions. ... We take a position that is not the tonic, not the basis of the tetrachord, as our center. Then it attracts everything around it.

Ourania speaks as if sounds could be more or less supple and as if between them existed a force. Are these metaphors? Or is it something that one could actually *hear*?

The Suspended Cadence

In Rast pentachord, explained Ourania, the tonal center is the first degree. But the second degree can also serve as a temporary resting point.

On Rast, especially before the final cadence, before concluding—before going back home to sleep at night, we have a suspended cadence on D, on the second degree [sings, with solmization]:



For those who play chords, one can often hear a slight hint of a G chord, or just a G [note], G-D. [resumes singing]



Each of us in turn tried to play that cadence in a short improvisation. Ourania commented after each try, gave advice, and asked to play again, one or two more times. On my turn I played the following (on my PVC kaval flute).



Ourania: That’s fine. But when you went on the D, I, for one, heard it also as a slight modulation to Uşşak. It’s fine. But we could lower even a bit more the ... We could nearly do the attraction of Uşşak on Segâh.

Victor [puzzled]: Hmm ... The attraction of Uşşak? ... on? ...

Ourania: I mean ... Look, as we were going to discuss the Uşşak tetrachord a bit later anyway, we’ll do it now. Because we’ve just heard it.

I, for one, had definitively not “heard” what Ourania claimed that we, collectively, had heard. Her initial description of the “suspended cadence” sounded familiar indeed. I knew that I had already heard things like that and possibly played them on occasion as well. But the “thing” at stake was more precise than what I had figured. Ourania employed a “hearing” scheme that was more detailed, and with that scheme, new affordances arose.

The Uşşak Parenthesis

Instead of just a cadence, explained Ourania, one can also use the second degree as a center.

Ourania: So we have the Rast pentachord here [writes the Rast pentachord again]. And on this second degree [shows the D], which is called Dügah, with all positions shared, we have a tetrachord that is called Uşşak [draws a bracket under the tetrachord].



John: It's called ... Dügah?

Ourania: Dügah. And it's one major tone above Rast. All positions are common. This means that we can go from one to the other naturally (*on peut passer de l'un à l'autre de manière naturelle*).

John sounded confused. Ourania had explained earlier that Rast pentachord started on the degree called Rast. This seemed to have some logic, but now the Uşşak tetrachord started on the degree called Dügah ... Interestingly, Ourania's answer to this does not resort to the French name *ré*, which would have been the most straightforward way to refer to the note drawn on the board. Instead, it confirms the new name Dügah and redefines it in relation to the previous one ("one major tone above Rast").

If the positions are common, asked someone, then what is the difference? Ourania had obviously expected the question and smiled with delight: "What's the problem?" she rephrased. "The problem is the behavior of Segâh. That is the third degree."

Because the Segâh, this third degree, flexible (*souple*) ... moving (*qui bouge*) ... that never stays in place ... that doesn't keep quiet, what else can I say? When it is on a C tonic (*une tonique de do*), it has a dominant position, it attracts (*il attire*). But on a D tonic (*une tonique de ré*), it becomes sensitive (*sensible*).^[28] A sensitivity somehow ... the kind of sensitivity that one might have when one is in love, for instance, you see? When one is ready to do things. We keep our position, we're a bit higher, but when the tonic attracts us, we fall like this.

That's why this tetrachord often depicts lovesickness. In [Ottoman] classical music, it's about divine love. In a traditional [popular] context, it's about love ... well, as we know it in traditional music.

Shall I give you an example? [Sings:]



The first staff shows a melodic line starting with a quarter rest, followed by a quarter note, then a series of eighth notes with a sharp sign. The second staff continues with eighth notes, including a flat sign. The third staff features a trill-like figure with a sharp sign, followed by eighth notes and a final quarter note.

Here, I didn't want to say anything. I stayed on Rast. [Sings:]



The staff shows a melodic line with eighth notes. A bracket is placed under a section of the line, and two downward-pointing arrows are positioned above it, indicating a specific musical feature.

And when I want to go back, I don't lower the E, you see?

But although the move seemed quite clear when she sang it, it was not easy to reproduce. The following discussion occurred after several of Marie's attempts:

[Marie stops, obviously dissatisfied.] Ourania: Imagine the sound of each mode! Something ... What will you say? How would you represent Rast?

Marie: Majestic?

Ourania: [Ok], then play us something majestic.

[Marie plays again on her violin]



Ourania: That's beautiful. And it flows super-naturally (*ça passe super-naturellement*). Carry on. [Marie plays again:]



Ourania: That's beautiful, and it's exactly the character that we needed. Because you told us what happened here. [Sings:]



And then you went back to something that shows that it's ok, this is over, and now all is well. [Sings:]



It's all behind us. You tell it as a parenthesis, as a color, in lieu of your suspension, and now it's all fine. That's what you told us.

Later on, Marie would refine her performance of this move even more. But already that day, I could see several participants nod in approval right after her E flat. It was immediately clear to those present that after the unsuccessful attempts, the “right” —or “real”?— thing had happened.

The Love Affair

Sophie (like many of us) encountered difficulties returning to a convincing Rast after the Uşşak parenthesis. On one attempt, she stayed with the E flat for too long after the parenthesis should have been closed. [Plays on her accordion:]



Ourania: There was a little ... worry. You were on the phone at the beginning: "How are you? Yes, I'm fine, I'm all right. It's been a long time. But it's all fine [Sophie laughs]. Meanwhile, you know, I had an affair. It lasted for a long time ..." And in the end, your story, it was ... perhaps not sad, but still a bit melancholic in the end. Did you notice that? With your E flat?

Sophie: Yeah. But I ... Shouldn't I always put an E flat when I go downwards?

Ourania: No. When you go back on Rast, you have an E natural. You continued with an E flat. Which shows that the affair is not yet ... [Both laugh ... Ourania, voice on the phone:] "Don't worry, I'll be fine!" [They laugh again].

Now you're going to tell him that you're really ok. He must believe you.

Sophie tried again and produced something more convincing. Julie's turn came next. She played the following on her clarinet.



Ourania: That's good. And try to create images on the character of each portion, each tetrachord. Tell us what it represents to you (*ce que ça représente pour toi*).

Julie: Shall I say it [with words]?

Ourania: Say it, or sing it ... What will be a Rast, for instance?

Julie: I see it as a wide open landscape, and then Uşşak feels like something darker, narrower. We enter into something related to inwardness, while Rast is more ... exuberant?

Ourania: Yes. That's it. And when you go from the second phrase to the first, this effect is even stronger. Because you told us something closed, then when you lift up your Segâh [3rd] degree, we'll see these fields that you mention. It's something open [sings]:



It's the same sentence. On a suspension, that thought came to you, of that love that we were talking about on the phone, and then you feel happy about it. It's just a parenthesis [sings]:



And what had to be done was done. In the end, you stay in Rast, positive. That's like a discourse. If you play an improvisation, it's like a discourse; you must tell something. You don't just play phrases because the theory tells you to. Theory is really nothing. It's just there to help us put some order into things that we already know, and that we'll tell. We must create images.

Hearing the Mode

It will be obvious by now that the setting described was a music class. Nominally, it was part of a course on "Musical repertoires from Greece."^[29] But throughout the first morning, from which the preceding description derives, the topic was more precisely Rast *makam*.

Makam is a notion familiar to ethnomusicologists. It has been described in a number of publications, some of which the participants had actually read.^[30] Two of them had Murad Aydemir's *Turkish Musical Makam Guide*^[31] in their bags and consulted it occasionally during the breaks. Another had obtained her bachelor's in ethnomusicology and was training for a conservatory degree on "Musics from the Middle East." I was a researcher in ethnomusicology. Nevertheless, or because of that, each of us had different expectations about what a *makam* could be.

In the context of the class, many of these expectations were left aside, or subject to change. Ourania's description of Rast *makam* was quite heterodox when compared to mainstream understandings of the Ottoman modal system. A guide like Murad Aydemir's, for instance, starts

with considerations about microtonal subdivisions and their notation. On stage, one would be hard pressed to find instruments tuned to equal temperament, like accordions or bouzoukis, in a band advertised as playing Ottoman music. Indeed, many musicians, music lovers, and theorists consider microtonal intervals to be essential to playing a *makam*. Yet Ourania starts by downplaying the temperament's importance. She does not ignore it, of course, but shifts the focus towards "suppleness" and "attractions."

One explanation could be that Ourania does not teach Ottoman but Greek popular music. This music has been played at least since the early twentieth century on tempered instruments like the *bouzouki* or the *santouri*. Greek popular musicians used to refer to a system of melodic modes called *dromoi*. *Dromoi* were derived from the Ottoman *makam*, and most names were similar.^[32] But the *dromoi* system had fewer modes and was less fussy about microtonal intervals. Bouzouki players, for instance, could refer to it, as did vocalists and violinists. Globally, it was less theorized, at least on paper, compared to the *makam* system. Starting with the 1980s, a younger generation of Greek musicians turned toward Istanbul to regain insight into what they considered to be Greece's Ottoman cultural legacy.^[33] In their vocabulary, the analytical framework of Ottoman *makam* superseded the vernacular *dromoi*. For musicians like Ourania, Ottoman *dromoi* and *makam* are in fact the same idea, but *makam* speaks to people who seek more analytical precision than what Greek popular musicians traditionally needed. In her teaching, and also in her PhD thesis, where she analyzes an early style of rebetiko music,^[34] Ourania refers to Ottoman *makam* under the explicit assumption that it describes musical "phenomena" encountered in Greek popular music as well. "Suppleness" and "attraction" are essential aspects of these phenomena, while temperament is not: "One still hears the mode," she says. This particular understanding of the relation between mode and temperament was a highlight of the class for many participants with whom I spoke: they could participate with any melodic instrument, and the teaching bypassed the rather tedious searches for the "correct" interval that some had experienced in other classes on oriental music.

This is to say that although *makam* might seem a familiar concept in the musicology of the southern Mediterranean, one cannot take for granted what it was in that room. Participants learned through discourse, through "observation," and through trial and error about something that they thought existed independently of them. Ethnography is useful to describe, first, the thing that they "observed," and second, how they also forged that thing in the act of "observing" it. They came in with various musical and intellectual backgrounds, and when the class was over, they agreed on the features of a sonic being with no physical counterpart.

Since the point of the class was not Ottoman *makam*, and classical ottoman theory was clearly not devised for Greek popular music, there was no real deference to the authority of Ottoman or any other tradition. The vocabulary of *makam* merely served as a frame of reference for the stabilization of a joint way of imagining sound. Ourania talked of Rast as if it were a being with observable properties: Rast *is* supple, it *has* internal attractions (and listen: Çârgâh *does* not). These things could be "heard" individually, and one could also "hear the mode," as if it were an object or a person. But clearly, not everyone in that room "heard" the same reality. The point of the discussion and of the musical attempts was precisely to give the other participants access to the world of objects and forces to which Ourania referred.

I had an interview with Julia a few months later. I asked her what she had gained from the class. Her answer referred to a new "sense of reality."

Often I've already played these things. And even if I never played them, it's usually things that I've already heard somewhere. So yes, it gives a sense of ... reality to things that I've already heard. All of a sudden, it becomes actual (*concret*). I had this feeling especially at the beginning, last year, when we were playing Rast. ... There are things that I played, either intuitively or from recordings, but I didn't know ... I thought that maybe I had invented it, whereas in fact, it exists.

It is perhaps not fortuitous that the last sentence begins in the past tense, but "it exists" refers to a permanent present. Some things come to exist through specific modes of listening, and stay as collective realities. Just to make sure, I asked Julia whether knowing that something exists in theory made it more "real" to her.

Oh yes, clearly! It clearly becomes more real! Like when you recognize spices in a dish! [laughs] It starts shining like this, it goes "shlung," "shlung"! Clearly yes. ... For me, in the end, it's only actual/material (*concret*) if it's an image in my head.

Conclusion: Thinking Through Sounds

In the vast literature about music and listening, there are some philosophical mountains. Their peaks are ideas like "music is not a thing at all but an activity,"^[35] "the relation between listener and sound is ... the affective correspondence of concurrent and ongoing movements,"^[36] or "sounding and listening [should be] aligned with relational ontology; the conceptual term for the position that substantive existence never operates anterior to relationality."^[37] Although sensibly different in their intellectual backgrounds, these ideas all refer to pre-objective states where the only things that can be said to exist are process and movement: no subject, no object, and no definite matter. From there to the auditory worlds that people think that they inhabit—where they confront, as subjects, objects and materiality—there are at least three paths down.

One is the path of "normal" auditory scene analysis. Along that path, listeners gain awareness of their physical surroundings. In our ethnographic example, one could listen for the instruments present, describe their spatial disposition, feel the room from its reverberations. One could listen as well for the participant's voices. One could notice, for instance, that Julie's sounded a bit grainy and muffled, and infer from it that she might have been slightly cold that day. There would be no reason to distinguish sharply between the sounds produced in the room and those coming from the outside. Through the open window, the electric grinder, for instance, made conspicuous interventions, which would be reflected in the scene's description. If one were to stick to that path, one would describe people's voices, but we would not know what they say. They would be making sounds with their instruments, but there would be no sense of *makam*.

Another path down would be to listen for structures in sound. One might try to determine, for instance, whether there is some pattern in how the hammer nails those things at the construction site. Or, listening to Ourania's voice, one could remark that she sometimes uses definite pitches and other times doesn't. One could further recognize that the definite pitches in Ourania's voice have the same pattern as the pitches that Sophie just played on her accordion. At that level of abstraction, sounds don't matter for themselves but for their relations. That is how voice and accordion can be said to play "the same thing." One could also recognize recurrent spectral patterns in the participant's voices. These patterns ("words") have meaning, in the sense that

people use them to refer to something other than the sounds. When Ourania writes a note just below the staff, when she utters “ré,” and when she sings a pitch at more or less 294 Hz, the point where the three intersect is an abstract concept : a “note” or a “degree,” a position in a system of oppositional values that can take various material forms.

But when Ourania and her students listen to Segâh (3rd degree) attracted by Dügah (2nd degree), they take a third path down the mountain. Along this path, sounds are infused with properties that can’t normally be heard. At the same time, they are objectified as external phenomena. They appear to listeners as auditory “things” with intrinsic agentive properties, what Brabec de Mori and Stoichiță propose to call “sonic beings.”^[38] This is the path of enchanted listening.

I would hold that in the interactions described above, the primary effect of saying “Dügah” and “Segâh,” rather than Ré and Mi, was to signal this bifurcation. The Ottoman way of naming notes was largely unfamiliar to the participants (some actually encountered it for the first time). Ourania didn’t even bother to present it as a full system. She never set out, for instance, to name all its notes in sequence. Ottoman names came in gradually, to designate auditory things as they appeared. The new designations did not so much assign the notes to a different system as *personify* them. Indeed, one could hear them as surnames as well: Segâh (whom we met previously) later became attracted by Dügah; they had a kind of love affair, and then it was over.

With regard to pitch, the Rast pentachord on the whiteboard really resembles the lower pentachord of a C major scale. There could be a comma difference on E, but it goes virtually unheard. Rast is “majestic” (Marie), “open” (Julie), with feelings of “what had to be done was done” (Ourania). But although everyone in the room is familiar with major scales, nobody even mentions that Rast could be anything like it. Uşşak, on the other hand, is infused with feelings of inwardness, longing, and nostalgia. But again, nobody even attempts to compare it with the more familiar concept of minor scale. The participants obviously strive to encounter a kind of being different from what they already know.

As abstract patterns, Rast and Uşşak very much resemble each other. One is a pentachord and the other a tetrachord with the same degrees. Only in enchantment do their properties really contrast. When Ourania says that “one hears the mode,” although Uşşak has barely come in as a half-mistake in the context of another exercise, she seems to acknowledge the potential of enchanted presence, rather than abstract structural recognition.

In *Thinking Through Things*, Henare, Holbraad, and Wastell outline the benefits of an admittedly controversial method for anthropology. Anthropologists have been well aware of a problem that undermines our accounts of what other people do. When other people use conceptual repertoires entirely different from our own, we run the risk of either mistranslating “their” conceptual repertoire or crushing it with “ours.” As a solution to this, Henare, Holbraad, and Wastell propose to avoid interpretation altogether and to adopt instead a posture of “radical essentialism.” Its initial premise would be that “meanings are not ‘carried’ by things but just are identical to them.”^[39] This would allow things to enunciate meaning in their very materiality. Anthropologists would no longer need to treat them as signs. They wouldn’t have to discover, translate, and possibly misrepresent what ideas these signs stand for. In this framework, ontological differences are not just cultural differences:^[40] we don’t all inhabit the same world with simply different worldviews; we live in worlds made of different things. “Thinking through things” does not explain how other people think about their world. The question is rather “how we must think in order to conceive a world the way they do.”^[41] It is a way of creating thing-concepts by seeing them “not

so much in our mind's eye, as in our eye's mind."^[42] For Henare, Holbraad, and Wastell, "thinking through things" is the only way to apprehend a reality for which the concepts that we have readily at hand are not sufficient.

Whatever its relevance for anthropology at large, this approach seems to me particularly interesting when people themselves deliberately transform their conceptual repertoires and what they hold to be real. Generally speaking, enchanted listening has the effect of transforming what people hold to exist audibly around them. Sounds appear to be "possessed" by qualities that can't normally be heard. In the specific interactions described above, the point for the participants was precisely to transform their conceptual repertoires in order to gain access to a new auditory ontology.

Although this was a "music" class, listening, in the narrowest sense of listening to each other, was the main activity of the participants throughout. In a broader sense as well, participants always listened, even when they played or sang: they listened, that is, *through* their ears, *through* their instruments, and *through* their voices, for something that emerged on a different plane of existence. They listened, one might say, "through their ear's mind."

One might ask what insights they gained from a world where auditory and imaginary beings were conflated. "For me, in the end, it's only concrete if it's an image in my head," said Julia. "It flows super-naturally," commented Ourania. Without any word spoken, we nodded approval after Maria's E flat. One might venture that in "thinking through sounds," our thoughts become one with thoughts that belong to (or simply are?) our auditory object.

Back up the mountain then. Listener and sound are once again indistinct in the act of listening. But this time both reality and self make use of auditory *matter* to augment each other reciprocally.



References

1. Albert S. Bregman, *Auditory Scene Analysis: The Perceptual Organization of Sound* (Cambridge, MA: MIT Press, 1994), 5. ↑
2. See also Diana Deutsch and John Feroe, "The Internal Representation of Pitch Sequences in Tonal Music," *Psychological Review* 88, no. 6 (1981): 503-22; and Diana Deutsch, "Grouping Mechanisms in Music," in *The Psychology of Music*, ed. Diana Deutsch, Cognition and Perception, 2nd ed. (San Diego: Academic Press, 1999), 299-348. ↑
3. Bregman, *Auditory Scene Analysis*, 17. ↑
4. Albert S. Bregman and Jeffrey Campbell, "Primary Auditory Stream Segregation and Perception of Order in Rapid Sequences of Tones," *Journal of Experimental Psychology* 89 no. 2 (1971): 244-49; and Stephen McAdams and Albert S. Bregman, "Hearing Musical Streams," *Computer Music Journal* 3, no. 4 (1979): 26-43. ↑
5. Bregman, *Auditory Scene Analysis*, 17. ↑

6. Bregman and Campbell, "Primary Auditory Stream Segregation," 244. ↑
7. Bregman, *Auditory Scene Analysis*, 675. ↑
8. Victor A. Stoichiță and Bernd Brabec de Mori, "Postures of Listening: An Ontology of Sonic Percepts from an Anthropological Perspective," *Terrain: Anthropologie & Sciences humaines*, December 18, 2017. ↑
9. *Ibid.*, 17. ↑
10. Alfred Gell, "The Technology of Enchantment and the Enchantment of Technology," in *Anthropology, Art and Aesthetics*, ed. J. Coote and A. Shelton, Oxford Studies in the Anthropology of Cultural Forms (Oxford: Clarendon Press, 1992), 53. ↑
11. Alfred Gell, "Technology and Magic," *Anthropology Today* 4, no. 2 (1988): 7. ↑
12. Alfred Gell, "Vogel's Net: Traps as Artworks and Artworks as Traps," *Journal of Material Culture* 1, no. 1 (1996): 15–38. ↑
13. Jérôme Dokic, Robert S. Hatten, Tim Ingold, Michel Kreutzer, and Elizabeth Tolbert, "Comments on 'Postures of Listening' by Victor A. Stoichiță and Bernd Brabec De Mori," *Terrain: Anthropologie & sciences humaines*, November 29, 2018, 5. ↑
14. *Ibid.* ↑
15. Roberto Casati and Jerome Dokic, "Some Varieties of Spatial Hearing," in *Sounds and Perception*, ed. Matthew Nudds and Casey O'Callaghan (Oxford: Oxford University Press, 2009), 98. ↑
16. Ingold in Dokic et al., "Comments on 'Postures of Listening,'" 7. ↑
17. *Ibid.* ↑
18. *Ibid.* ↑
19. Antoine Hennion, *La passion musicale: Une sociologie de la médiation*, Sciences humaines 15, 2nd ed. (Paris: Métailié, 2007). ↑
20. Christopher Small, *Musicking: The Meanings of Performing and Listening*, Music/Culture (London: Wesleyan, 1998), 2. ↑
21. Daniel Miller, "Materiality: An Introduction", *Materiality*, ed. Daniel Miller (Durham, NC: Duke University Press, 2005), 7. ↑
22. *Ibid.*, 9. ↑
23. Bruno Latour, *We Have Never Been Modern*, trans. Catherina Porter (Cambridge, MA: Harvard University Press, 1993); Karen Barad, *Meeting The Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, NC: Duke University Press, 2007); Anna Tsing, "More-Than-Human Sociality: A Call for Critical Description," in *Anthropology and Nature*, ed. Kirsten Hastrup, Routledge Studies in Anthropology 14 (New York: Routledge 2013); and Steven Feld, "Acoustemology," *Keywords in Sound*, ed. David Novak and Matt Sakakeeny (Durham, NC: Duke University Press, 2015). ↑
24. Miller, "Materiality: An Introduction," 10. ↑
25. The verbal interactions reported below have all been translated from French. All participants were anonymized, except for Ourania Lampropoulou, whose role is special, as will be seen, and who allowed me to use her real name. ↑
26. Here and below, I transcribe Ourania's spoken references to *makam* using their conventional Turkish orthography. Although Ourania herself does not speak Turkish, this should help readers familiar with Ottoman makam theory to grasp correspondences between her's and others' explanations of the system. ↑
27. Two notes about transcription: (1) None of the music played or sang that morning had isochronous

beats. My transcriptions use durations ranging from sixteenth to whole notes to denote relative lengths. In rough approximation, sixteenth and eighth notes should stand for “transition” notes, longer durations for “resting” points. (2) In the examples she sang, Ourania always pronounced the name of each note in solmization as she sang it. ↑

28. *Sensible* can be translated as “sensitive,” but in a musical context it can also mean “leading tone.” The rest of the sentence here clearly favors the first translation, since Ourania goes on to compare Segâh to a person being in love. The homonymy is telling though. Along its history, Western musicology incorporated many a metaphor as a technical term: a tone, for instance, can “lead” to another, be “dominant,” or “sensitive,” adjectives which primarily denote movements or affective characters. ↑
29. The class was provided in November 2020 as part of a 100-hour training course for advanced and professional musicians at the Institut International des Musiques du Monde (IIMM) in Aubagne, near Marseille. ↑
30. For an introductory bibliography, see the articles on “[Mode](#)” and “[Maqām](#)” in *New Grove Dictionary of Music and Musicians*, ed. Stanley Sadie and John Tyrrell (Oxford: Oxford University Press, 2001). See also Karl Signell, “Contemporary Turkish Makam Practice,” in *Garland Encyclopedia of World Music*, vol. 6, *The Middle East*, ed. Virginia Danielson (New York: Routledge, 2001), 47–58. ↑
31. Murat Aydemir, *Turkish Music Makam Guide*, Pan Yayıncılık 151 (Istanbul: Pan, 2010). ↑
32. On the relation between *dromoi* and *makam*, see, for instance, Risto Pekka Pennanen, “The Development of Chordal Harmony in Greek Rebetika and Laika Music, 1930s to 1960s,” *British Journal of Ethnomusicology* 6, no. 1 (1997), 65–116. ↑
33. For a detailed analysis of this cultural turn, see Eleni Kallimopoulou, *Paradosiaká: Music, Meaning and Identity in Modern Greece*, SOAS Musicology Series (Burlington: Ashgate, 2009). ↑
34. Ourania Lampropoulou, “Le rébétiko du pirée: Implications du makam dans la période de l’entre-deux guerres” (PhD Diss., Université Paris 8, 2021). ↑
35. Small, *Musicking*. ↑
36. Ingold in Dokic et al., “Comments on ‘Postures of Listening.’” ↑
37. Feld, “Acoustemology,” 15. ↑
38. [Stoichiță and Brabec de Mori, “Postures of Listening.”](#) ↑
39. Amiria Henare, Martin Holbraad, and Sari Wastell, “Introduction: Thinking Through Things,” in *Thinking Through Things: Theorising Artefacts Ethnographically*, ed. Amiria Henare, Martin Holbraad, and Sari Wastell (London: Routledge, 2007), 3. ↑
40. See Holbraad’s defense of this position in Michael Carrithers, Matei Candea, Karen Sykes, Martin Holbraad, and Soumhya Venkatesan, “Ontology Is Just Another Word for Culture: Motion Tabled at the 2008 Meeting of the Group for Debates in Anthropological Theory, University of Manchester,” *Critique of Anthropology* 30, no. 2 (2010): 152–200. ↑
41. Henare, Holbraad, and Wastell, “Introduction,” 15. ↑
42. *Ibid.* ↑

Cover image: *Auditory chimera*, AI image generated by Victor A. Stoichiță using [deepai.org](#).