

Noise Annoys, Noise is the Future: Communicational Noise in Cybernetic Theories and Popular Music Practices

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Introduction

We are surrounded by noise. And this noise is inextinguishable. It is outside—it is the world itself—and it is inside, produced by our living body. We are in the noises of the world, we cannot close our doors to their reception, and we evolve, rolling in this incalculable swell [...] In the beginning is the noise; the noise never stops (Serres, 1982, 126).

Noise has always been a slippery concept, at once a sonic phenomenon and a concept that transcends soundwaves to apply to all communicational processes (Goddard, Halligan and Hegarty, 2012); noise is also both an unwanted excess or transgression of clear expression subject to various measures of 'noise reduction' and essential for any form of communication to take place. Despite attempts to quantify urban noise, for example, in terms of decibels or other objective measures, ultimately noise is highly contextual and situational, and one person's musical comfort zone is someone else's intolerable noise depending on a range of factors as much aesthetic, social and cultural as objectively about sonic volume (see White 2012, 234-236 ff).

This chapter will introduce some of these different approaches to noise from Shannon and Weaver's information theory (1949) that was at the heart of the post WW2 cybernetic project to Michel Serres' more sophisticated account of noise as a parasite (1982)- a third term complicating any direct transmission between two positions in a system. If for Shannon and Weaver noise was a disturbance of a signal caused by the resistance of a channel, and ideally subject to elimination, for Serres this complication is inevitable as all points within a system are already involved in other dynamics, and there is always a 'third party' appearing to disrupt in simple linear transmission between two points.

In terms of music, Jacques Attali (1985) has raised similar issues and also points to the ways that all innovation in music is initially perceived as noise in relation to dominant orders, and as such operates as a harbinger or premonition of the future not only on the musical but also the social and political planes. This can be clearly seen in the case of popular music where every new style from jazz and rock and roll to industrial and noise music is initially perceived as an intolerable and unmusical noise before becoming assimilated and subsequently overtaken by ever new forms of noise (see Goddard, Halligan and Spelman, 2013).

This chapter will argue that this 'noise of the new' in popular music is neither a purely sonic phenomenon, nor a mere transgression of a dominant musical regime, but rather a kind of communicational noise that overwhelms the current limits and norms of social

communication and ushers in unanticipated future that extends beyond the purely musical or sonic. Referring to case studies of UK punk band The Clash and industrial group Throbbing Gristle, the chapter will argue that these groups, however noisy they appeared in a sonic sense, were in fact engaged with a communicational noise announcing unprecedented futures in a 'hyperstitional' manner that amount to nothing short of an 'information war'.

Negentropic Feedback Loops: Theories of Communicative Noise

When Shannon and Weaver introduced their 'mathematical model of communication' in 1949, both communication and noise were seemingly considered as an engineering issue, while at the same time presented in a highly generic and abstract form. Specifically this meant abstracting the message from its material context and from any questions of meaning or quality. In analysing the dynamics of sending any symbolisable message from a transmitter to a receiver through a channel, via processes of encoding and decoding, the relationship with noise was complex and ambivalent. While misread in engineering contexts as providing the basis for processes of noise elimination or at least reduction, in fact noise is fundamental to information in Shannon and Weaver's theory and enters this process in two distinct ways. As Su Ballard states "noise is both the material from which information is constructed as well as the matter which information resists" (Ballard, 2011, 62). More concretely 'noise' refers to elements added to a transmission of information like sonic distortions, static, picture deformations etc that were not part of the intended message and which interfere with its clear transmission and decoding. These additions, sometimes referred to as errors, accidents or glitches, are inevitable as all messages are transmitted via some physical medium that necessarily resists the pure transmission of information, due to laws of movement and thermodynamics. But the situation is more complex than this exterior resistance as noise is also fundamental to the form of information and thus appears twice in the process of communication.

While Shannon and Weaver's initial problem was noise reduction, and in fact this is how their theory was taken up in several fields, their theory in fact posited noise as fundamental to communication processes in two distinct ways; as external resistance, noise is introduced into a communication channel as the resistance of the material components that distort and deform the original message from the outside, producing "unexplained variation and random error" (Ballard, 2011, 67). But noise also enters the system from the inside as entropy encoded within the message, and plays a more positive role, allowing for continual reorganisation and the overcoming of redundancy. Despite the original meaning of entropy as loss of organisation and information, in Shannon and Weaver's model entropy actually produces a greater quantity of information and becomes the very measure of information. As Weaver put it: "If noise is introduced, then the received message contains distortions, certain errors, certain extraneous material [and] an increased uncertainty. But if the uncertainty is increased, the information is increased, and this sounds as though noise were beneficial!" (Weaver, 1949, 19). It is the very abstraction of this theory from any physical constant that differentiates it from entropy in thermodynamics and perversely refigures it as generative and productive of order out of disorder, organisation out of chaos, or in a

certain sense a source of negentropy. When applied as second generation cyberneticists would do to problems of self-organisation, noise appears as even more fundamental than in Shannon and Weaver's theory. As Malaspina puts it: "In a self-organising system a compromise is needed between redundancy and variety: to reduce noise and enable the transmission of information, without which the system would break down, and yet allow noise which introduces variety, which in turn augments the number of possible responses of a system to random fluctuations of the conditions imposed on it by its environment" (Malaspina 2011, 69). This was indeed the key shift between the problematics of control of first generation cybernetics for which noise was a disturbance to be minimised and the second generation for which it was fundamental to processes of self-organisation as a potentially negentropic feedback loop allowing for the autopoietic processes of living organisms, for example.

This 'equivocation' at the heart of information theory, has led later theorists to cast noise in much more positive terms as fundamental to all communication processes and therefore neither possible nor desirable to eliminate. For Michel Serres noise is the 'parasite', the third term that is always arriving to disturb any linear communication between two points. Using Aesop's fable about the country and the city rat whose meal is interrupted by the noise of a third party, he shows how all meals are in fact interrupted with a shifting distribution of roles between guest, host and parasite:

The tax farmer is a parasite, living off the fat of the land: a royal feast, ortolans, Persian rugs. The first rat is a parasite; for him, leftovers, the same Persian rug. [...] at the table of the first, the table of the farmer, the second rat is a parasite. [...] But strictly speaking, they all interrupt: the custom house officer makes life hard for the working man, the rat taxes the farmer, the guest exploits his host [...] A given parasite seeks to eject the parasite on the level immediately superior to his own (Serres, 1982, 3-4).

Tellingly the parasite that appears in the fable presents itself as a noise and Serres uses this to extend this fable to the complex relations of communication and noise which are for him always a parasitic process, taking place in a single direction. Expanding this with reference to Leibniz's monadic philosophy in which the subjects are always ignorant of the whole, Serres argues that all messages, knowledge or harmony are predicated on a fundamental repression of noise which is then disavowed, in order to constitute all kinds of systems whether technical or social based on one-way communication. But without noise there is only death: "Noise destroys and horrifies. But order and flat repetition are in the vicinity of death. Noise nourishes a new order. Organisation, life, and intelligent thought live between order and noise, between disorder and perfect harmony. If there were only order, if we only heard perfect harmonies, our stupidity would soon fall down toward a dreamless sleep" (Serres, 1982, 127). For Serres both pure chaos and pure order are distinct forms of stupidity, but intelligence and life takes place in the liminal zone between them "on the fringe" or "crest" (127). The distribution and contestation of roles of host, guest and parasite therefore is purely partial and dependent on a certain blindness, or rather deafness to the parasitic process which keeps them mobile which far from being an agent of

destruction, entropy and death is what enable any life, thought or feeling to take place at all and is therefore negentropic when not consigned to the black box of the unwanted disturbance to be eliminated.

Noise and Music from the Extra-Musical to Premonitory Hyperstition

As already suggested here noise escapes confinement to any single medium, as well as to any single valuation. Nevertheless, the sphere of popular music is an exemplary one for tracking the operation of noise in communicative systems more generally. On the one hand it inherits from the banal engineering interpretation of Shannon and Weaver the mania for 'perfect sound' and noise reduction across successive recording and playback apparatus's from the analog to the digital, while also depending on successive waves of what is originally perceived as non-musical noise in order to drive development across and within various musical styles and genres.

That this is not a new phenomenon is evident in Jacques Attali's *Noise* which, while more concerned with what he calls "the political economy of music", has been fundamental for thinking the noise and music relationship. Attali situates noise as a disruptive force traversing all musical regimes from the pre-classical music he associates with sacrifice, across the classical regime of representation to the modern technological era of repetition:

With noise is born disorder and its opposite: the world. With music is born power and its opposite: subversion. In noise can be read the codes of life, the relations among men [sic]. [...] when it is fashioned [...] with specific tools, when it invades man's time, when it becomes sound, noise is the source of purpose and power, of the dream—Music (Attali, 1985, 6)

This is no simple binary opposition but as with the communicative theories mentioned previously a complex genetic process in which noise and music are intertwined and spiral around each other in a similar manner to RNA and DNA in a double helix. The codes of music emerge through an organisation of what was previously the clamour or uproar of social life, but also give rise to their own internal subversion through the very possibilities of differentiation that they make possible. It is by no means necessary to wait for the eruption of popular styles of the recording era like jazz and rock and roll for this transgression of music by noise to become evident. As Attali points out "What is noise to the old order is harmony to the new: Monteverdi and Bach created noise for the polyphonic order. Webern for the tonal order. Lamont Young for the serial order" (Attali, 1985, 35). But noise is not just the motor for the development of musical forms, in Attali's view, but in his most radical argument is prophetic of future forms of social organisation. So it is not only the case that "Mozart and Bach reflect the bourgeoisie's dream of harmony better than and prior to the whole of nineteenth century political theory [and] Janis Joplin, Bob Dylan and Jimi Hendrix say more about the liberatory dream of the 1960s than any theory of [capitalist] crisis" (Attali, 1985, 6). Beyond mere reflection, music is a herald, a prophecy of future forms of social and political organisation because it "explores, much faster than material reality can, the entire range of possibilities in a given code. It makes audible the new world that will

gradually become visible, that will impose itself and regulate the order of things” (Attali, 1985, 11). While Attali cites the revolutionary aspirations of Berlioz and early Wagner in this regard as anticipatory of the not yet formulated communist project, we could also look at the slogan and attitude of ‘No Future’ that characterised first generation punk in the UK. While the social welfare state was already in crisis, and certainly popular and rock music had become an elite activity cut off from any youth participation, the situation of there being literally no future in terms of the overthrow of the welfare state and the imposition of neoliberalism would only really begin in 1979 and become fully implemented in the new millennium. Recently theorists like Franco Berardi ‘Bifo’ and Mark Fisher have proposed theories of the slow cancellation of the future applying both to music and socio-political life, but as Berardi acknowledges, these developments in naming 1977 “the year of premonition” (see Berardi, 2009, 14-16) were already seismically registered in punk music in 1977 across a whole range of semiotic expression.

The concept of noise as premonitory also resonates with the idea of hyperstition as developed by the Cybernetic Cultures Research Unit in the 1990s to account for the ways in which aesthetic works such as William Gibson’s *Neuromancer* could not only anticipate the future but engineer it. Drawing on such legacies as the surrealist notion of the imaginary as that which tends to become real, and Burroughs and Gysin’s multi-media cut-ups about which they famously claimed ‘when you cut into the present the future leaks through’, hyperstition as conceived at the CCRU is presented in the following terms: “we are interested in fiction only so far as it is simultaneously hyperstition—a term we have coined for semiotic productions that make themselves real” (CCRU, 2017, 63). Other than *Neuromancer* with its calling into existence of both cyberspace and cyberpunk Lovecraft’s concept of the *Necronomicon* is an exemplar of this; a fictional ‘evil’ book alluded to within several Lovecraft fictions, it has now become the basis as a real text for several ‘Cthulhu’ cults.

This might seem fairly far removed from questions of noise and music, but as channelled through the work of former CCRU members like Mark Fisher, Kodwo Eshun and Steve Goodman whether as ‘sonic fictions’ (See Goodman, 2009, 2 and Eshun 1998) or ‘sonic hauntology’ (see Fisher, 2014), this has been a highly influential way of thinking the prophetic power of music, which is in turn inseparable from the disruptive force of noise. Nevertheless, there are perhaps other terms that come into play beyond Attali’s interplay of noise and music. One of these is rhythm that is not really considered by Attali at all and yet is essential in almost all forms of music and extends beyond them to social relations and the production of subjectivity. This is discussed in Deleuze and Guattari’s *A Thousand Plateaus* in which rhythm emerges out of repeated actions and gestures that generate a territory which they theorise in terms of the refrain-and as their reading of Proust shows even the most complex works of classical music are ultimately reduced in memory to a ‘little ditty’ or repetitive refrain. It is this repetition, this rhythm, which is of course at the heart of all styles of popular music, and in a certain sense precedes both noise and music. This relates it to yet another term vibration. According to Goodman, in his project of *Sonic Warfare* “the concept of noise will be steered elsewhere, investigating when it is not conceived as an end in itself but instead as a field of potential [...] By shunting the problem of noise onto one of the

emergence of rhythm from noise, the power of a vibrational encounter to affectively mobilize comes into clearer focus” (Goodman, 2009, 8). This is not to argue against the fundamental nature of noise so much as to stress its hyperstitional powers in the process of becoming repeated as rhythm and thereby organising a range of territorial practices from military uses of sound as torture to the direct experience of vibration in bass heavy musical practices like dub reggae. In Goodman’s more recent Audint project (see Goodman, Heyes and Ikoniadou eds, 2019), the hyperstitional nature of this emphasis becomes even more explicit as existing and past practices of sonic warfare are traced forwards into a hyperstitional future via a range of performative engagements with ‘unsound’ or the not yet heard. This is both an enactment of hyperstition, as a form of sonic time travel and another example of the organisation of sound as a herald or prophecy of the future.

Annoying Noise in Punk and Industrial Musics

To return to the example of the noise of punk, this chapter is arguing that it was able to construct out of the range of available media in a specific urban socio-cultural environment, an intense expression of both reigning dominant forces and resistance to them via a rebellious range of mediated performances from new modes of urban dress and behavior, to aggressive live performances, to the generation of a range of artifacts extending well beyond the music itself (films, posters, record covers, and home-made cassettes are only part of this extensive archive). In all of these arenas, punk, in relation to existing norms of rock music, operated very much in terms of noise, annoying to the reigning status quo of both the established rock industry and wider cultural practices. This is not only in the obvious sense of producing ‘noisy’ music since psychedelic rock and heavy metal before punk were both exemplars of noise, sometimes produced more effectively than in punk. Punk, however, was noisy in a communicational sense precisely for its failure to meet a set of what had become standard requirements for rock music communication; technical proficiency and macho prowess over one’s instrument, professional standards of recording and live performance, and appropriate behavior of fans and consumers. In all these levels of what Paul Hegarty qualifies as punk’s ineptness (Hegarty, 2007, pp.89-90 ff.), noise was generated in relation especially to the stadium virtuosity of progressive rock, leading him to affirm the Sex Pistols’ *The Great Rock and Roll Swindle* despite or rather because of its obvious flaws and inauthenticity as a greater punk album than *Never Mind the Bollocks* (2007, pp.95-97). This position adopted from Stewart Home (see Home, 1996) flies in the face of writers like Jon Savage, Dave Laing or Greil Marcus who celebrate tracks from the former such as ‘Holidays in the Sun’ as sophisticated works of punk rock authenticity, as opposed to the lack-lustre performed bad cover versions of the latter, expressly designed to promote McLaren’s version of the Sex Pistols as his own fraudulent creation, a version of events John Lydon would only be able to contest through the formation of the decidedly post-punk Public Image Limited (PIL). But punk noise was not limited to ineptness in relation to rock norms, nor the refusal to produce a quality product, even where it came to rebellion (something that bands like The Clash and Crass would certainly depart from). Rather, punk noise was a short circuiting of mainstream media channels both by producing punk’s own

forms of media and especially by presenting the mass media with messages and content it was unable to easily assimilate. The Bill Grundy 'obscurity' interview with the Sex Pistols and its subsequent tabloid amplification is one example of this, but on a smaller scale so was the refusal of the Clash to go on Top of the Pops leading their singles like 'Bankrobber' to be presented in the form of interpretive dance. At its height, punk was a disturbance to norms of both media communication and the music industry, by being popular enough to be in the charts while remaining unrepresentable in terms of both radio airplay and televisual representation, while also forcing a reluctant music industry to engage with material that was directly critical of its own practices. Examples of this include the Clash's 'Complete Control', which forcefully expressed the band's direct rejection of their record label CBS's decision to release the relatively user friendly single 'Remote Control' from their first album, or the Sex Pistols' even more direct 'EMI': 'Too many people support us/An unlimited amount/Too many of them selling out'.

In this sense punk functioned not only as literal, musical noise, or the sociological, subcultural noise identified by cultural studies accounts like Hebdige's (See Hebdige, 1979), but also as communicational, media noise, short-circuiting dominant modes of representation and opening up of spaces for alternative modes of expression. This was even more the case for industrial music, which as I have argued elsewhere (see Goddard, 2017 163-167) was less a specific musical style or genre than a range of audiovisual strategies for destabilizing cultural norms through presenting anomalous phenomena from sound as a form of warfare, to serial killers, cults, 'modern primitivism', post surrealist anomalous art, the cut-ups of Burroughs and Gysin, 'incredibly strange' films and musical exotica.

In fact this engagement with cultural anomaly can be seen as the equivalent in the realm of culture to the deployment of noise in relation to conventional forms of music. Anomalies are noise in the literal sense of unassimilated and in some cases unassimilable perceptions yet to be labeled or ordered under a coherent category of understanding. As Paul Hegarty puts it: "Industrial music makes noise explicit, acting as cultural noise at many levels, and making sure these layers collide in collage [...] to challenge not only prevailing aesthetics but the notion of aesthetics being its own domain, and also the notions of what is normal, rational, desirable, or true" (Hegarty, 2007, 116). If many of these anomalous phenomena have since been commodified in practices from neo-tribalism to music styles ranging from global exotica to Techno, to the proliferation and extension of cut-up techniques into almost every sphere of popular music production, the anomalous impulse that animated these groups is still of significance for contemporary artistic and social practices today. The challenge is to find the anomalies that can be confronted and engaged with today, to produce new forms of cultural noise and new sensations in an era when it is perhaps much more difficult to do so than in the 1970s, now that the retro-processing of sonic and other forms that groups such as TG pioneered has become the dominant and standardised technique of sampling as a mode of cultural production. Rather than fetishising this past artistic experimentation by freezing it in a genre that betrays this impulse towards the anomalous and the future, as in most of what passes today for Industrial music, it challenges us to construct a plane of composition capable of assembling the 'noise' of our

contemporary post-industrial environment and expressing its new and anomalous vibrations.

What both punk and industrial musics at their best and most inspired were engaging in were processes of hyperstition or prophecy that not only critically engaged with dominant orders in the present but also suggested both its future dystopian potentials and possibilities for resistance. This can be seen in the Clash's obsession with radio to the extent of seeing themselves as a kind of alternative world service guerrilla radio station as imagined on 'This is Radio Clash', or Throbbing Gristle's notion that what they were engaged with was not the invention of a new style of music but information warfare: 'It's a campaign: it has nothing to do with art' (Throbbing Gristle, *Heathen Earth*). However this hyperstition was not at all about imagining a distant future but instead an intense engagement with the now, considered as a disruptive event, capable of opening different futures, to the Neoliberal one that was just materializing at the end of the 1970s. In this sense both these musical phenomena grasped the insight that could be traced all the way back to Shannon and Weaver that the only way of overcoming the noise of the dominant order was through a different variety of desirable noise.

Conclusions

This chapter has aimed to present some key theories of noise both in terms of communication theories and their parasitic reworkings by theorists like Serres, and more specifically sonically oriented theories of the relations between noise and music, from Attali to the CCRU's notions of hyperstition and beyond. It has also looked at how this played out in practice, in different ways, in both punk and industrial musics, both of which have hyperstitional aspects whether in terms of premonitions of the cancellation of the future in punk, or the post-industrial technological anomalous viral deformations of social existence discerned in industrial music and also being enacted in a range of 21st century experiences from Anthropocene climate chaos and new fundamentalisms, to the emergence of neo-fascism and new forms of technologically mediated authoritarianism. In all of these processes, noise is the fundamental energy that acts as both a creator and destroyer of worlds, that various forms of popular music, initially perceived of as unlistenable and un-musical noise, compose new forms and new futures with beyond the strictly musical or sonic spheres in which they predominantly operate.

References

- Attali, J. (1985). *Noise: The Political Economy of Music*, trans. B. Massumi, Minneapolis: University of Minnesota Press.
- Ballard, S. (2011). 'Information, Noise et al.' In: M. Nunes ed. *Error: Glitch, Noise and Jam in New Media Cultures*. London and New York: Bloomsbury, pp. 59-79.
- Berardi, F. (2009). *Precarious Rhapsody: Semiocapitalism and the pathologies of the post-alpha generation*, ed. E Empson and S. Shukaitis, trans. A. Bove, E. Empson et al. Williamsburg: Autonomedia.
- CCRU (2017). *Writings 1997-2003*. Falmouth: Urbanomic.
- Deleuze, G. and F. Guattari (1980). *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. B. Massumi. Minneapolis and London: University of Minnesota Press.
- Eshun, K. (1998). *More Brilliant than the Sun: Adventures in Sonic Fiction*. London: Quartet books.
- Fisher, M. (2014). *Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures*. Alresford, Hants: Zero Books.
- Goddard, M., B. Halligan, and P. Hegarty. (2011). 'Introduction'. In: *Reverberations: The Philosophy, Aesthetics and Politics of Noise*. New York, London: Bloomsbury, 1-11.
- Goddard, M., B. Halligan and N. Spelman. (2012). 'Introduction'. In: *Resonances: Noise and Contemporary Music*. New York, London: Bloomsbury, 1-9.
- Goddard, M. (2017). 'Audiovision and Gesamtkunstwerk. The Aesthetics of First- and Second-Generation Industrial Music Video.' In G. Arnold, D. Cookney, K. Faourclough and M. Goddard ed. *Music/Video: Histories, Aesthetics, Media*. New York; London: Bloomsbury.
- Goodman, S. (2010). *Sonic Warfare: Sound, Affect and the Ecology of Fear*. Cambridge, Mass., London: MIT Press.
- Goodman, S., T. Heys and E. Ikoniadou. (2019). *Audint. Unsound: Undead*. Falmouth: Urbanomic.
- Hebdige, Dick (1979). *Subculture: The Meaning of Style*, London: Methuen.
- Hegarty, P. (2007). *Noise/Music: A History*. New York, London: Continuum.
- Home, Stewart (1996). *Cranked up Really High: Genre Theory and Punk Rock*, Hove: Codex Books.
- Malaspina, C. (2011). 'The Noise Paradigm'. In: M. Goddard, B. Halligan, and P. Hegarty, *Reverberations: The Philosophy, Aesthetics and Politics of Noise*. New York, London: Bloomsbury, 58-72.
- Serres, M. (2007). *The Parasite*, trans. L. Shehr. Minneapolis and London: Minnesota University Press.

Shannon, C and Weaver, W. (1949). *A Mathematical Model of Communication*. Urbana, IL: University of Illinois Press.

White, K. (2012). 'Considering Sound: Reflecting on the Language, Meaning and Entailments of Noise'. In: Goddard, M., B. Halligan, and P. Hegarty eds. *Reverberations: The Philosophy, Aesthetics and Politics of Noise*. New York, London: Bloomsbury, 219-232.