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ORIGINAL ARTICLE – DOSSIER "NEW SOUND ECOLOGIES"

The Critical Ear

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Resumo: O "ouvido crítico" é um conceito que cruza ideias de "escuta técnica" e "higiene auditiva". Foi apresentado pela primeira vez numa oficina prática dedicada à escuta nas suas formas múltiplas e complexas (Synth Library Prague, Julho de 2024). A oficina propôs discutir o ambiente sonoro e os vários contextos em que a escuta ocorre. Com base em vários exercícios, foi questionado, por exemplo, como se pode reconhecer frequências na paisagem sonora mundana. Nesse sentido, estes exercícios assumem uma perspectiva pragmática, tal como a identificação de frequências e fenómenos acústicos do dia-a-dia; assumindo uma relação básica com o som, a da acústica espacial, mas, ao mesmo tempo, adoptando práticas de escuta profunda e de higiéne sonora, no sentido poético da escuta. O „ouvido crítico" resulta da oscilação constante entre uma compreensão técnica do som e uma reflexão sócio-política sobre o ser ouvinte.

Palavras-chave: escuta profunda, política do som, higiene auditiva, resposta de frequência, atenção acústica

Abstract: The "critical ear" is a concept crossing ideas of "technical listening" and "ear cleaning". It was first presented as a workshop (Synth Library Prague, July 2024) dedicated to listening in its manifolds and complexities. It discussed our sonic environment and the several contexts in which listening takes place. Based on exercises that train frequency recognition, for example, how can we recognise that content in our mundane soundscape? In that sense, these exercises take a very pragmatic perspective, aiming at identifying frequencies and acoustic phenomena out-in-the-world. These comprise a basic relationship with sound, that of spatial acoustics, but at the same time, it adopts practices of deep listening and sound healing, towards the poetics of listening. The critical ear reflects the author's practice endeavour: a constant sway between a technical understanding of sound and a socio-political reflection on being a listener.

Keywords: deep listening, sound politics, ear cleaning, frequency response, acoustic attention

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This essay is based on the "the critical ear" workshop, held at the Synth Library Prague (Czech Republic, July, 2024).[1] The workshop departed from the audio CD accompanying the book *Critical Listening Skills for Audio Professionals* (Everest, 2007), which I came across by chance at the Library. At first, the idea for this workshop emerged because of an expectation I had toward the title "critical listening skills" which is not exactly fit to what the book seems to consider critical. In this case, "critical" is not concerned with "criticism", but with an idea of "essential". In that logic, the workshop focuses on practical exercises for training one's listening skills. These exercises focus mostly on frequency identification and sound phenomena such as reverberation and distortion, for example, and in most cases in relation to or applied to music. But are these parameters the basis for proper listening? The book offered an opportunity to reflect about what is considered "trained listening" and the content which seems to be essential in order to qualify for that.

While thinking about this, I remembered that also R. Murray Schafer's *Ear Cleaning: Notes for an Experimental Music Course* (1967), seems to address the idea of ear cleaning for the purpose of musical education. In his notes, Schafer shares a series of thoughts and exercises that are, in a way, organised by what seem to be the *essential* themes in listening. In my understanding, Schafer's point in "cleaning" the ear is concerned with deconstructing a series of conventional approaches in music composition and, by default, in listening to the surroundings. Nevertheless, these exercises are still driven by musical analogies and aims. Curiously, both Everest's and Schafer's books have a very similar selection of themes to achieve semi-similar results: the first aims, in a gross mode, to train the listener to recognise spectral content, and the second wants to train the students to extend their creative horizon regarding musical composition.

[1] The Synth Library Prague (Czech Republic) is a "space for sharing, creating, discussing, experimenting, learning and unlearning not only in the field of sound and electronic music." It is run by Marie Čtveráčková, one of its co-founders.

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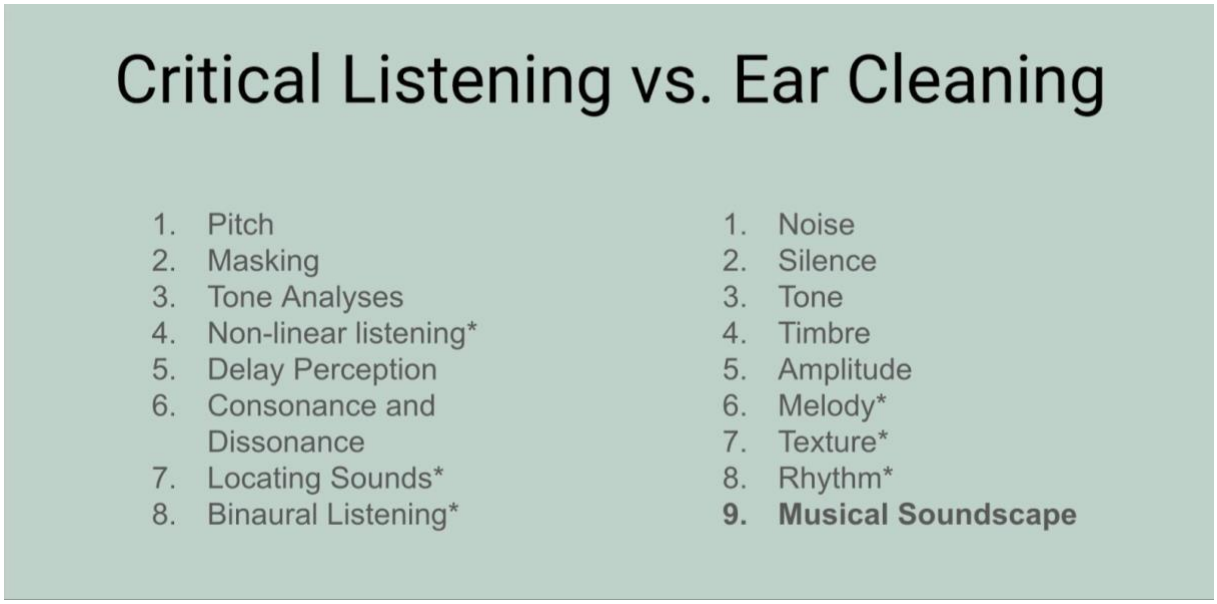
FIGURE 1 – Critical Ear Workshop: List of chapters in both books.



Source: Elaborated by the author.

Evidently, discussions about music and sound as being the same, or not being the same, or being somewhat indistinct, are obsolete and often neutralising. Music is a consequence of sound, albeit not the only one. By the same token, Schafer (among others) has embraced that *music is organised sound*, that the *world is a composition*, that there is no such thing as *silence*, and that the world is a *harmony on its own* (Berendt, 1987). In sum, that the world can be understood by *its soundscape*.

However, Katherine Norman specifically sheds light on the relatability of "real world" sounds. She proposes the term "reflective listening", which considers "the aesthetic implications of employing sounds from the real world as musical material. Without disregard to musical instruments, "reflective listening" takes the view that music composed of, and about, real-world sounds shares concerns already explored by writers and practitioners in film, poetry and other non-sonic arts" (Norman, 1996, p. 2). In a way, that is similar to Schafer's claim that the world's "musical soundscape" is a sum of several elements (namely, the themes listed in the first eight chapters/lessons of his book).

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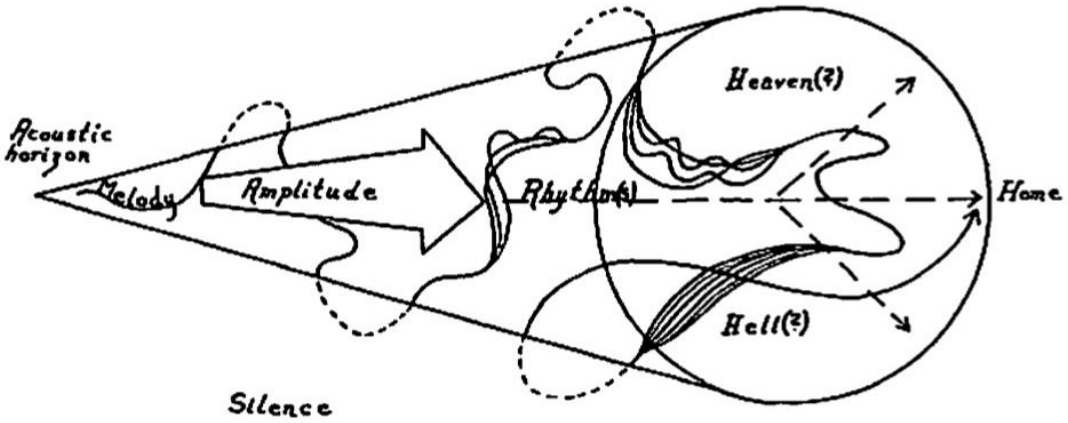
FIGURE 2 – Ear Cleaning.



Source: Schafer (1967, p. 25).

In this chain of thoughts, Marie Čtveráčková and I decided that I would prepare a workshop derived mostly from these two sources, "Critical Listening Skills" and "Ear Cleaning". Equally important, the workshop would include the theory and practice of "deep listening" by Pauline Oliveros (2005) — if not only because that is a core practice of listening, also because it is a concept keen to the context of the library and recurring in my own teaching routines.

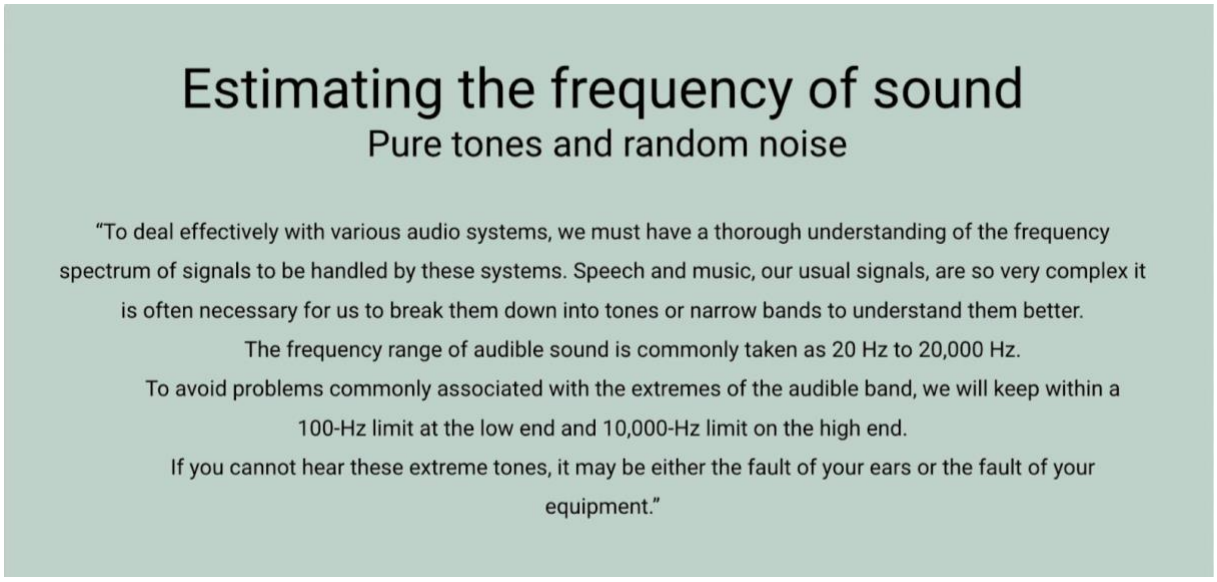
The workshop was divided in three different perspectives: training frequency recognition, cleaning the ear and understanding sound propagation. In the meantime, there was a chance to discuss silence and attention as well. Each exercise had a twofold purpose: to train one's ears and to question the implications underneath the premisses of that training. In other words, the exercises were based on the examples in these three books (many times adapted to my own sonic content) and followed by a discussion about the principles that guided the exercises themselves. For example, if the participants were asked to listen to a specific frequency or even practice its recognition, they were also encouraged to try to recognise it in their quotidian. These conversations spontaneously led us to engage with certain political or social contexts, and that brought the opportunity to discuss also the ideas of "acoustic justice" (Brandon LaBelle, 2020) and political engagement (Salomé Voegelin, 2018), the study of the "vibrating ear" (Shelley Trower, 2012) and the research about "noise pollution" by SHLUK, which culminates in the idea of "deep recording" (2024).

The following chapters describe the content of the workshop almost exactly as it went (and in the same tone) as a hybrid form of essay. I am aware that there are many other practices could have also been included in this realm of, let's say, Acoustic Ecology. For the sake of this workshop, these three chosen sources seem to be a fair enough combination to promote a critical approach to listen which, hopefully, reveals listening not as a simple sensory act but as a complex, culturally situated process. As Drew Daniel posed, "to hear and 'to know what one hears' are in constant battle for priority, and there is no possible neutrality here" (2011).

1. The critical ear, training

The first lesson in *Critical Listening Skills for Audio Professionals* focuses on "Estimating the Frequency of Sound: Pure tones and random noise".

FIGURE 3 – Critical Ear Workshop: First lesson from "Critical Listening Skills"



Source: Everest (2007, p. 3)

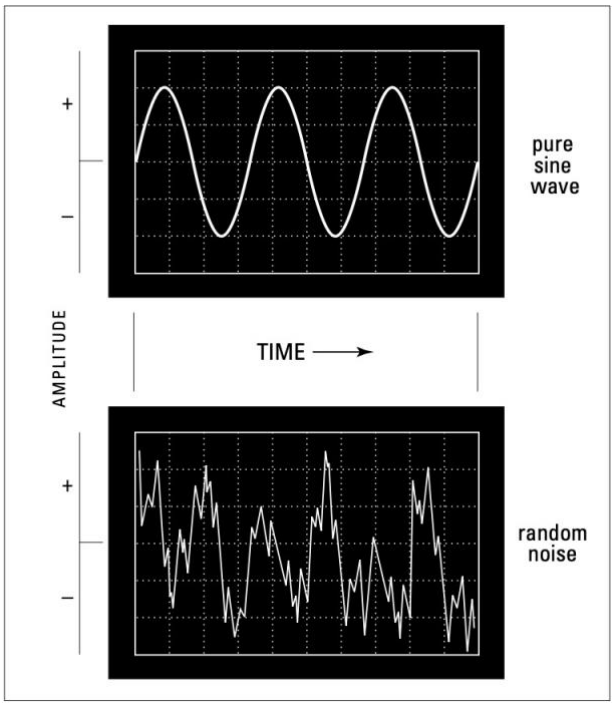
It follows by sharing an example of specific frequencies: "this is a 100-Hz tone" [insert sound], "this is a 10,000-Hz tone [insert sound]" (Everest, 2007, p. 4). The narrator then proceeds to explain that "they differ only in the rapidity of oscillation of the air particles which bring the sound to your

ears." (Everest, 2007, p. 4). Following up, the narrator proposes, "now, let us listen to a few other tones as we travel up through the audible range of frequencies between 100 Hz and 10,000 Hz."(Everest, 2007, p. 5).

After recalibrating the listener's perception back to 100 Hz again, the exercise continues: "this is a 260-Hz tone, which corresponds closely to the middle C on the piano. *But of course, it does not have the richness of the piano tone.* Increasing the frequency, we move up the scale one octave to the C above middle C, twice 260 or 520-Hz" (Everest, 2007, p. 5 — intended not in the original). After sounding 1000 Hz and 5000 Hz frequency tones, the narrator suggests:

> Now for a sweep of tones through the entire audible spectrum. Don't be concerned about the fluctuations in loudness you hear. [insert sound]
> Pure tones (that is, single frequencies) carry little information alone, but they represent the essential building blocks of all speech and music with potential for carrying a tremendous amount of information.
> In some ways, random noise is actually closer to speech and music signals than pure tones. Random noise is constantly shifting in frequency, amplitude, and time relationships.
> In the manual, you can see a cathode ray oscillogram of a pure sine wave, the simplest of all signals, and random noise, which is far more irregular and constantly shifting. (Everest, 2007, p. 6-7)

FIGURE 4 – Critical Listening Skills.



Source: Everest (2007, p. 7).

He continues:

> Let's listen to a sample of random noise which has energy distributed through the entire audible band from 20 Hz to 20,000 Hz: [insert sound];
> A band of noise one octave wide, centered on 1000 Hz, extends from about 700 Hz to about 1400 Hz. Here is a sample of an octave band of noise centered on 1000 Hz: [insert sound]
> Now, let's consider a band of noise one-third octave wide centered on 1000 Hz. This band extends from about 890 Hz to about 1100. Here is a sample of a noise band one-third octave wide: [insert sound]
> Going to extremes, this is how a very narrow band of noise only one-tenth octave wide sounds: [insert sound]
> We shall now listen to these four noise bands in succession. Note that the narrower the band centered on 1000 Hz, the more it sounds like 1000 Hz: [insert sound](Everest, 2007, p. 7-8)

The comparison between "pure sine waves" and "random noise" is interesting in different ways. It seems to follow the same line that a *260hz tone is not as rich as a C in the piano*. Yet, this statement fails to explain where that "richness" comes from and why it is so. Once again, it seems to overestimate "musical sources" over "sound sources" without explaining that any tone of 260 Hz propagated inside a *rich* container would be *richer* than a pure sine wave. In other words, a pure tone barely exists in nature, it becomes *rich* precisely when inserted out there-in-the-world.

By the same token, it also suggests that a "pure tone" and "random noise" are opposite sides of sound. To illustrate that idea, the author plays a sample of "white noise". However, "white noise" is not exactly random noise: random noise is the range of all audible frequencies at the same exact amplitude. So it might be random in the sense that it is not a specific sound object, but its spectrum (which is the subject of study here) is not random. Thus, one could easily argue that there are also "random tones" and "pure noises".

Parallelly, in "Ear Cleaning", Schafer also started his lectures with discussing the notion of noise. Similarly to Everest, Schafer seems to think of noise as a negative experience, especially in opposition to music: "Noise is (...) the unwrapping of cellophane candies during Beethoven" (1967, p. 5). It reduces noise to a standard definition of "unwanted sound" (See SHLUK, 2024). Although this is neither Schafer's nor Everest's proposal, listening to white noise is possibly one of the most efficient ways to reset one's ears. Be it after some intensive period of audition, to find

some rest from the surroundings or simply (and mildly) to mask the sounds around (coincidentally, masking will be the focus of Everest's second lesson). In this sequence, the workshop follows with white noise as an exercise of "ear cleaning".

2. The critical ear, cleaning

After listening to white noise for a certain amount of time (and playing a little bit with equalization), it is possible to scrutinise many aspects of the experience. Do we focus more on one part of the spectrum than another? Do we hear rhythmic patterns within the spectrum? The "critical ear" workshop posed the following questions:

1. What sound would best describe your mood today?
2. What is the first sound that you remember listening to today?
3. What sound would you like to hear today?

Firstly, I would like to note that there is no such thing as "one sound". A sound is an amalgam of many sounds, depending on many criteria. As SHLUK posed elsewhere, "a sound, per se, is never *just a sound*. Sound is a compound of many particles, variables, and conditionings. Sound is plural" (2024). While the participants thought about these questions (knowing that they were not obliged to share their answers), white noise was played once again. This time, it was played without any equalisation conditioning the frequencies, but bearing in mind the challenge of finding those sounds within the white noise. As we searched for it, it is important to clarify that although sound comes from a place of memory, in this case from a rational place (instead of from sensation). It would be very difficult to choose a sound to describe one's mood at the moment, because most likely we would be choosing *the idea* behind that sound — be it because it translates the mood we would like to describe or because it reminds us of the *idea* of that mood. Let's say, for example, that the sound of an electric coffee grinder describes "one's mood today". Did we arrive at that answer because of the sound the coffee grinder makes, or because the coffee grinder gesture matches the description we want to convey?

Secondly, the answer to "the first sound remembered today" would be, most likely, also a rational answer based on our recollection of how one wakes up, how the day started. But that is not the same as remembering "the first sound listened to today". Eventually, everyone can answer "the alarm clock" because effectively that is very probably the first sound heard. But the question is "listened to" not "heard" (a distinction clarified below). In that sense, the question asks "what was the first sound paid attention to". Needless to say, to listen "in imagination" or "in memory" is also a debate. Most likely, one remembers the thought of the sound (that there was an alarm clock), not the sound (of the alarm clock). In other words, one does not really "listen to" it in one's head, but remembers the object as heard before.

And thirdly, the question regarding what sound someone "would like to hear today" can also be attached to the idea behind that sound, not the sound itself. One can answer "the sound of the sea", for example, but perhaps that has more to do with the feeling of the sea, rather than the factual sound that the sea makes (and once again, that is not just one sound but a compound of many sounds). In a way, training or cleaning our ears also implies deconstructing ideas about listening, as much as Schafer tried to deconstruct ideas about music and sound.

3. The critical ear, attention

Following up, Schafer's second lecture was dedicated to "silence". Evidently, thinking and discussing "silence" at the time Schafer held this lectures (the book was published in 1967) is a different discussion than now (in 2024). Nevertheless, silence is a common topic of discussion in conversations about sound. This may be due to different reasons. One of them is, perhaps, the simple assumption that sound and silence are opposites. As if silence would be the rebel parent of sound. But listening to silence is as much of an exercise as listening to white noise or frequency testing. Once we are set to listen to silence, there is a common feeling that there is no such thing as silence: even in the most quiet moments, we can still hear something. Secondly, the listener realises that "silence", as an idea, is a very rich notion. Silence, in fact, is a gesture of resistance: when we stop to listen to it, we notice the subtle. It reveals the world as a composite beyond the immediate, it uncovers the *unacknowledged*. For example, even in the quietest of the bedrooms, we can hear the

sound of our head weighing on the pillow. In fact, this is exactly the heritage from Oliveros (or from John Cage's lectures on Silence): anything makes sound if we pay attention to it.

In this vein, discussing silence leads to the topics of attention and choice. Bringing up attention reveals that listening is a two-direction road, that it implies two agents, that there are two angles to it (See Pinheiro and Rouš, 2022). In this sense, "the subject heard" (for example, a frequency) is a different discussion than what "the subject hears" (in this analogy, a pitch). That is the division between "applied physics" when measuring sound, and "psychoacoustics" when referring to the way that sound is perceived. In a manner of speaking, that is also the difference between "hearing" and "listening", where hearing is a physical condition, and listening an active choice. This distinction was often emphasised by Oliveros in her practices of "deep listening" (2005). Accordingly, "*Listening* has very little definition compared to hearing. Though the two words are often used interchangeably, their meanings are different" (2005, p. xxii, emphasis in the original). Hearing is not a choice – but listening is. Hearing is a physical condition, listening is circumstantial and depending on many conditionals.

For instance, the "cocktail effect" is one manifestation of this. According to this effect, the listener is able to focus precisely on a specific part of the information according to their interest. In order to explain it, Everest puts emphasis on the way that both sound and ears are conditioned, because these conditions define the listening experience:[2]

> For the first part of this section, you should be listening over your loudspeaker.
> The theme for this unit is very simple: *Two ears are better than one!* Everyone knows that, but do we really appreciate fully the tremendous benefits we enjoy every day by having two ears? (...)
> It is possible for us to direct our attention toward a desired source of sound as our mind rejects interfering sounds. For example, in a crowd of people, we can converse with one person successfully in spite of a din of competing voices: [insert sound]
> This ability is often called the cocktail party effect.
> As we listen to polyphonic music, it is possible to attend to one melodic strain in the presence of others. When you think about it, it is rather remarkable that we are able to direct our attention to just a part of the mixture of sound falling on our ears, rejecting the rest or at least pushing it into the background. [insert sound]

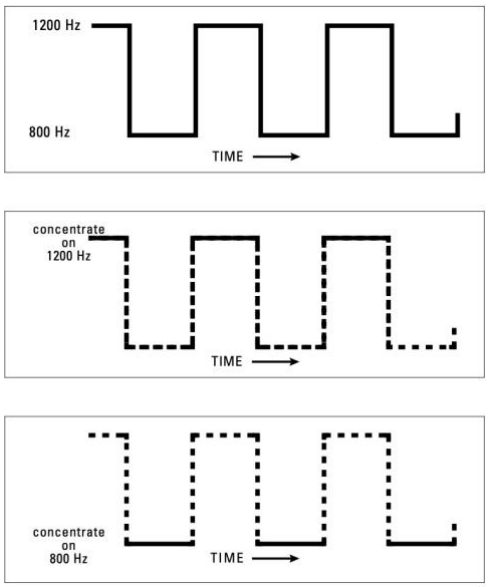
[2] Everest's book is divided in two blocks of content: the first was a series of lessons on the technical aspects of audible sound (called lessons); the second refers to the audible apparatus that perceives it (called units). We are now entering the second block.

> Let's try a little experiment to exercise this ability.
> Here is an 800-Hz tone which will be one of our signals: [insert sound]
> And this is our second signal, a 1200-Hz tone: [insert sound]
> These two tones will be alternated. Let's get used to this signal as it is very rapidly switched from one tone to the other: [insert sound] (Everest, 2007, p. 181-182)[3]

More importantly, this section hints over the fact that the ear itself is an instrument, it has its own agency. Everest continues with the same exercise:

> Now, let's try exercising our brain's power of focusing attention. First, concentrate all your attention on the higher tone, excluding the lower: [insert sound]
> Now, we are going to concentrate our attention on the lower tone, excluding the higher: [insert sound]
> This is listening selectively.
> Now, let's listen comprehensively, concentrating on both tones at the same time: [insert sound]
> In the following 20 seconds, concentrate your mind first on one, and then on the other, and then on both at the same time: [insert sound. (Everest, 2007, p. 182-183)

FIGURE 5 – Critical Listening Skills



Source: Everest (2007, p. 182)

[3] As many other statements along the book, the affirmation "two ears are better than one" seems itself... rather critical. I guess the author was trying to shed light on the complexity of the human auditory system, without intending to attribute that complexity *only* to a specific anatomic model. That too seemed a valuable discussion to have at the workshop.

At this point, he concludes that

> the selectivity in attentiveness we have just done consciously, we do unconsciously all the time. Perhaps you don't hear the refrigerator, or the neighbors, or the plumbing noises while listening to your hi-fi playing softly. Or we hear the airplane overhead only when our attention is called to it. Or we tune out a noisy colleague because of our immersion in a good book. (Everest, 2007, p. 183).

In this last unit, there is a hint that it is possible to relate to pure tones in real life sounds. Before that (in unit 4), Everest was dedicated to explain "Non-Linearities in the Auditory System", namely the fact that it is actually possible that our ears do not *just* hear things, as they can also make things up. In that unit, Everest explains that as "distortions generated in the ear" (2007, p. 143) but Maryanne Amacher's psychoacoustic research and work presented as the "otoacoustic emissions", often featured in her compositional work as "the third ear". Hence, to close this cycle in the workshop, participants listened to Maryanne Amacher's "Sound Characters" (1999) for a while. They were also invited to listen to Pauline Oliveros's "Deep Listening" (1989) and Alvin Lucier's "I am sitting in a room" (1969) outside the workshop.

4. The critical ear, propagating

After listening to two tones (1200hz and 800hz) and trying to focus on one of them, the participants were invited to a mental exercise again:

1. Imagine a space, any space. How does it sound?
2. How do you describe the way it sounds? Can you describe it? Can you describe the way it sounds?
3. Did you imagine it with people? How do you describe the way they sound?

Alike with the questions posed before, the participants were not requested to share their answers. The purpose of the workshop was to raise awareness to these topics and, in that sense, thinking about these questions is more important than achieving (or sharing) a specific conclusion (specially

if the idea of sharing it with a group of people might be inhibiting, which is very often the case). Once again, the exercise disguises the process of "thinking about sound" and "thinking sound". In other words, one thing is how the space sounds, the other is how we manage to describe it. During these questions, a vibrating object sounded remotely. Some of them reached their pockets immediately, thinking or worrying that it was their own phones. It was a played-back sound, but it initiated a different part of the discussion, namely a specific perception of space which is not refrained to the space in which the listener is.

In simple terms, space contains and amplifies sound, which is easy to relate to in the "real world". However, that is far beyond simple. It hides the principles of sound propagation, which are at the core of sound perception. Discussing the relationship between sound and space includes discussing reverberation, resonance, (early) reflections and frequency response, delay, Doppler effect, distortion, compression, etc. In lesson number seven, Everest focuses on intelligibility as one of the side effects of reverberation:

> In the following exercise, the narrator is going to speak six one-syllable words with normal reverberation:
> Let's analyze these words a bit. Note carefully that we depend upon the consonants at the end of each word to distinguish one word from another: [insert sound]
> Note also that the consonants are much softer than the opening parts of the word: [insert sound]
> Anything that interferes with these low-level consonants reduces the intelligibility of the words. Reverberation is one thing but not the only thing that can seriously impair the understandability of speech by covering up these low-level consonants. Here is a repeat of the six one-syllable words with excessive reverberation, a reverberation time of 3½ seconds: [insert sound]
> The slow trailing off of the sound of the first part of each word interferes with our hearing the consonants at the end of each word, and the identification of each word depends upon identifying this consonant. (Everest, 2007, p. 67-68)

There are many reasons why natural and artificial reverberations became a common resource among musicians, technicians, artists, etc. That is because everything sounds better when it has a certain (and controled) amount of variables to colour it. It became common knowledge that everything "sounds better" in reverberant places, that is why everyone sounds better when singing in the shower: the sound of one's voice diffuses in the space, mostly likely propagating nicely

through walls made of tiles, with the reflected sources accumulating over one another and summing the frequencies. It creates harmony on its own.

Nevertheless, while sound propagates through space, it is absorbed in every material it encounters. Albeit it has boundaries, it has no limits. In that sense, the example with the sound of a phone vibrating gives way to many topics of discussion. First, that a phone without sound (meaning ringtone), still makes sound (it would be redundant to say that the vibration is sound). Secondly, that many people are oblivious to the fact that their phone vibrating can be heard across flats, rooms, offices. Meaning that for them, it is just a phone notification, disregarding the extent of it (and disregarding that it "notifies" more people around). But in any case, the idea of boundary itself needs to be discussed since it became apparently normalised to use the phone loudspeakers in public (for phone calls, watching videos, listening to music – any type of "broadcasting") in social or public contexts.

The amount of audible information in public spaces is, spectrally speaking, overloaded. And in that sense, people become more and more oblivious to their aural input, while contributing to this overload. But this is a symptom of a bigger problem, while contributing to the problem as well. In an overwhelming busy world, it is hard to point to that as noise pollution while being surrounded by so many other sources no matter what. This seems to contribute to a general misunderstanding of sound, a sort of inverted isolation, an isolation in which privacy and individuality are turned public. More importantly, this contributes to neglecting the auditive sense. The phone vibrating, earphone music or loudspeaker phone calls, ubiquitous presence of our contemporary existence, should be subjects of extensive discussion for a critical ear.

5. The critical ear, in conclusion

In fact, this is the expectation that "critical listening skills" raised: to be aware of our sonic environment (and knowing how to listen to it) but also to reckon a certain notion of "auditive health". The current social relationship with sound reveals a total lack of awareness of the fragility of this apparatus (the auditive system) and, at the same time, its neurologic impact. The truth is that the ears never rest, they are constantly taking input in a more or less involuntary way. In that

sense, it is necessary to think of the acoustic environments that we are raised in — obviously, starting from early stages such as kindergartens, to later stages such as the acoustic conditions of hospital and care homes. The quality of their acoustics has a direct impact in the quality of our health (Andrade et al. 2021).

Everest himself recognises the complexity of "listening" when stating that

> there are no subjective instruments or meters that can give us direct readings of the response of an individual to different physical stimuli. Each person responds in a different way. The only way to measure human response to different sounds is by psychoacoustic testing. Panels of observers or listeners are the very heart of such experiments, and their response must be statistically analyzed to get dependable answers. (Everest, 2007, p. 110)

As important as realising the subjectivity of acoustic phenomena, is realising that we are only aware of a minor part of that phenomena. First because of the auditive range, which in optimal cases is from 20 to 20.000 Hz, and second because there is little consideration to sound beyond that range and beyond the audible. When practising frequency/tone training, it is compelling to *imagine* those frequencies spread around every sound out-there. For example, it is much more likely to react negatively to a certain frequency in isolation because of its relationship in tone vs. loudness, than when masked within other frequencies in the so-called "random noise". However, those frequencies are there nevertheless, and certainly make the ear drum vibrate. As Trower posed, "vibrations in the nerves correspond with sensations in the brain" (2012, p.40). In that sense, "hearing gives a way to a sense of being shaken though the body, rather than by the ear" (2012, p. 110). More importantly, "sound — *not music but sound* — can let us hear what is not yet locatable on the available maps of identity (Daniel, 2011, p. 5 — intended in the original). Admittedly, "no longer can audio people take the ear for granted. The auditory response to speech and music vibrations in the air must be taken into careful consideration, for human perception is the final link in the audio chain" (Everest, 2007, p. 110). Curiously, when the audio samples required text (instead of music), the narrator used a poetic citation. It said: "Long ago Lord Railey said 'directly or indirectly all questions connected with sound must come for decision to the ear, and from it there can be no appeal'". To the critical ear, all questions are connected with sound, and it is the whole body that listens.

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In sum, the critical ear aims to think about sound from all angles: technical, artistic and social towards a reflection on listening. For listening is both an act of mastery and engagement, where the purpose is beyond "to hear" or to classify sound but to acknowledge and maintain balance within an environment that is inseparable from community, socially and politically.

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