Automated Nemocentric Listening

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Abstract

Questo contributo si propone di analizzare gli assemblaggi tecno-cognitivi di cui le piattaforme di streaming fanno parte, e come tali piattaforme creino le condizioni per una "fisionomia" delle abitudini di ascolto, sulla base dei presupposti dell'ascolto automatico distribuito su cui si fonda il loro funzionamento. Prendendo in considerazione la genealogia dei formati musicali digitali (Sterne, 2012), interrogando le ri-mediazioni *retromaniache* (Reynolds, 2011) all'interno delle piattaforme di streaming, osservando i mutamenti e i conflitti generati dall'automazione (Reynolds, 2011; Burrows e O'Sullivan, 2018) e ricorrendo alla teoria e alla filosofia del rumore (Attali, 1985; Brassier, 2011; Malaspina, 2018; Mattin, 2022), il testo si propone di far luce su diversi vincoli non sonori che informano e modellano il nostro modo di concepire le routine di ascolto, analizzando al contempo le abitudini di ascolto basate sullo streaming attraverso la lente del rumore. Se il rumore è quella perturbazione che diventa prerequisito per un soggetto senza sé (Brassier, 2009), potremmo sostenere che i sistemi algoritmici fondati sul rumore, basati sull'oggettività di ascoltatori meccanici, organizzino il caos dei soggetti desideranti creando l'illusione di un sé unico, ma in realtà diventino il terreno di coltura definitivo per la produzione di soggettività "nemocentriche" (Metzinger, 2004)? Tali soggettività possono essere considerate prive di un centro perché distribuite attraverso gli assemblaggi cognitivi del capitalismo di piattaforma, dematerializzate e disperse. Se il rumore è stato inglobato all'interno dei presupposti di "mascheramento" (Sterne, 2012) tipici del capitalismo di piattaforma, in che modo i soggetti nemocentrici operano sotto le logiche prescrittive delle stesse strutture capitaliste che li hanno prodotti?

This contribution is meant to analyze the the techno-cognitive assemblages that streaming platforms are part of, and how streaming platforms create the conditions for a "physiognomy" of listening habits under the premises created by the automatic distributed listening on which their functioning relies. Considering the genealogy of digital music formats (Sterne, 2012), interrogating the *retromaniac* (Reynolds, 2011) re-mediations taking place within streaming platforms, looking at the shifts and clashes generated by automation (Reynolds, 2011; Burrows and O'Sullivan, 2018), and using noise theory and noise philosophy (Attali, 1985; Brassier, 2011; Malaspina, 2018; Mattin, 2022), this text will attempt to elucidate different non-sonic constraints that inform and shape the way we engage with listening routines, while also analyzing streaming-reliant listening habits through the lens of noise and noise philosophy. If noise is the disruption that becomes prerequisite for a selfless subject (Brassier, 2009), could we argue that noise-reliant algorithmic systems, based on the objectivity of machinic listeners, organize the chaos of desiring subjects by creating the illusion of a unique self, but in reality becoming the ultimate breeding ground for nemocentric (Metzinger, 2004) production of subjectivities? These subjectivities can be considered nemocentric (namely: without a center) because distributed across the cognitive assemblages of platform capitalism, dematerialized and scattered. If noise has been subsumed under the "masking" (Sterne, 2012) premises of platform capitalism, how do nemocentric subjects operate under the prescriptive logics of the very capitalist structures that produced them?

Parole chiave/Key Words

Streaming platforms; noise, nemocentrism; automation.

Piattaforme di streaming; rumore; nemocentrismo; automazione.

DOI: 10.54103/connessioni/26778

1. Introduction

Streaming platforms are ever present within the everyday music consumption's landscape, they are part of techno-cognitive assemblages in which the transparent and, on the surface, frictionless interaction design camouflages them as neutral, when in reality there is nothing ingenuous concerning their functioning. This alleged neutrality is premised on the assumption that the datafication inherent to the automation of mundane activities such as listening to music relies on an objectivity that resulted from the modern project of normalizing and standardizing technologies.

The modern project of standardization tackled the listening function[1] of the machine from an engineering perspective, creating systems that were robust to noise, and that aimed at canceling it or minimizing it[2]. With the computerization and digitization of communication systems, the approach to noise changed. If at the infrastructural level noise started being embedded in the design of infrastructures to ensure resilience to disruption and proneness to disambiguation of content, at the level of music production, noise was domesticated—not eliminated, just "masked". Masking implies the elimination of similar frequencies, overcoming the subjectivity of listening for the sake of compression, moving the noise underneath more desirable sounds (Sterne, 2012, pp.94-95). Masking is at the core of the standards that gave birth to compression formats such as the MP3[3]. These compression formats enabled an acquaintance and a consumption of music that progressively detached from material support, upending the ownership paradigm and transforming the pirate acquisition approach that was already present within the consumption previous music media (i.e. tape cassettes). The introduction of streaming platforms paved the way to a new consumption model, ultimately detached from the materiality and ownership of music media, and based on a precarious hyper-rent paradigm.

With the popularization of streaming platforms as preferred sites for music consumption, the "celestial jukebox" (Burkart, McCourt, 2004) imagined in the noughties of the new millennium and inspired by the MP3-induced dematerialization of music, became a reality. This global repository of music responded both to the datafication of cultural content and to the incremental promotion of "Mobility as a Service"[4]. The MP3 first, and streaming platforms soon after, promote consumption formats that are centered on a diffused and interconnected listening experience, for casual users and distracted listeners forced to adapt to

the ever-increasing paces of urban life and, in the last decade, to the information overload across digital platforms and devices.

Within a distracted listening experience, automation becomes central in reducing the users' effort to discover new music, somehow freeing them from the burden of deciding what to play on different moments of their busy lives. The standardization of media in the age of platformized music sees objective machinic listeners[5] sifting through massive databases of content, retrieving information through logics that transcend, and often efface, genres, to respond to logics of categorization such as tempo and mood that are more amenable to playlist-based recombinations rather than genre- or cultural-specific.

However, automated recommendation systems conceal a new kind of servile work, operationalizing machinic categorization on the basis of the data collected from users' behaviors; this kind of work is predicated upon an appreciation of music without deep emotional investment, and that has repercussions that music journalist and author Simon Reynolds described as" desocialization" and "desanctification" of the experience of music (Reynolds, 2011, p.122).

2. Automated Disindividuation

At the mercy of algorithmic logics, transindividuation, «the process through which psychic and collective individuation takes place, involving a concretisation of circuits (the technics of transferring memory, knowledge and experience)» (Burrows, O'Sullivan, 2019, p.405) is captured by platforms, and by taking control of it, they turn transindividual processes into disindividuation processes. For philosopher Gilles Deleuze, computerization marked the turn from discipline to control, from discontinuity to continuous connection to a network; for media studies professors Alexander R. Galloway and Eugene Thacker this control operates «at a level that is anonymous and non-human» (Galloway, Thacker, 2017, p.5), it disguises protocols and strict rules behind the freedom of roaming, especially in times of broadband connectivity.

> Transindividuation then, which transmits individual memories through long-circuits to produce collective knowledge or logos, has been steadily captured through industrial and now digital processes – an event that, Stiegler reminds us, Simondon refers to as "proletarianisation". In this, digital systems produce short-circuits (or an acceleration) of knowledge acquirement and application and long-circuits cease to be common. One example Stiegler gives is the act of listening to (mass-produced) music, which, unlike in the past, requires no ability to read and play music (Burrows, O'Sullivan, 2019, p.405).

In times of platformized musicking, the threshold has been lowered even further, given that the transparency and the camouflaging techniques of mobile apps remove contextual understanding and demand even less knowledge in terms of methods of production and dissemination.

> Transparent devices are highly intuitive, constituting an interface that rapidly disappears from our perception. The same holds true for a service such as Spotify, whose software and content are patented and copyrighted, whose standards and protocols are hidden (Eriksson, Fleischer, Johansson, Snickers, Vonderau, 2019, p.99)

Interfaces are tested and designed so that their hyper simplification can be mass marketed while all the other processes—from music marketing to compression to salvage (and savage) stealthy accumulation of data—are hidden in plain sight, leaving the average consumer with barely any tool to comprehend what lies behind the screen. As philosophy and speculative design professor Benjamin Bratton writes, «Platforms are generative mechanisms—engines that set the terms of participation according to fixed protocols (e.g., technical, discursive, formal protocols)» (Bratton, 2015, pp-79-80); precisely because of their formal neutrality, they represent institutional models, they structure layers and interactions in ways that can be affirmatively defined as political.

The retention that according to philosopher Bernard Stiegler is needed in order to generate a collective memory that can turn into a positive futurability is made impossible by the reduction of individual experience to reactive dopamine-driven gestures; knowledge is constituted by quantitatively considered information and presented in a probabilistic and statistical patterning disguised as narrative. In this case a playlist does not equal a radio program curated by a DJ, but it is a syntactical assemblage powered by recognition algorithms: It resembles a diachronic product yet it is constructed on the synchronicity of an ever-available central database.

> Whether narrative, sense and the senses are limited or transformed as the capacity for information processing increases in humans and machines. [...] as technologies process information at increasing speeds, or function through ever-faster sound and image consumption, they compress or transform social and experiential processes. (Burrows, O'Sullivan, 2019, p.439)

The sensory affordances of contemporary media "interpassively" entrain subjects through platformized sonic interactions and music consumption. The objectively sampled, lis-

tened, and algorithmically recommended media enter the subjective space with no regards for the desire of the subjective users, playlisting moods through contextual data that offer a partial portrait of *a* body attached to *a* thumb. Contemporary technology accelerates interplays between selective attention, unconscious, and technological infrastructures (Burrows, O'Sullivan, 2019, p.439), leading to a kind of hyper attention directed to a deluge of signals (info-noise) that are often not fully consciously metabolized, but are potentially available for engagement. This hyper-attention, despite being detrimental for the long term memory and deep learning processes advocated by Stiegler, prompts humans to develop new sets of skills that allow them to survive in these augmented, fragmented, platformized conditions.

In platform life, «constant psychological boosts keep you hooked. As a result, we're dead inside. We feel defeated, overwhelmed, stressed, anxious, nervous, stupid, silly, useless. Mood swings are programmed—steadily up in the morning, followed by a parabolic tumble in the afternoon» (Lovink, 2019, p.35). Spotify has a playlist for each of these phases of the day, Swagger playlist in the morning, Sad Girl Music in the afternoon; «while providing playlists for every moment is in itself constitutive of intimacy, this intimate relationship is monetized at the very moment when users click play» (Eriksson, Fleischer, Johansson, Snickers, Vonderau, 2019, p.99). When discussing the rise of the MP3 and the digitization of music, Reynolds claimed that «many of the consumer-friendly advances of the digital era relate to time management: the freedom to be inattentive or interrupted […] this flighty state of distraction is the appropriate response to the superabundance of choices» (Reynolds, 2011, p.71). As media theorist Geert Lovink asserts in *Stuck on the Platform*: "decision fatigue" is well known to media providers. For Spotify this is resolved through the daily mixes, the artist radios, the mood playlists, and the content tailored to the users' "listens" that often amount to just a few seconds[6]. Enough for the platform to record the behavior and feed it back into the recommendation system, while imposing chrono-normative prescriptions of "the good life" (Eriksson, Fleischer, Johansson, Snickers, Vonderau, 2019, p.144) and promoting a self-help ethos inscribed in a utilitarian model of music consumption that exacerbates the "sadness by design" (Lovink, 2019) of the users.

Even the formats proposed are not new; Spotify repurposed the radio nomenclature and exploited the intimate act of listening to music to affect the unfathomable loops of the post-human relationship with our smartphones. These unfathomable loops relate to the non con-

scious cognitive processes inaccessible to conscious introspection (Lovink, 2022, p.90). Technogenetic co-evolution of humans and machines has to account for the different temporalities of the «looping [of] the (relatively fast) firing of neurons, conscious registration and the (relatively) slow process of narrative comprehension in humans with the speed of the Central Processing Unit in computers» (Burrows, O'Sullivan, 2019, p.438). The synchronic nature of the Spotify database is hidden behind a veil of diachronic narrative selection (mood, genre, mixtapes, playlists), and the objectivity of listening through machines that emerged with modernity is allowed to enter and affect the private emotional and subjective space of the app users; it infiltrates their everyday life and activates a circuit of connections, an "unfathomable feedback loop," that manifests in the rhythms of the self dictated by capitalism.

Diachronic narrativity can enhance processes of transindividual mnemonic transmission, as opposed to the synchronicity of the database. Data rearranged as a pseudo-narrative, a pseudo-event, does not do much more than creating a mood, what philosopher Steven Shaviro defines «a kind of ambient sensibility» (Shaviro, 2010, p.2) the same sensibility behind the idea of wallpaper music promoted by Spotify[7]: an affect-generating machine that does not demand attention, but is meant to play and dwell in the rear end of the senses.

3. Noise and Nemocentrism

According to scholar Sean Higgins, recognition is positioned at a distance from thought spurred by noise. Recognition is the application of a model of listening that identifies a signal, a *datum*—or given; the exposure to noise would by contrast entail the empirical absolute difference and excess in sound, in relation to any previously established model of listening (Higgins, 2010, p.53).

Noise as the driver of acts of thought implies the forced breakdown of a system, with a consequent reconfiguration that pushes a system to become different in spite of attempts to stay the same (Higgins, 2010, p.53). The tuning that happens through the mood-reliant service offered by Spotify affords a rhythmic context for the inattentive listener. "Wallpaper music" is the result of a processual mindset and engineering attitude that, across the 20th and 21st centuries, shifted the perception of noise from a disruption to be eliminated to an unwanted element that could be hidden through perceptual coding underneath more desirable sounds (Sterne, 2012, p.118). Sound-masking technologies making use of noise as a fundamental engineering parameter, were implemented when developing the MP3 format

and its protocols, and are still implemented in what sound researcher and media professor Mark Hagood has defined "orphic media":

> Orphic media have arisen to silence a blaring contradiction in our liberal, capitalist, and increasingly 'infocentric' society, which generates the imperative for a focused, free, and disembodied subject while also complicating the environmental conditions that have always negated the possibility of such a subject (Hagood, 2019, p.10).

Contemporary media utilize algorithmic decision-making processes to promote increased freedom of choice; in reality they remove from the users the responsibility of choosing within a fabricated environment of virtual freedom. Freedom is virtual insofar as it allows the user to operate within prescribed spaces of controlled power and value. The hyper-personalization of content affords a phantom agency that masks the noise of the shared social dissonance that affects us all (Hagood, 2019, p.17). "21st century noise"[8] is the foundation of the different technosocial assemblages of our contemporaneity: If we consider noise as central in the formula for the creation of consumer applications and interfaces, it becomes more difficult to discern noise as a recognizable form of disruption and, possibly, tool for emancipation. Moreover, in times of genre-less platformized music, music itself can be said to subvert established genres, and to refuse to be subsumed by any genre-related categorization (Brassier, 2007). The genreified noise (as a category of music) shares the same database as Billie Eilish and Taylor Swift, it is as commodifiable as any other musical genre. In an interview with researcher and musician Bram Ieven, philosopher Ray Brassier asserts that what is «interesting about noise is its dis-organizing potency: the incompressibility of a signal interfering with the redundancy in the structure of the receiver. Not transduction but schizduction: noise scrambles the capacity for self-organization» (Brassier, Ieven, 2009). The introduction of noise, for Brassier, would trigger an excess that would force a subject to make sense of herself «in a quite unfamiliar and even fundamentally foreign conceptual register» (Brassier, Ieven, 2009), opening up the possibility of an experience-less subject, a nemocentric[9] subjectivity that would create new possibilities for the formation of communist subjectivities.

If noise is the disruption that becomes prerequisite for a selfless subject (Brassier, Ieven, 2009), could we argue that noise-reliant[10] algorithmic systems, based on the objectivity of machinic listeners, organize the chaos of desiring subjects by creating the illusion of a unique self, but in reality becoming the ultimate breeding ground for nemocentric production of subjectivities?

These are nemocentric because distributed across the cognitive assemblages of platform capitalism, dematerialized, decentrered, scattered, they are everywhere and nowhere at the same time. However, having noise been subsumed under the "masking" premises of platform capitalism, these nemocentric subjects operate under the prescriptive logics of the very capitalist structures that produced them, inscribing them within stealthy trajectory of value production that they promote.

The infrastructure of likeness built by Spotify is political to the extent that it reduces the margin of agency for emancipating not only the fingertip, but all that it symbolically represents. Harnessing all the noise within reticular structures of media consumption is a political move, and by bending the noise to make it fit into the platform's shape, the streaming platform declares war to noise.

Despite getting progressively embedded within the systems it eludes, noise manages to reformulate itself and stay at the fringe of recognition and automation. If music is the organization of noise, according to Jacques Attali, it is also «a model of listening for recognition of sonic signal through the suppression or organization of empirical difference as given to the senses. That is, music is what can be recognized, and noise is what can only be sensed» (Higgins, 2010, p.55). How can we recuperate the notion of noise as an evasive limit concept, an agent that could allow for disruption and interruption, revealing the interdependent functioning of the interfaces, pulling them out of their engineered transparency?

If noise can reveal «non conscious rhythms of the self, those very rhythms that produce representations through which capitalism enslaves a populace» (Burrows, O'Sullivan, 2019, p.371-372) can we envision a way to break through the overwhelming wealth of info-noise as the canon for aesthetic and cognitive apprehension? How can we avoid being datafied and objectified, and become aware of that *living noise*[11] that would allow us to understand how we are conditioned and what our limitations of our present means are (Mattin, 2022, p.102)?

4. Nemocentric Listening: a Proposition

The living noise hides in the cracks of the distributed mediation of digital interactions, it is fragmented across virtual and physical realities, it emerges as the often incomputable excess of machinic determination and behaviorism.

The clash of the objectivity of the listening operated by the machine—and the incomputability it faces when confronted with ambiguous content—with the subjective, situated, position of a human listener exemplifies a tension that from modernity until today grew into a reticular system I identify as the "nemocentric" distributed listener. The way this kind of listener operates on technology users flattens them to a "nemodimensional"[12] state, where its alienating effects can potentially be conditions of possibility, rather than just be seen as the consequences of an inescapable oppression. The one-dimensionality envisioned by philosopher Herbert Marcuse in his seminal *One-Dimensional Man* indicated a movement of repression to be countered with a process of liberation that would unfold the one dimension into a multiplicity of dimensions of thought and behavior. Nemodimensionality builds on the acceptance of the systems described in this text: The nemodimensional condition already contains multiplicities, it is a psofotopia[13] that can be potentially explored. What paradigms are fostered by automated systems of sound recognition? How do they affect human listeners? What kind of agency is retained within this often bleak landscape?

5. Objectively Incomputable

Platform infrastructures rely on the distribution of systems for listening, created on the premises of supposed neutrality and objectivity of categorization and recommendation. This distribution fragments and scatters the listening function, creating a "listening from everywhere", or "nowhere", that is pervasive across the infrastructures of the technosocial assemblage and operationalized in the concert among trackers, algorithms, databases, artificial intelligences, etc. Delegating the listening function is very clear in the case of streaming platforms—the algorithm literally pre-listens for the platform users and organizes content according to what we will define later as a physiognomy of habit. In recognizing specks of ourselves in these automated portraits, we also adapt and engage in processes of adjustment that inherently mutate the way we listen, correct, speak, enunciate, and ultimately, write. When compelling us to adapt our responses, these systems expose the patches and points of ambiguity, of mishearing and miscategorizing.

In delegating the responsibility for listening to a nemocentric distributed apparatus, we inadvertently become complicit in normalizing its dead spots and in treating the content pertaining to them as waste to be disposed of within other segments of the exploitative cap-

italistic machine. One understanding of noise in these distributed systems of listening is the unrecognizable, the unpredictable. It is the idiosyncratic, perhaps disturbing and confronting, perhaps just confusing because at the fringe or outside of known epistemic categories. Sometimes, it is just what is not rubricked as relevant, or in the context of streaming platforms: not promoted by big music labels. Music and music consumption are captured by processes of homophilic digestion, where similarity breeds more similarity: Algorithmic homophily is a central guiding principle in a technical assemblage that flattens anticipation, preluding to the disindividuation described earlier. The objectively incomputable is what falls out of this homophilic logic of prediction. In the current state of things, in order for the objective synthetic listeners to operate, parsing and categorizing the ambiguous noises, or eliminating the confronting ones, is a task outsourced to exploited and invisible human listeners[14]. They deal with the kind of content that could disrupt the frictionless online market of data mining, staging another—perhaps unsuccessful—masking effect, a solution that does not eliminate the noise, but rather hides it through exploitative outsourcing.

6. A Physiognomy of Habit, or: the Lack of Lack

Despite being designed and engineered with objectivity as its main purpose, the listening apparatus "objectively" listens to content in order to restitute ad-hoc reactions to the human listener, such as a music selection. The subjective receiver then will proceed in amending her input, adjusting her content preferences and interaction habits. These traces will be added to the data pool that will feed the machine in its endeavor to, in turn, continue "serving" the user. We can expand on this by considering the act of listening as a bi-directional rhythmanalytical relation (House, 2017, p.22).

> A medium conceived of as a trained body—a listening body that undergoes change—is broad enough to include both the algorithm and the phonograph alongside the human. Lefebvre himself opens this potential when he writes that by 'bodies' he includes 'living bodies, social bodies and representations, ideologies, traditions, projects and utopias. They are all composed of (reciprocally influential) rhythms in interaction' (House, 2017, p.22).

We are affected as we listen to music through Spotify, and we affect the platform as it monitors our behaviors, movements, walking pace, and as it adjusts to gain deeper and more detailed access to our innermost selves. If early "objective" listening machines were deployed

to develop forensic vocal portraiture or physiognomy of the voice (Li, Mills, 2019, p.S130), with the advent of automation, the objective listener is directed towards a physiognomy of habit. Listening habits constitute a valuable source of data, «they also cast music as an ideal tracking device, accompanying individuals across a variety of social, physical and geographical spaces. In this way, the very attributes that make music so powerful as a "technology of the self" facilitate its transformation into an equally powerful technology of surveillance» (Drott, 2018, p.233). Having failed to deliver the promised relief from the losses caused by digital music piracy at the beginning of the millennium, Spotify had to monetize whatever else they could have access to. Alongside the promotion of certain kinds of musics that can become successful within the infrastructure streaming platforms have created, the physiognomy of habit cross-references music with other kinds of contextual data, approximating through its automated data processing a kind of prediction that is more fittingly understood as preemption.

By exploiting decision fatigue and the mutual entrainment between human and machine, the objective listener anticipates desires and needs before they even manifest, operating at a pre-subjective and affective level, eliminating the lack that is usually present when a desire arises, and when the quest to satisfy that desire is undertaken. With the introduction of the mobile phone as the device where multiple work and entertainment activities are carried out and enacted, leisure apps such as Spotify can implement tracking operations that gather contextual data that can be easily monetized, operationalizing different kinds of "objective listeners" whose non-humanity turns quickly into an aseptic and ruthlessly deterministic in-humanity.

7. The Automated Nemocentric Listener

The modern objective listener developed around machinic constraints and protocols that helped regulate and standardize an ever-growing communicational infrastructure. Contemporary audio analysis entails automatic identification but also the automation of response (Dockray, Parker, 2023, p.255), implicating both sender and receiver in a process of mutual exchange and adaptation. Technological progress in audio technologies for telecommunication was made possible by using exclusionary parameters that narrowed down the necessary bandwidth for the successful, and efficient, carrying of meaningful information, cannibalizing the unheard and using it as a parameter for dissemination. An analogous exclusionary parameter is at work in the history of compressed digital audio. Perceptu-

al coding and perceptual technics inspired by psychoacoustic studies could support new technologies of production, distribution, and consumption of music[15]. The format's capabilities are amenable to the requirements of the objective listeners, and in turn influence the kind of music that can sound "best" through reduction and synthesis. These formal aspects, together with the affordances of the techno-cognitive apparatus itself—such as algorithmic recommendation mixed with industrial interests, classification parameters that do away with genres, etc—become central in the way we are mutually entrained with apps like Spotify.

With internet connectivity and the platformization of communication, the objectivity of the different listeners at work to process information exchange among users is dependent on the possibility to access in a synchronic way a vast database of knowledge, and on the assumption that that very database can be considered a truthful "map" of our experienced reality.

> The digital overlay will operate as a virtual mirror, reflecting the world back to itself in machine-readable form. […] The fantasy of automation is that in the breadth of its reach, in the ambition of its scope, it can approach the post-subjective perspective of the view from everywhere – or nowhere: the purely objective representation that leaves nothing out (Andrejevic, 2020, pp.114-115).

Media studies scholar Mark Andrejevic looks at this objectivity through the lens of framing, a theory proposed by sociologist Gregory Bateson in 1972. For Bateson, psychological frames served as «spatial and temporary bounding of set of interactive messages» (Bateson, 1972, p.191), operating as a kind of metacommunication. This metacommunication, dependent on contextual, familiar, and cultural constraints, situates individuals interacting with each other, allowing them to understand nuances that exceed the factual content of a given message. By designing machines that operate synchronically on a virtual map of reality, granting them a view from everywhere, they are also, by default contrast, operating from nowhere. They are everywhere at once, dismantling the idea of subjective positionality that comes with framing, and reducing the time and the space for diachronic and diegetic experience.

This non-human listening takes objectivity as totality and does away with the frame and its determination of a view, an opinion, a way of choosing. The frame constitutes a set of constraints that condition the listening act. The paradox of this situation lies in the removal of the frame for the sake of automated objectivity: this creates new, broader and ambiguous, limitations to the way we listen, while offering an overarching palliative narrative about the impos-

sibility of escaping this expanded frame advertised as non-existent. The transparency of this larger infrastructural and UX-friendly frame, together with the disembodied and disseminated nature of the objective listener, offers an analogy with the notion of nemocentrism. I want to think speculatively about this idea, translating the meaning initially formulated and assigned to it by philosophers Thomas Metzinger and Ray Brassier into the post-subjective realm powered by the techno-algorithmic apparatus and inhabited by the objective listeners.

If the model of selfhood is something that, as artist Mattin argues, is created through the entanglement of the «spectral objectivity […] based upon our social interaction under the regime of commodity production» and the phantom subjectivity this produces through neurobiological processes (Mattin, 2022, p.111), then the first-person perspective and the idea of ownership of experience are mere illusions. If the self[16] does not exist, if it is a fiction created by our information-processing sensori-cognitive system, it might as well be externalized through conditions created by the reticular cognitive assemblage of contemporary technocapitalism. Metzinger highlights three minimal constraints for the experience of phenomenal consciousness:

> I. Presentationality, or the generation of a window of temporal presence through which the system represents the world.
> 2. Globality, or the availability of information for guided attention, cognitive reference, and control of action.
> 3. Transparency, defined as 'inversely proportional to the introspective degree of attentional availability of earlier processing stages.' (Brassier, 2011, p.14)

By stretching further the mutual entrainment highlighted earlier in relation to the constant adjustment between human and machines, we can claim that the post-subjective nemocentric listeners are operatives deployed for the simplification of the chaotic selves disturbing the totalizing map created by objective synchronic databases. In the case of Spotify, we can analyze its functioning through the different constraints enumerated above. The presentationality is given by the activation of a series of archival information at the moment of interaction (the physiognomy of habit); the continuous contextual tracking and cross-referencing with the globality of datasets predict future desires (the lack of lack) and behaviors (preemption) in homophilic fashion. The whole apparatus functions seamlessly, without friction, making its functioning transparent, removing conscious access to its functioning. It generates a "naive realism" (Brassier, 2011, p.15) that concretizes through the assumption of the recommendation system as a given, in relation to a phantom self projected and scat-

tered across different platforms operated by objective listeners and viewers. The transparency of the interface as an intuitive navigation map obscures, as a special kind of darkness (Metzinger, 2003, p.558), the inner workings of the nemocentric automated listener.

In the transparent process of entrainment between human and machine, the phenomenal self model's conditions are captured by platform capitalism. We can assign a listener function to the nemocentric listener, and understand it as a way to circumscribe and prescribe the auditory ways in which individuals acknowledge themselves as subjects. What results is a complex process of coevolution and coadaptation: Subjectivity learns to listen like the distributed nemocentric listeners listen, reducing the space of the "real" (or: objectively incomputable) that exceeds machine listening, and that machine hearing attempts to approximate. The current state of things becomes a manifestation of the negation of selfhood, creating the conditions for platform users to adhere to the fragmented quality of the total simulation created by these virtual spaces and their functioning logics. Our own experience becomes the experience that is given to us from a set of automated procedural listeners. There are no selves, but information processing systems engaged in the transparent process of mediated phenomenal self-modeling. The notion of experience as something unique, something that is sold by platforms such as Spotify, might as well be a reproduction of countless other accounts, determined by a kind of collaborative filtering[17] that operates in the background to generate an illusive sense of uniqueness. With the reduction of the noise of the unpredictable chaotic selves, the dream of totalization prompted by automation can actually come into being. We are digitally portrayed through a series of assumptions built on partial premises fed to the nemocentric apparatus as interface interactions. In a logic of progressive (monetary, performative, etc.) optimization, the algorithms are at work to restitute an image of us that will ultimately resemble us more than the image we have of ourselves: augmented distributed subjects devoid of noise, yet constructed through systems that feed on noise.

8. Nemocentric Doom as Pharmakon

How can we define noise, within the complex nemocentric reticular architecture? Noise has here a manifold—and, tautologically, inherently psotofopic—meaning. A first remark regards the premise upon which PAINR[18] systems are created. Predictive Artificially Intelligent Noise Resilient Systems are decentralized control systems built on noise. Difference is

not policed and eliminated, but rather encouraged, in order to increase the flexibility of surveillance and control through predictive AI tools. This means that a more "traditional" understanding of noise—that of disruption in relation to technological apparatuses designed to be robust to noise—can be applied with difficulty to the current state of things. Noise deployed as a fundamental parameter for building the networks that host the nemocentric listeners becomes a fundamental variable in the process of mediating experience and conceiving of that very experience. How can we account for the noise that is generated by possible disruptions, failed alignment with (or total acceptance of) the distributed versions of ourselves as generated by the nemocentric listeners?

Some paradoxes emerge through the clashes between these two understandings of noise. Noise is the root cause of the cognitive dissonance generated by way of interfacing with nemocentric listeners. Our chaotic selves collide with the reduced and simplified version of reality offered by the nemocentric listeners, a flattened landscape that on the one hand provides the solace of temporary relief, while on the other, if not questioned, it generates longer-term issues. We could even add the paradox of noise (as a term containing the contradictions stated above) representing the damage caused by the nemocentric listeners operationalized through platforms, but also being an enabling condition: a possible line of flight or intensification; a device to analyze the dysfunctional operations of reticular cognitive assemblages; a way to follow the reticular threads and find pockets of resisting living noise.

Platform capitalism promotes the idea of strong and unique individuality (through hyper-personalization, commercialization and monetization of one's online presence, etc); however, this individuality is constructed on the dividuality that is inherently generated by the nemocentric techno-assemblages. When parsing and dispatching anesthetized versions of (certain parts of) ourselves—with the aggravating addition of advertising and propaganda—the nemocentric listeners overload the dividuals with information that surpasses their own diachronic understanding of themselves. This is what Cécile Malaspina analyzes as the mental state of noise: an internal crowding and confusion created by a plethora of stimuli that cannot be organized properly. In the attempt to reach homeostasis in a Turing-inspired feedback loop[19], different coping mechanisms are developed. When confronted with such ambiguities, the chaotic subject craves for a stable sense of self, on the grounds of representation and continuous memory (Malaspina, 2018, p.179). Mnemotechnics[20], often highlighted as the main

premise and motor behind technological progress, create novel ways of perceiving, recollecting, and storing information, exteriorizing memory into technical objects. When the latter process is delegated to devices and applications programmed with a limited set of automated selection criteria, the diachronic narrative of humans collide with the synchronic nature of databases, normalizing catastrophe as a principle of operation (Hui, 2015, p.132).

In the face of the uncertainties created by all the instances described above, the negative capability—that is: being able to approach confusing material «without prematurely resorting to an armor of pre-set attitudes and behaviors» (Malaspina, 2018, p.181)—is a skill that is difficult to exercise because of the generalized removal of friction through processes of nemocentric cleansing. Platforms give a false sense of control, that is what the subjects entrained with the nemocentric listeners obsessively seek, as a catastrophic reaction[21] to the cognitive dissonance generated by the assumption of a robust self colliding with the diluted and fragmented version of it generated by the nemocentric listeners themselves.

The nemocentric listener is subservient to the totalizing plan of datafying reality, nullifying the agency of the subject (as driven by desire, even when that desire is eliminated by the elimination of the lack) and relegating it to responses to pre-subjective affective modulations, forcing it to become entirely computer-readable, without inconsistencies. A noiseless subject for a frictionless capitalism, yet stuck in catastrophic reactions created by the algorithmic catastrophes that are normalized and programmed into automated systems.

The alienation that results from this game of nemocentric assumptions and mediations produces a further flattening of that one-dimensionality formulated by Marcuse in the 1960s, that I want to term "nemodimensionality." This nemodimensionality is an alienating space generated by the nemocentric listening apparatus, and despite its grimness, it can also be, as Mattin states, an enabling condition:

> a way to reveal the social dissonance between our image of ourselves (as free individuals endowed with rational agency) and our socio-physical determination or constitution by the capitalist totality, understood to include the value-relation and technological mediation, in interaction with the subpersonal mechanisms that are necessary for the production of selfhood (Mattin, 2022, p.38).

These interactions, or collisions, can happen at any point of the nemocentric network, creating the possibility for alien(ated) outgrowths and derailments along the distributed

processes of translation and mediation. In these accidents, we can recuperate the potentiality of noise, but only if we understand how we are constituted by different forms of noise, from the mental noise to the noise operationalized within technological infrastructures and the noise of our limited knowledge (Mattin, 2022, p.195).

The concept of living noise can be once more useful here, in contrast to the inescapability of the nemodimensional totalization that is created by capitalism and its technostructure. Dreams of opting out, of ultimate escapes and detoxes from the algorithmic capture, are trite utopian myths. We have to accept the psofotopic nature of our reality, and the ambiguous sonic space that is created through the interaction of human nemodimensional listeners and synthetic nemocentric listeners. If we inhabit that space with the awareness of the inadequacy of our tools to fully grasp its magnitude, but still trying to understand how it affects us, we could imagine collective strategies of coping and resistance. A further line of research could be the mapping of specific cases in which the living noise emerges from the automated nemocentric listening apparatus, creating an empirical extension to this theoretical proposal.

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[1] In *Reason and Resonance, A History of Modern Aurality* (Princeton University Press, 2014) Veit Erlmann derives the listener function from the Foucauldian writer function. If the author is depersonalised in favour of the discourse that surrounds it, the listener is here considered as the rational and relational agent within the physiological and conceptual realm of the sonic.

[2] The model of communication theorized by mathematicians Claude Shannon and Warren Weaver in 1948 is an example of classic information theory dealing with noise; another example is offered by the theorization of cybernetics by Norbert Wiener in the same year.

[3] "Based on a number of factors—some chosen by the user, some set in the code—it discards the parts of the audio signal that are unlikely to be audible. It then reorganizes repetitive and redundant data in the recording, and produces a much smaller file—often as small as 12 percent of the original file size. The technique of removing redundant data in a file is called compression. The technique of using a model of a listener to remove additional data is a special kind of "lossy" compression called perceptual coding. Because it uses both kinds of compression, the MP3 carries within it practical and philosophical understandings of what it means to communicate, what it means to listen or speak, how the mind's ear works, and what it means to make music. Encoded in every MP3 are whole worlds of possible and impossible sound and whole histories of sonic practices." Sterne J., *MP3. The Meaning of a Format,* Duke University Press, 2012, p.2

[4] The beginning of MaaS in the domain of music can be identified with the introduction of the Walkman in the age of tape cassettes, theorized as "the Walkman effect" by Japanese studies professor Shuhei Hosokawa in 1984.

[5] The "objective listener" is a metaphor that will return throughout the text, mobilized to explain the interpolation of machines (and their alleged objectivity) in processes of sensing, and making sense, in relation to music.

[6] In the framework of the datafication of content, Spotify registers a song as "listened to" after just 25 seconds.

[7] Music journalist Liz Pelly defined the music promoted by Spotify in thematic playlists as "emotional wallpaper music". Pelly L., *The Problem with Muzak. Spotify's Bid to Remodel an Industry*, The Baffler no.37, December 2017

[8] The Noise Research Union (Sonia de Jager, Cécile Malaspina, Mattin, Miguel Prado, Martina Raponi, Inigo Wilkins) defined 21st Century noise as follows: "21st century noise resounds across globalized neoliberal capture, burgeoning AI power, the rise of platform economies and transnational corporate empires and all their implications: neocolonialism, cyberwarfare, sweatshops, predictive policing, etc. If 20th century noise was a centrally broadcast symphonic maelstrom, 21st century noise is a user-generated cacophony that has amplified existing

forms of exclusion and exclusivity. Noise in music and sound art both expresses this situation and enacts resistance to it." https://n-r-u.xyz/

[9] The term "nemocentric" is composed of the prefix *nemo*, "no one", "nobody", in Latin. "Nemocentrism" is a term coined by philosopher Thomas Metzinger at the beginning of the 2000s, supporting his claim that no such thing as self exists in the world, and that the idea of subjectivity is centered on no one. Metzinger T., *The Ego Tunnel: The Science of the Mind and the Myth of the Self*. Basic Books, 2009

[10] Meaning: operating in a fragmented fashion, mutating contextually, producing" a user-generated cacophony that has amplified existing forms of exclusion and exclusivity", Noise Research Union's website

[11] Living noise is defined by Mattin as "a noise that is not yet socially validated i.e. commodified. It lies at the intersection between our activities and our unconscious. […] Understanding that it is there […] can help us to better grasp how we are conditioned, and the limitations of our present means. Living noise is precisely that which cannot be objectified in the labour process, because it is residual and remains below the threshold of measurement." Mattin, *Social Dissonance*, Urbanomic, 2022, p.38

[12] The adjective "nemodimensional" plays on the combination of the prefix *nemo* from the term "nemocentrism", and the notion of "one-dimensional man" advanced by philosopher Herbert Marcuse in the 1960s.

[13] Psofotopia is a term I coined, and that refers to the ambiguous "noisy" space between utopian hopes and projections, or simply positive judgments, and dystopian projections, or negative statements. The term has been proposed in the essay titled *Psofotopias*, published on Connessioni Remote n.5 (2023)

[14] I am referring to the work depicted in the documentary The Cleaners (2018) by Hans Block and Moritz Riesewieck, but also the work carried out in companies focused on the "cleaning" of metadata such as Gracenote; companies like Gracenote deliver metadata packages that include information crucial for the categorization and the sorting of music, implemented by streaming platforms in disparate ways, but always centering automation.

[15] Specifically, companies like Spotify capitalize on the masking operated by our ears, our sonic training/habits, and technological (im)possibilities. Compression formats like OGG Vorbis, twin sibling—yet open-source, hence royalty free—of the MP3 (the format at the root of standardization through psychoacoustic research and noise masking) exclude frequencies that are not heard by our ears in order to render audio files lighter, reducing the buffering time during streams, and allowing for a seamless music consumption.

[16] "To avoid any misunderstandings, then, in what follows, by individual we mean an autonomous and separate person, but with the understanding that this is an ideological construct based on a conceptual abstraction. As for self, as discussed below we will follow Thomas Metzinger, for whom the phenomenal self is what gives an experiential perspective into one's own consciousness by constructing a point of view. Although we may experience the self as 'transparent 'access to a substance or a thing, in fact it is the outcome of a process: the subjective experience of being someone emerges when a conscious information-processing system operates under a transparent self-model. The notion of the subject is the most complex of these concepts and remains to be constructed. What we can say in advance is that the subject comprises the unconscious activities that we carry out in reproducing existing conditions, while in the process mystifying how the subject appears in the world. That it is why it is of such importance to demystify the fiction of the individual as subject." Mattin, *Social Dissonance*, Urbanomic, 2022 p.13

[17] Collaborative filtering is a process used for the retrieval of information aimed at recommendation. This method is used by streaming platforms to recommend certain kinds of music to users, based on how users with similar tastes and preferences have interacted with those very kinds of music. The patterns of user interaction and consumption are used to prompt music "discovery".

[18] PAINR is an acronym coined by philosopher Inigo Wilkins. It is documented in the NRU zine n.1, produced by the Noise Research Union (Sonia de Jager, Cécile Malaspina, Mattin, Miguel Prado, Martina Raponi, and Inigo Wilkins) in May 2022

[19] "Turing's essay 'Computing Machinery and Intelligence'—appearing in, of all places, the philosophical periodical *Mind*—proposed an experiment, the so-called Turing game: A computer *A* and human *B* exchange data via some kind of telewriter interface. The exchange of texts is monitored by a censor *C*, who also only receives written information. *A* and *B* both pretend to be human, and *C* has to decide which of the two is simulating […]. But the game remains open-ended, because each time the machine gives itself away—be it by making a mistake or, more likely, by not making any—it will refine its program by learning. In the Turing game, Man coincides with his simulation." Friedrich Kittler, *Gramophone, Film, Typewriter*, Stanford University Press, 1999 p.17

[20] I am here referring to the conceptualization of mnemotechnics developed by Bernard Stiegler (2011, 2016). Departing from the assumption of how mnemonic processes of retention underline processes of transindividuation, I

am looking at how the industrialization (and consequently, automation) of mnemotechnics leads to dividuation, and to the general arguments developed in this text in relation to the automated nemocentric listener.

[21] I refer to the analysis that Cécile Malaspina makes of the catastrophic reaction, drawing from the notion of "mental state of noise" advanced in psychiatry by Steven Sands and John Ratey in 1986.

"The range of behaviours Sands and Ratey associate with this 'catastrophic reaction 'to the 'mental state of noise 'may take the form of a wide variety of behaviours and psychodynamic processes, spanning from 'boisterousness to fainting and passive weakness', from 'internal and social withdrawal to catatonia 'and 'stereotypies'. Significantly, also 'excessive orderliness 'is listed alongside other behaviours, as a form of behavioural and cognitive withdrawal from noise. In defining these behaviours as a 'catastrophic reaction', Sands and Ratey refer to early-twentieth-century neuropsychiatrist Kurt Goldstein. […]

Yet despite attempting to stave off the 'mental state of noise' through the closure of discourse and methodical rigidity, the 'catastrophic' reaction fails to alleviate the tension and the catastrophic attempt to organize experience 'may only add to confusion and psychotic phenomena'." Cécile Malaspina, *An Epistemology of Noise*, Bloomsbury, 2018, pp.175-180.

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Martina Raponi è un'artista e scrittrice che ricerca il rumore e l'inascoltato attraverso la scrittura, la performance sonora, la realtà espansa, installazioni interattive, e workshops. Dopo aver ottenuto un diploma in Lettere e Filosofia (Università degli Studi di Padova), una specializzazione in Pedagogia e Mediazione dell'Arte (Accademia di Belle Arti di Bologna) ed una in Fine Arts (Sandberg Instituut, Amsterdam), Martina è dottoranda presso l'Amsterdam School of Cultural Analysis dell'Università di Amsterdam. Martina ha pubblicato un libro sul rumore "Strategie del Rumore. Interferenze tra Arte Filosofia e Underground" (Milano, Auditorium Ed., 2015). È co-fondatrice di noiserr, un gruppo di ricerca interdisciplinare centrato sul suono, ed insieme all'artista [M] Dudeck ha fondato l'Ansible Institute, un laboratorio nomade di "speculative fiction". Martina è parte di NRU (Noise Research Union) ed è insegnante di teoria dell'arte presso la Willem de Kooning Academy di Rotterdam. Martina sta lavorando al suo secondo libro, "Psofotopias. Noise: Sounding Out the Unheard" (Auditorium Ed.), la cui uscita è prevista per la primavera del 2025.
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Articolo sottoposto a double-blind peer-review