Noise/ Music

A HISTORY

Paul Hegarty

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FIRST

> Existence and the world seem justified only as an aesthetic phenomenon. In this sense, it is precisely the tragic myth that has to convince us that even the ugly and disharmonic are part of an artistic game that the will in the eternal amplitude of its pleasure plays with itself. But this primordial phenomenon of Dionysian art is difficult to grasp, and there is only one direct way to make it intelligible and grasp it immediately: through the wonderful significance of *musical dissonance*.[1]

Noise is not an objective fact. It occurs in relation to perception—both direct (sensory) and according to presumptions made by an individual. These are going to vary according to historical, geographical and cultural location. Whether noise is happening or not will depend also on the source of what is being called noise—who the producer is, when and where, and how it impinges on the perceiver of noise. Noise is not the same as noises. Noises are sounds until further qualified (e.g. as unpleasant noises, loud noises, and so on), but noise is already that qualification; it is already a *judgement* that noise is occurring. Although noise can occur outside of cognition (i.e. without us understanding its purpose, form, source), a judgement is made in reaction to it. Noise then is something we are forced to react to, and this reaction, certainly for humans, is a judgement, even if only physical.

Noise is not only a judgement on noises, it is a negative reaction, and then, usually, a negative response to a sound or set of sounds. Biologists, sound ecologists and psychoacoustics would have us believe that noise is sound that damages us, and that a defensive reaction is simply natural, even if, at an individual level, it might be learned. This would imply that certain frequencies or volumes of noise are inherently noisy. Let's imagine that this is the case—we still need to think on how it works, and this will show that the idea of some things being noisy deconstructs itself. First, even in this model, noise needs a listener—probably some sort of animal or a non-organic machine with hearing capacities (both can be classified as 'hearing machines'), in the vicinity of the noise so that the soundwaves can be heard. The sound then has to be perceived as dangerous to the functioning of the hearing machine. Without these two moments, we might have a sound, but we do not have noise. I am sure that few would disagree with this interaction being necessary, but would then insist that certain frequencies or volumes are fundamentally and always damaging to particular organisms or machines; but the tolerance of individual hearing machines varies, however, and this is not just due to biological factors. Many organic hearing machines (and not just humans) will split the world into loud sounds that are fine and dangerous sounds that are noise, whose reception must be avoided, and this is as much to do with learned social behaviour as physical pain, or the threat of same. *Noise is cultural*, and different groups of hearing machines will process sounds differently. Primarily, here, I am interested in human hearing of noise, and human cultures display a variety we can understand

more clearly than the range of sound ecologies for dolphins, whales, primates or birds. Whether a noise is *there* or not, it comes to be as sound, or as noise perhaps, only retrospectively. The Big Bang can be said to have occurred at a given moment, even if time did not exist until just after it, but it betrays itself retrospectively as humans (or others) come to understand it, and also because its evidence only comes to you over time, as the universe expands. And the Big Bang has a sound—it is the final static that can never quite be removed—so the universe itself (this universe anyway) can be imagined as noise, as residue, unexpected by-product, and the last sound will also be the first.

Humans can be physically affected by certain sounds or noises: very high frequencies or very loud sounds measured can damage hearing. Very low frequencies affect other areas of the body, and have commonly been used in torture—digestive systems can be disturbed, the functioning of the heart disrupted. Many types of sound can be mentally disturbing. To think of these effects is only to begin to see how noise works, and the element that links all noise, all judgements that noise is happening, is that noise is something that one is subject, submitted or subjected to. Further on in the book, we will see that subjection in the context of noise can be mobilized more positively, but for now, I want to argue that noise happens to 'me', is beyond my control, and somehow exceeds my level of comfort with the soundworld I or we inhabit. In some way, noise threatens me, is part of the other I define myself against. Noise is a phenomenology of noise, insofar as it exists in relation to individuals, who define themselves as being subject to noise (a community forms around the hearing of a house or car alarm).

Certain types of noise are to do with the sounds of 'other people', and these are the ones that are most complicit with power, and lead to noise control regulations. As a result, practices that are not in any way loud enough to constitute a physical threat or even irritation are thought of as noisy. Different subcultural or cultural traditions or practices that are thought of as other are noisier, hence perceptions of people speaking in 'foreign' languages being loud, or to take a peculiar case, the reaction of some pubs or cafés to groups of deaf people using sign language. This last example raises another key part of what noise is: although it can be loud, it is much more about what is deemed to disturb, and loudness is only part of that overall *sense* of noise. So, noise is an excess, is thought of as being too much, and for human hearing, this occurs almost entirely through cultural perceptions, and individual reactions within that framework. This is why Jean-Luc Nancy, for example, tries to build up an ethics based on listening, as listening suggests openness, receptiveness, and this leads to understanding. You don't need poststructuralism to tell you that, as we have come to believe that listening is almost enough to have a society or community that gels together and conquers its neuroses or issues, but what Nancy and other writers who will feature in this book identify is that hearing has been neglected within western philosophical reflection, and this neglect has reduced our appreciation for the difference between hearing and listening.

Generally speaking, hearing is thought of as less reflective, a physical process we can do nothing about (the tired truism of not being able to close our ears as we can our eyes adding to the impression that seeing has correctly been imagined as the dominant human sense). To hear is to be subject, though, and writers such as Jacques Derrida would argue that western philosophy ('metaphysics') is

based on a presumption that I hear myself speaking, and that is how I know I am here. But, he claims, 'here' is always 'there', and there is never truly a moment where 'I' am simply present, all in one place, at the same time.[2] The common presumption today, whether coming from human resource management, counselling or politicians, is that listening is a good. But who listens? Too often it is supposed that there is a 'me' that is in a position to control 'my' listening. I want to claim, as Nancy has done, that listening is not under 'my' control. As Stanley Fish has it, you do not have culture, it has you, and any listening, including the belief that listening is good, ethically sound, productive, and so on, comes from within a culture. Or, as Arthur Kroker puts it, 'Hearing has always been alchemical, a violent zone where sound waves mutate into a sedimentary layer of cultural meanings, where historical referents secrete into contemporary states of subjectivity, and where there is no stability, only an aural logic of imminent reversibility' (*Spasm*, 52).[3] Noise, and the music that comes from an engagement with it, tests commonplace notions of hearing and listening, and tries to destabilize not just our expectations of content or artistic form, but how we relate to those, to the point where the most interesting point of encounter might be a loss of controlled listening, a failure of adequate hearing, even if this is only temporary.

Noise is negative: it is unwanted, other, not something ordered. It is negatively defined—i.e. by what it is not (not acceptable sound, not music, not valid, not a message or a meaning), but it is also a negativity. In other words, it does not exist independently, as it exists only in relation to what it is not. In turn, it helps structure and define its opposite (the world of meaning, law, regulation, goodness, beauty, and so on). Noise is something like a process, and whether it creates a result (positive in the form of avant-garde transformation, negative in the form of social restrictions) or remains process is one of the major issues in how music and noise relate.

Noise has a history. Noise occurs not in isolation, but in a differential relation to society, to sound, and to music. Against the backdrop of Enlightenment, and then Romantic, notions of music and its place, modernist thought about music tries to branch out, to address the world of sound and human interaction with and/or construction of that world. The first key moment occurs with Futurism. Filippo Tomaso Marinetti, the leader of the movement, had already introduced the notion of 'sound poetry', but it is Luigi Russolo's *The Art of Noises* that provides the theorisation of futurist ideas on sound. According to Russolo, 'ancient life was all silence. In the 19th century, with the invention of machines, Noise was born' (23).[4] Mel Gordon glosses this claim with the statement that 'the cacophony of sounds in the 19th century street, factory, shop and mine—seemingly random and meaningless—could not be easily isolated and identified' ('Songs from the Museum of the Future', 197).[5] So instead of silence being the premodern state, we have a soundworld based on recognition and incorporation. As John Cage 'discovered', there is no such thing as silence, even when all sound seems to be removed.

In fact, the next canonical moment in the thought of noise is silence, in the guise of Cage's piece *4' 33"*, inspired by a visit to an anechoic chamber. In this ostensibly soundless room, he still heard something. He was informed that what he was hearing was 'the nerve's [sic] operation, blood's circulation' (*Silence*, 13).[6] From this came the 'silent' piece, where the audience's attention is drawn to all the other sounds to be heard in a concert hall (many of which are from outside the

room). The world, then, is revealed as infinitely musical: musicality is about our attentiveness to the sounds of the world. This returns us to a Platonic conception of the universe: the forms of all things are there—we just create versions of them. Douglas Kahn argues that this movement illustrates the central role of neo-Pythagorean conceptions of sound within modernism—i.e. the music of the spheres being out there, even if presently inaudible to humans. This notion is ambiguous as well as significant: 'the legacy of neo-Pythagoreanism within modernism, however, has been fairly peculiar, as it pertains to both notions of the breadth of *all sound* and the capability of a line to represent many attributes of the world, including a range of sounds' (Kahn, *Noise Water Meat*, 74).[7] In the case of music's relation to noise, Russolo and composers such as Erik Satie and Edgard Varèse sought to bring this broadened musicality of the world into music. The Futurists invented a range of machines that would make popping, hissing, crackling sounds—and these would be mobilized into compositions. As well as the presumption of finding sounds and music inherent to the universe, we also have the question of 'material': the world would be a source of music when harnessed in some way, a 'material for' in order to be material. Can music be immanent? Music cannot just be out there, as it implies human organization. But just because that has been the view does not mean it has to stay the case. It would seem that music has to at least pass through agency, if only historically, for there to be, as there is in certain forms of contemporary Japanese noise music, a sense of such an immanence.

While the non-immanence of music might seem to be given, how far can we say sound or noise is 'for itself', a something in the world? Even the place of sound has to be historicized, for while the world was not silent until the mid-nineteenth century, other than in its 'musical' aspects such as water running, or birdsong, nature was at least quiet, except at moments of danger. Urbanization is one factor in the coming of noise: first at the obvious level of there being more people, machines, vehicles, and so on. But with population comes a concentration of wealth, in the proto-capitalist sixteenth to eighteenth centuries. This, combined with a growing concentration of lower classes, brings the phenomenon of street music and performance. Early noise abatement legislation (i.e. from that period) targets street criers and street music. R. Murray Schafer writes that the perception, which heightens in the nineteenth century, is that 'the street had now become the home of non-music, where it mixed with other kinds of sound-swill and sewage' ('Music, Non-music and the Soundscape', 36).[8] Jacques Attali adds, in his book *Noise*, that this is the period where the threat of those without power was crystallizing in the spaces of the city, and their culture was increasingly deemed 'noisy'. So what we think of as perhaps inherent to an idea of noise, its unwantedness, comes initially, and over a long period of time, with an undesirability that goes beyond the auditive unpleasantness of certain sounds.

This situation is of course exacerbated in the nineteenth-century industrializing city—machines add a layer of volume and continuity to unwanted sound. With mechanization, the perception of noise widens and the sounds of industry are associated with the 'noisier' working class, and retain their status as unwanted because low, because not acceptably hierarchized into the forms of 'high' music or meaning.

For Schafer it is not just class and hierarchies that count—it is the division of space, and, importantly in the history of thinking about sound, the enclosure of space, that has a huge bearing on what is thought of as noisy. He argues that there is a transition to 'indoor living', especially where the upper classes are concerned, notably with the development of plate glass for windows in the late seventeenth century. At this point, 'high' music is private, taking place in people's houses. This is the basis for the modern concert hall, where people are to attend to the music generated from a given spot within that space, and nothing else. They are certainly not to be allowed to make noises themselves, except at conventionally agreed moments, e.g. to applaud at the end. But what's on the outside? Now more than ever, there is a sense of sounds not generated by someone or something else, outside, being intrusive, unwanted. Music heightens the separation of the world into desired, organized sounds, and unwanted noise. For Hegel, 'music acquires an especially architectonic character because, freed from expressing emotion, it constructs on its own account, with a wealth of invention, a musically regular building of sound' (*Aesthetics*, vol. II, 894).[9] What goes on at the speculative level has its corollary in the world of class, of private and public. Schafer writes that 'with indoor living, two things developed antonymously: the high art of music and noise pollution—for noises were the sounds that were kept outside' ('Music, Non-music and the Soundscape', 35). The status of western art music depends on this excluded other, and even doubles this exclusion when it attempts to represent nature or specific sounds within it.

Noise and music were not always so separate. According to Attali, after Nietzsche, music was not autonomous, even in the west, until the early modern period. Even in Greek society, music and sound were part of a whole, part of a general sacrificial economy: although the sacrifice brought the threat of the divine, it was part of the process of the sacred, without which there is no sacred (at least in the terms laid out by Georges Bataille).[10] For Attali, the development of music, and even that it develops (over history, over time), is part of a continual creation of an outside, where noise is disorder:

> Primordially the production of music has as its function the creation, legitimation and maintenance of order. Its primary function is not to be sought in aesthetics, which is a modern invention, but in the effectiveness of its participation in social regulation. Music—pleasure in the spectacle of murder, organiser of the simulacrum masked beneath festival and transgression—creates order. (*Noise*, 30)[11]

When music is central to ritual, to sanctioned transgression, it is effectively not music: it is the noise that will gradually, progressively be excised in the same way that, for Bataille, we move cemeteries and abattoirs to the outskirts of towns. But that which music excludes can come back: Antonin Artaud uses the plague as a metaphor for theatre, for how a sacrificial, mobile, unwanted form of theatre would operate.[12] According to Attali, noise is returning, in the form of the omnipresence of purposeful muzak and advertising: this is the price for excluding certain practices as noise.

Within aesthetics, the tradition has it that the beautiful is so, in different ways, because of its link/reference/belonging to nature. For Kant, music can be pure or

'free beauty' (*Critique of Judgement*, 76–7),[13] but nature will always offer a better version. Music always runs the risk of being as if it were natural, either through imitation, which is cheating (169),[14] of being 'only an agreeable noise' (173), or too intrusive. On religious singing, Kant has the following to say: 'those who have recommended that the singing of hymns be included at family prayer have failed to consider that by such a *noisy* (and precisely because of this usually pharisaical) worship they impose great hardship on the public' (200n) [Kant's emphasis]. This neatly brings together the dual problematic of a society reducing the sacred in its ritual and possibly threatening forms, and the unwantedness of noise. Excessive celebration is out because it offends 'the public', the protestant, privatizing, proto-secular public. While nature is, for Kant, good to society's bad, or to its bad lowering of nature, perhaps we should ask where exactly the boundary of nature and culture is. Nowadays we might talk of a sound environment or even a sound ecology, but even when Kant writes what he is in favour of, in terms of sound or music, it is the natural music of birdsong, for example (80), because it is not being aesthetically directed. Maybe we should see the loud singing by someone else as an internalized nature–culture divide. Even if this new 'nature' is largely deemed offensive, it is closer *for the listener* to nature.

This brings us back to the twentieth century: for Russolo, the industrial world was humanity's environment—as we would always be interacting with our surroundings, we should regard those as our environment, and treat any sounds emanating from it in the same way. Attali, too, insists that 'life is full of noise and [. . .] death alone is silent: work noise, noise of man, noise of beast' (*Noise*, 3), and as for Cage, he writes that 'wherever we are, what we hear is mostly noise' (*Silence*, 3).[15]

When we combine Enlightenment views of nature versus culture and twentieth century thought on noise, we encounter something we're very familiar with by now: the notion that nature is a product of culture: the product that acquires a real status, often higher than culture, setting up a process of mutual legitimation, as now nature justifies cultural practices. Noise threatens this divide, as Theodor Adorno illustrates, unwittingly, in *Aesthetic Theory*. Here he complains about aeroplane noise ruining walks in the forest (311): but what is being ruined is precisely that acculturated form of nature that forgets, endlessly, its acculturatedness. While ostensibly it is a human noise that disrupts the tranquillity of the forest, what is actually being disturbed is the walk, a cultural phenomenon, with its human demand for calmness, with its foreknowledge of just how much nature you're going to get.[16]

Certain sounds within nature are deemed musical. For Rousseau, even early human communication falls into this category, but 'natural musical sounds' are separated off from meaningful communication just as surely as any other noise by virtue of not being humanly structured.[17] The music of Aube (Akifumi Nakajima) represents one way around this set of problems, in that it poses the question of what might count as music, in terms of naturalness, faithfulness to nature and human intervention. Most of his albums consist exclusively of one sound source (the sounds of nerves in the brain, water, the pages of the bible being torn, metal—are a few of the many sources), which is then heavily processed and turned into sound 'pieces'. The sounds have something musical about them (sometimes

rhythm, sometimes a form of tonal progression), but tend not to settle into that, and in any case, do not consist of the narrow range of tones western music identifies as notes.

It is a common argument that noises can be soothing, due to our experience in the womb, and also our early pre-linguistic time of life. The experience of sound immerses us in our environment (it is often claimed). John Shepherd writes that 'while a sound may have a discrete material source [. . .] it is experienced as a phenomenon that encompasses and touches the listener in a cocoon-like fashion' ('Music as Cultural Text', 147); for Richard Leppert, 'sound, by its enveloping character, brings us closer to everything alive' ('Desire, Power and the Sonoric Landscape', 305).[18] Aube's sounds often recall this immersive, soothing quality, but ironically distort the source so that it is not as nature would have it. Often his processing of non-natural sounds might lead to something that sounds 'more natural'. In *Quadrotation* we see four different sources set up against one another. They are: steel, blood, fluorescent and glow-lamp, water. This suggestion of a new 'four elements' that would cross many traditional categories offers a way of approaching the divides outlined above.

Does Aube bring noise into music, make noise music, or noise? This question applies across the spectrum of 'noise music'. In other words, the question is, how do music and noise relate? The answer will vary of course, but there might be some general theoretical assumptions to be made, and these too might vary, according to when and where we think noise is. If noise is fundamental within nature, then maybe the invention of music (or language in general), as the human organization of sounds, is the way awareness or perception of noise spreads. If noise is fundamental to culture (including listeners within cultures), then it arises in contrast to other sounds we do not categorize as noise; these can be noises which we no longer hear, or the exact opposite, sounds organized into meaningful structures. The only difference between noise as natural and noise as cultural is temporal. Both are about the 'discovery' of noise, even if recognized as something of a reconstruction, a retrospective awareness that noise 'has always been there'. For humans, noise is nothing without having meaning, or law, or structure, or music as its other.

According to Attali, the relation is even more specific, as 'music is a channelization of noise' (*Noise*, 26). His vision is a quasi-Hegelian one, where noise is endlessly brought into culture and meaning, essentially through music, which acts as a key tool of power throughout western history. Music transforms amorphousness and something like natural freedom (i.e. that present in a 'state of nature') into society. As western history rolls on, a series of avant-garde musics and associated behaviours (nomadism, for example, subcultural behaviours, or lifestyles in general) accretes into a core of a developing society that combines progress with oppression:

> 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 [. . .], when it becomes sound, noise is the source of purpose and power, of the dream—Music. It is at the heart of the progressive rationalization of aesthetics, and it is a refuge for residual irrationality. (*Noise*, 6)

While parts of Attali's theory match the complexity of Hegel's vision of the dialectical development of Spirit, his view is more of a transformation of existing matter, from natural to cultural to political. Noise is originally threatening, a threat that is mobilized by humans, which gradually makes it lose its noisiness, or at least means it can only ever be noise temporarily. He writes that 'noise is a weapon and music, primordially, is the formation, domestication, and ritualization of that weapon as a simulacrum of ritual murder' (24).[19] So when noise is first part of the human world, it remains threatening, part of sacrifice. Nowhere is this more literally in evidence than in the 'brazen bull' of Phalaris, ruler of Acragas, in Sicily, in the sixth century BCE. Phalaris had Perilaus construct a bull in bronze, within which a human could be placed. A fire would be lit under the bull, and the heat would roast the victim. All the while, reeds placed in the nostrils of the bull would convert the screams into sounds like the bellowing of a bull. It seems that Perilaus was 'allowed' by Phalaris to test it himself.

Attali follows the Nietzsche of *The Birth of Tragedy* in privileging the Dionysian element of ancient Greek culture, where noise exhibits something of the threatening sacred world.[20] This gradually gets formalized into musical gestures, and in so doing illustrates, or, more accurately, provides, the model for centralized control of death in the shape of ritual sacrifice. Attali is not clear whether sacrifice precedes mobilization of noise, but we can imagine earlier sacrifice not imagining representation in the noises it made, but conceiving of its noises as directly powerful, divine etc., and later, this becoming ritualized (in the thin sense of the word) in the shape of music. Music then replaces the sacrifice, suggesting it instead of making it happen or accompanying it (hence the 'residualness' of irrationality in music).

From that point on, in Attali's story, music operates at the spatial and temporal edges of what goes on to become western society, and mostly it comes to work as a prophetic indication of further social change. It 'is a herald, for change is inscribed in noise faster than it transforms society' (*Noise*, 5) and 'the noises of a society are in advance of its images and material conflicts' (11). I am not interested in the accuracy of these statements as such, and therefore the looseness of the term 'noise' can be ignored. What is of interest is the continual process opened up by this perspective, where music becomes an avant-garde, and in so doing is always, initially, at least, identified as noise. Only later does the old noise come to be seen as legitimate music. The moment of recuperation, though, signals the loss of something for musics that have willingly taken on their categorization as noise, and I think this is most telling for experimental and/or radical music in the latter part of the twentieth century (although dada and its 'museification' experienced the strange moment of failing while being too successful). Ultimately, for Attali, we will resist these recuperations, and he offers a naive vision of how new technology will make us all musicians, music producers, and so on, and that this will have positive implications for democracy (this is where the 2001 edition of his book is most self-congratulatory, and at its weakest).

Music is there to save us from the chaos it unwittingly reveals as its other and as its sources (i.e. if music is organized sound, then sound must need arranging), and while Kant gets very confused about music in his *Critique of Judgement*, Hegel offers pure certainty, while still showing that music's order can only function by rejecting noise, and in so doing, noise as something we are aware of as threat, comes to be, at least as potential:

> On the one hand, we demand an expression of th[e] regularity [of the beat] as such so that this action can come to the individual's apprehension in a way itself subjective, and on the other hand we desire an interest less empty than this uniformity. Both are afforded by a musical accompaniment. It is thus that music accompanies the march of troops; this attunes the mind to the regularity of the step, immerses the individual in the business of marching, and concentrates his mind on what he has to do. For the same sort of reason, the disorderly restlessness of a lot of people in a restaurant and the unsatisfying excitement it causes is burdensome; this walking to and fro, this clattering and chattering should be regulated, and since in the intervals of eating and drinking we have to do with empty time, this emptiness should be filled. This is an occasion, like so many others, when music comes to the rescue and in addition wards off other thoughts, distractions, and ideas. (Hegel, *Aesthetics*, vol. II, 907)

Music can organize our bodies and keep our minds in order—long before Foucault supplies the critique of disciplined societies, philosophers and 'classical' music are harnessing notions of beauty as order. Long before 'background' music, Hegel is aware of the thin line between order and disorder, and this latter appears even in something like emptiness. Why? Because the empty is formless, a threatening emptiness that is not as simple as a lack. At the same time, the formless makes us think too much, and think 'badly' (i.e. thoughts that need to be warded off, if they cannot be corralled into a system).

It is unfortunate, but unavoidable, that a structuring of the history of noise has not only been Hegelian, tautological, and based on the notion of noise music driving musical progress. So we have a canon of the greats, the precursors, the moments that count. We cannot avoid this, but we can be aware of the paradox of relating a continuous history of what is by definition discontinuous, what is about disruption and disturbance. Noise is like the avant-garde—always what seeks to be ahead, even if assimilable to a history of those that were ahead (so contemporary art books that are surveys of art history praise progress and innovation as a result of modernist avant-garde values of progress and innovation, and then work back to reinterpret earlier art in this context—but this canon-formation is based on mutability, a mutability that got hidden, then lost, then denied). The canon is not to be ignored, but it can be messed about, broken down. One of the ways we can do this is to continually remind ourselves that a precursor (for example, Varèse) only becomes a precursor later on: comes to *always have been a precursor*.[21]

Michael Nyman makes an important move in this direction, when he identifies a categorical difference between avant-garde and experimental music. The former is produced by composers (Boulez, Stockhausen, and so on) and 'is conceived and executed along the well-trodden but sanctified path of the post-Renaissance tradition' (*Experimental Music*, 1).[22] In other words, the score, the orchestra, the composer, the persistence of western tonal schemes (however dissonant) are avant-garde, but only in a limited way. The true avant-garde is engaged in practices which undermine and dispute western art music as a whole, and is therefore to be seen as experimental. Notions of finished pieces, competence of performers, composition, means of production (of sounds, of pieces) are all to be questioned.

For Nyman, as for many, the pivotal figure is John Cage, and in particular, his piece 4' 33". This is now widely accepted, but Nyman wrote this in the early 1970s, very much as an active participant in 'the future of music', so his intervention is also one of the moments Cage is moved to the centre, to the pivotal position, so more than a simple observation of fact. Of course, there are earlier moments we can point to, and Nyman's distinction can work just as clearly when we look at the more experimental composers of the earlier part of the twentieth century.

There is then, a key difference between the use of dissonance or unfamiliar elements (such as quotation of folk songs in Stravinsky or Bartók) in orchestral or chamber music in or around tonality, and the experiments Satie, Russolo, Kurt Schwitters, or (at a push) Varèse, were engaged in. The distinction is not a pure one, and if you were to insist too strongly on it, it could be easily deconstructed. We need to acknowledge that this difference occurs *after*, or as a result of Nyman's distinction, and applies retrospectively, in light of the proliferation of noise musics. For me, we can talk about dissonance in Beethoven, Berlioz, Wagner, Richard Strauss or Arnold Schoenberg, but it can only be thought of as noise in newness (essentially as seen by Attali), while Futurists such as Russolo signal a world where the arrangement of musical notes is secondary.

Noise cannot be imagined as a synonym for dissonance, even if the judgement of noise by the then-surprised publics is imposed on modernist dissonance. Dissonance works through its rethinking of consonance, and composers using it tended to think of their work as reinvigorating the western tradition of music. Schoenberg's twelve-tone system was often imagined to be 'atonal', and it does diminish one hierarchy (of dominant tones), but this dissonance was not there to wreck or disturb music: 'dissonances need not be a spicy addition to dull sounds. They are natural and logical outgrowths of an organism' (Schoenberg, 'My Evolution', 91). He rejected the idea that he was doing anything other than continuing the project of 'classical' music, with a 'more inclusive sound-material', so that '*nothing essential changes in all this!*' ('The New Music', 137).[23] Despite my claim for a fundamental difference between those who sought to renew music and those who were against the existing institution of music, all imagined, at some level, that they were contributing to advancing music. Russolo himself notes that 'noise instruments expand the chromatic-diatonic system without destroying it' (*The Art of Noises*, 80). Russolo, Satie, Varèse and Charles Ives all wrote scores to be performed, but the essential difference is that they wished to incorporate non- or extra-musical sounds. Audiences, though, heard non-musical sounds in Debussy, Stravinsky or Schoenberg, and in terms of initial reception, all have moments where performances are disrupted by the unwanted noise of audience protest (such as the riot at a performance of Stravinsky's *Rite of Spring*, in Paris, on 29 May 1913, or the uproar at the first public performance of noise music (as Russolo puts it) in Milan, 21 April 1914).[24] To the first distinction of wishing to use sounds previously thought of not as bad music, but as non-music, we can add a second that is the wish to provoke, to expand the field of the rethinking of art into a rejection of how it had thus far been done. This precisely matches (but without mapping directly on to) the shift in visual art from Impressionism and Cubism to Futurism and dada. It is not that the practitioners necessarily saw themselves as competitors, but how they associated with the art institutions (including the public) differed. Futurism, through Russolo in particular, is the key to this shift.

Russolo himself took his inspiration for his 'art of noises' from Marinetti's poetry, which he describes as the first poetry capable of living in the new age of technology, cities and mass warfare. This latter, in particular, called for 'the noise instrumentation of Futurist *free words*' (*The Art of Noises*, 49). Marinetti's poems used onomatopoeia to bring noise into language, usually the noise of bombs, bullets, and so on. What is also important is that this poetry be read, and the noisiness would inflect even the more straightforwardly written parts. Similarly, also in the 1910s and early 1920s, dada would bring this element into their performances, further disrupting the 'reading' by pitting it against other simultaneous performances of music, plays or more shouting/poetry. In a way, this type of poetry, tied in with performance, would continue without great changes, throughout Fluxus's time and on into the 1960s, and beyond, in the shape of 'sound poetry'.

Futurism also announced a technological aesthetic. Rather than just representing or illustrating the relatively newly industrialized, militarized and technologized urban environment, this world would be brought directly into art. It would be recognized as being of aesthetic value in itself, and also mobilized into artworks to raise awareness of the beauty of machinery, warfare and industry. An endless stream of manifestos hammers the point home. Marinetti's 'The Founding and Manifesto of Futurism' (1909) proclaims the glory of war, the beauty of industry, and above all, the 'beauty of speed' (*Futurist Manifestos*, 21).[25] Futurism saw technology and mechanical aggression as the death knell for polite art and society. Balilla Pratella attacked the conservatism of music, particularly in Italy, and although he praises composers such as Debussy and Richard Strauss, he is already trying to look beyond symphonic renovation ('Manifesto of Futurist Musicians' [1910], 32).[26] But it is Luigi Russolo who synthesizes these ideas in his *Art of Noises*, which first appeared in 1913.

Like many of the Futurists, Russolo's ideas were way ahead of the actual art he produced: after several rousing chapters on our new ways of seeing and hearing, and the shiny but harsh world of modern noise, he still returns to the question of finding the right pitches for noises, and carefully shaping and moulding the new noise instruments he had devised (*The Art of Noises*, 86–7). His ideas about what noise is and how it can constitute art and even be aesthetically pleasing in the most simple sense are what make this book important. Having stated that noise was 'born' in the nineteenth century, he adds that 'today, noise is triumphant and reigns sovereign over the sensibility of men. Through many centuries life unfolded silently, or at least quietly' (23). Russolo seems to be offering a very clear 'when' for the advent of noise, but life itself is noisy: 'every manifestation of life is accompanied by noise' (27), and noises in nature should actually be interesting to us in their own right (see 41–3). So there had always been noise, or at least noises, but this seems to have been heightened in the expanding urban environment of the west (arguably this applies elsewhere too, but the conclusions drawn about noise by Russolo [or Satie or Cage etc.] refer back to the western art music tradition, and produce an aesthetic of progress, in the shape of avant-gardes, to combat it, so for now, the new noisy environment is largely in the west). Noise music would try to capture the inherent richness of noise (39) and its newly acquired intensity in cities. But Russolo is not simply adhering to the Pythagorean idea of capturing sounds from the infinite musicality of the universe. For Russolo, modern society has added to and developed the already noisy universe, and drawn our attention

through its sonic intensity to that very noisiness. Instead of one continuum of noise that humans feature in, noise is supplemented by urban industrial soundworlds, and from that point on, we recognize the noisiness of nature. His conclusion is that modern listeners now exist who are ready for noise music (24, 85), and that in harnessing this, 'our multiplied sensibility, having been conquered by Futurist eyes, will finally have Futurist ears' (29).

Russolo designed and built his noise machines, his *intonarumori*, in order to replace the old orchestra. Among the many types (which would later be combined in 'noise harmoniums' of various sizes) were hummers, bursters, rubbers, cracklers. Instead of musical tones, sounds would be created, often inspired by machinery, which although pitched, would work between and link different pitches, using microtones and overtones—so the instruments would remain noisy. Although the machines would not represent the sound of hammers or sirens, they could certainly imitate already existing sounds; appropriately, Russolo is the complete antithesis of Kant, in that the former praises imitation (*The Art of Noises*, 44). In harnessing noise, the realm of music would be made infinite, and 'for him who *understands* it, noise represents instead an inexhaustible source of sensations' (41). Two things stand out in this statement: first, the emphasis, as witnessed elsewhere in *The Art of Noises*, on the listener. This shows a recognition that noise music will be something different from music, in that the musical piece is not a finished product under the control of a composer. On the other hand, the statement also shows that while you might not have to be classically trained to like the new music, there are still better and worse listeners.

Many of Russolo's contemporaries might not have been seen by him as listening well enough, for the predominant reaction among even experimental composers was of being interested but unwilling to accept the ultimate usefulness of music created only from noises, and would, at best only incorporate 'non-musical' elements. Debussy is fairly typical in identifying Futurist music as limited in comparison to more overtly musical forms: '[Futurist music] claims to reassemble all the noises of a modern capital city and bring them together in a symphony [. . .]. It's a very practical way of recruiting an orchestra, but can it ever really compete with that wonderful sound of a steel mill in full swing?' (*Debussy on Music*, 288). In other words, yes it is a beautiful sound, but stick to the real thing. Varèse also had doubts, and Fernand Ouellette glosses his view like this: the Futurists 'never succeeded in progressing any further than mere noise. They produced no work of art. There was no attempt to go beyond the simple imitation or unmodified utilization of familiar noises—such as the klaxon—on stage' (*Edgard Varèse*, 38).[27] Ironically, Russolo and others who used his *intonarumori* were closer to Varèse than either side would have liked, as they ended up mostly combining the noise instruments with more traditional ones, and Varèse incorporated sounds such as sirens into his music.[28] Schoenberg, meanwhile, while revolutionizing the concept of tonality (i.e. it was always to be re-established anew) and accepting that art could stray far from beauty (see his 'Eartraining through Composing', 380, on this last point) was uninterested in the use of noises. We must 'force nature', he writes, 'otherwise we can either not grasp it, or else, if one lets the sounds run as they please, it remains a children's game, like electrical experiments with elderberries or tobogganing or the like' ('Theory of Form', 253).[29] Unwittingly, Schoenberg shows how far he is from the more radical experimental art of Futurism, dada, or

even Surrealism, which would be more than happy to be associated with such fripperies, even if his thoughts correctly highlight the utopianism in imagining you can bring nature into art without in some way processing it.

So far, it might seem as if 'real' noise music is very literal, very directly using noise (e.g. Russolo), but from Wagner to Schoenberg, and later on in Boulez and Stockhausen, there is noise, of a very clear form, as signalled by Attali: that of temporarily being misheard, the noise of a dissonance that is later accepted. Schoenberg represents the highly didactic strain of composing: 'what I am doing is perfectly musical, and one day you will all catch up and understand me'. He is far from wrong, but this is a search for acceptance, for the acknowledgement of the renewal of a moribund art, while all around other art movements are doing something else, something more noisy (even if those noises too, whatever the intention of its producers, become intelligible over time).

In stark opposition to Schoenberg's self-importance and validation of art music are Ives and Satie, both of whom introduce a different form of noise to concert music—in the shape of popular music, referring to it, but also writing it. Ives combined extensive use of dissonance with the writing of songs that have gradually come to be seen as essential to the identity of twentieth-century America. He was not trying to disturb audiences as such: the composer Henry Cowell (with Sidney Cowell) notes that 'at a time when consecutive extreme dissonances were unknown, Ives used them constantly whenever, in his judgement, they constituted the most powerful harmonic force for his purpose. He had no sense of their being ugly, or undesirable, or in any way unpleasant' (*Charles Ives and His Music*, 155).[30] But I think the Cowells' judgement is of its time. Composers and musicians would bolster each other through claims of musicality rather than noisiness, or disruption. However radical the composer, most were dismayed at the violent reactions against their music and the almost total commercial failure of their work.

As well as the dissonant elements in the music, Ives disturbs the genres of music, something essential in all 'noise music', where expectations are supposed, however temporarily, to be upset. While not crucial to the noisiness or otherwise of Ives, it is important to note his relation to the music publishing industry. Although he was a successful businessman, his ideas were definitely left-wing, and he refused to have copyright on his work, to the puzzlement and annoyance of publishers who would assign him it, and then be argued against until it was removed. So what? Attali identifies the invention of copyright as a key control over music production, bringing it into the capitalist realm of regulation and profit (*Noise*, 51–5). The question of ownership of music is significant for noise as economic disruption, notably via sampling (see chapter 12), but contrast Ives' position with that of Schoenberg, who complains that intellectual property seems to be the only type to be allowed to be taken away ('Human Rights', 509).[31] Schoenberg's position is still against the functioning of the existing institutions, and in line with the vast majority of musicians, but Ives stands here as precursor to values of musicians from later decades of the twentieth century.

Satie is well known for his tranquil piano music, but even that can be seen as rebellion against the growing complexity of 'classical' music of the late nineteenth and early twentieth century (as with minimalism in the 1960s and 1970s). But he also created stranger works, incorporating non-musical sounds, notably in *Parade*, for Cocteau's ballet. Here there are sirens, a gun, a typewriter, a spinning lottery

wheel, a *bouteillophone* (made of bottles), and extensive percussion. These short bursts of 'non-musical' sound are integrated into what is still a recognisable piece of music, if quite a repetitive piece. Satie imagined many different futures for music: 'the mysterious frontiers which separate the realm of noise from that of music are tending increasingly to disappear [tendent de plus en plus à s'effacer]' (Satie, *Écrits*, 140).[32] There should also be a 'musique d'ameublement'—furniture music. Normally, he argues, music has nothing to do, so why not have music for specific purposes, or actions. This would largely be in the background, literally ambient, but just like lighting, there would be different musics for different settings.[33] He imagines an advertisement: 'Don't go to sleep without listening to a track of "musique d'ameublement" or you'll sleep badly' (*Écrits*, 190). This new type of music steps outside all of the existing genres of the time (even if the boundaries between music and other activities would have been much more fluid prior to the eighteenth century), and rethinks incidental music as something positive. In terms of noise, it could even be seen as a counter to it, controlling your own surrounding soundworld, but it is just as much a mobilization of noise as a way of preventing or combating it, and above all, the relation between music and noise is rethought. Lastly, his piece *Vexations* stands as an essential moment in the reconceptualizing of what music is and how it works. This reasonably short piece is to be played 840 times, which would take over a day to perform. The player is at least as tested as any audience. Noise is built into this piece as it directly poses the question of musical competence and consistency. Prefiguring Fluxus and the performance art of the 1960s and 1970s, this is an endurance test, without, for example, the narrative 'reward' of Wagner's 'Ring' cycle. Content becomes irrelevant, expression hard to control, as fatigue and trance set in. This most fixed of pieces becomes aleatory, fluid. Also, maybe it was never meant to be played, and its concept is far more important than any realization it might have.

Satie was a major inspiration for John Cage (as acknowledged in the latter's *Cheap Imitation*), who takes all those experimental and/or noisy elements of Satie and expands on them. The growth of noise is just that, and exponential in the case of Cage. From experiments with turntables and radios, to percussive music, to chance generation of work, through the incorporation of any and all sound to the recentring of music as simply 'organized sound' for and only existing through the listener, Cage is a central figure in any thought about noise, and his *4' 33"* the moment we can pick to illustrate this (as Nyman argues, *Experimental Music*, 2, and the first two chapters expand on this). *4' 33"* is a piece lasting 4 minutes and 33 seconds. The first time it was played, in 1952, David Tudor 'played' it on a piano. The instructions are that there be three movements, indicated by the performer, and these movements are to be silent. The piece can vary, and be 'played' on any instrument. But Tudor or anyone else is only the framing device: like Piero Manzoni's *Socle du monde* (where an upside down plinth is placed on the earth, making the world the art object), everything else becomes the material. The listeners will not hear everything else, though, if they are today's humans, but will instead have a specific sound environment for the duration of the piece. What was noise (including sounds made by the audience) becomes the piece. In Cage's thoughts, as Kahn clearly shows, this meant accessing some form of the 'music of the spheres', the inherent musicality of the universe, even if also raising the question of whether this would be the case without listeners.[34] Noise is not abolished

when 'all sound' is let in—unpredictability means a more subtle (less literal) form of noise and the interplay of noise and music persist alike. *4' 33"* and Cage's other silent pieces have become an ironic moment in the history of audience reaction to experimental music, as instead of jeering or complaining, the later audiences sit attentively, waiting for 'music' to come to them. Of course, if they make lots of noise, then they might be diminishing the strength of the piece (through controlling it, perhaps as a defence mechanism), but the piece *cannot fail*, and ultimately, failure is something that is increasingly important in the linking of noise and music. *4' 33"* is still didactic; it still tries to teach us about music we have missed up until now, caught as we were in tonality, or our own mundane sound production.

Kahn goes further, arguing that Cage needs to silence in order to 'let silence be'. The silence of the performer of *4' 33"* can be understood as an extension of the traditional silencing of the audience to better appreciate the music being performed (*Noise Water Meat*, 166). Music itself is silenced, sacrificed to the musicality of the world: '[Cage] not only filled music up; he left no sonorous (or potentially sonorous) place outside music and left no more means to materially regenerate music. He opened music up into an emancipatory endgame' (164). In so doing, Cage also closed off the unwantedness of sounds, or certain sounds. All sound was good, so how could there be noise—and for noise here, read also diversity, social and aural dissonance (162). Kahn's point is well made: within music and sound art, Cage is unquestioningly accepted as a major authority, and this needs balancing, but Kahn's impatience with the worship of Cage's genius means that he spends a lot of time on subtly undermining Cage, and ends up reinforcing the centrality of his influence. But once this job is done, I think we can reassess Cage in terms of individual pieces or strategies, and these will show an avant-gardism in spite of Cage's limits or obsession with 'letting noises be', to the point where they cannot be noise. Although many of these works precede *4' 33"*, that work is still within the Futurist lineage, and works such as the *Imaginary Landscapes* belong in the next phase, in terms of noise: where electricity expands audition.

NOTES

1. Nietzsche, *The Birth of Tragedy and The Case of Wagner* (New York: Vintage, 1967). Emphasis is Nietzsche's.

2. We should not imagine that Derrida's reprivileging of writing (écriture) and challenges to the authenticity of speech means he is inattentive to the problem of listening (see 'Tympan', in *Margins of Philosophy* [Chicago: Chicago University Press, 1984], *Ulysses Gramophone: Hear Say Yes in Joyce* [London: Routledge, 1992], among many) and to the human voice as different to speech (see his *Artaud le Moma* [Paris: Galilée, 2002], for example).

3. Kroker, *Spasm: Virtual Reality, Android Music, Electric Flesh* (New York: St Martin's Press, 1993).

4. Russolo, *The Art of Noises* (New York: Pendragon, 1986).

5. Gordon, 'Songs from the Museum of the Future: Russian Sound Creation (1910–1930)', in Douglas Kahn and Gregory Whitehead (eds), *Wireless Imagination: Sound, Radio and the Avant-Garde* (Cambridge, MA: MIT Press, 1994), 197–243.

6. Cage, *Silence: Lectures and Writings* (London: Marion Boyars, 1968).

7. Kahn, *Noise Water Meat: A History of Sound in the Arts* (Cambridge, MA: MIT Press, 1999).

8. Schafer, 'Music, Non-music and the Soundscape', in John Paynter et al. (eds), *The Companion to Contemporary Musical Thought*, vol. I (London: Routledge, 1992), 34–45.

9. Hegel, *Aesthetics*, vol. II (Oxford: Clarendon, 1975).

10. On this, see in particular Georges *Bataille, Visions of Excess, Selected Writings, 1927–1939* (ed. Allan Stoekl) (Minneapolis: University of Minnesota Press, 1985), and Bataille, *The Accursed Share* (New York: Zone, 1991).

11. Attali, *Noise: The Political Economy of Music* (Minneapolis: University of Minnesota Press, 1985). This book, first published in 1977, has itself become part of the 'when' of noise, part of the history of thinking about noise. Unfortunately, Attali has substantially rewritten his book (*Bruits: essai sur l'économie politique de la musique* [Paris: PUF/Fayard, 2001], and effectively diminished the Nietzschean thinking in order to compound some of the problems of the first edition. He overstates his prescience of 1977, and shows an embarrassingly feeble grasp of the music he is using to 'update' his book. I will largely be referring to the first version of this text.

12. Artaud, *The Theatre and Its Double* (London: John Calder, 1970), 7–22.

13. Kant, *Critique of Judgement* (Indianapolis: Hackett, 1987): 'Many birds (the parrot, the humming-bird, the bird of paradise) and a lot of crustaceans in the sea are free beauties themselves and belong to no object determined by concepts as to its purpose, but we like them freely and on their own account. [. . .] What we call fantasias in music (namely music without a topic [Thema], indeed all music not set to words) may also be included in the same class' (76–7).

14. The nightingale's song is among the most beautiful sounds, writes Kant, so in the absence of one, a 'jovial innkeeper' would 'hid[e] in the bush some roguish youngster who (with a reed or a rush in his mouth) knew how to copy that song in a way very similar to nature's. But as soon as one realises that it was all deception, no one will long endure listening to this song that before he considered so charming'.

15. This sentence is much more curious than I imagine Cage intended it to be: are we always a we, 'wherever we are'? If what we hear is noise, how do we understand where we are, or that we exists as an entity? Is noise just there, and we stumble across it, or is our hearing effectively the producer of noise as the thing 'we' hear? Is it noise before we hear it? Or if we don't? Or if we are not 'we'? Noise is a constant, it would appear, and there is a large amount of it, but the 'mostly' is still letting us hear more than it says: is all that we hear 'mostly noise'? Or is it that most of the sounds we hear are noise (while some are not)? Is our hearing mostly occupied with noise? Could we not also say that what we mostly do not hear is noise? (i.e. that there is always noise occurring, but actually 'we', 'wherever "we" are' are mostly not hearing that noise even as 'what we hear is mostly noise'). The noise that comes to 'our' ear is made background, if it is 'mostly noise', so our hearing both makes and unmakes noise. None of this even touches the question of whether we listen or can choose to listen, wherever we are, to noise. Or whether it would still be 'mostly noise'.

16. Adorno, *Aesthetic Theory* (Minneapolis: University of Minnesota Press, 1997).

17. See Rousseau, *Discourse on the Origin of Languages* (Oxford: Oxford University Press, 1999).

18. Shepherd, 'Music as Cultural Text', in Paynter et al. (eds), *The Companion to Contemporary Musical Thought*, vol. I, 128–55; Leppert, 'Desire, Power and the Sonoric Landscape', in Andrew Leyshon, David Matless, George Revil (eds), *The Place of Music* (New York and London: Guilford Press, 1998), 291–321.

19. Here Attali directly 'echoes' Nietzsche, who writes that 'optimistic dialectic drives music out of tragedy with the scourges of its syllogisms; that is, it destroys the essence of tragedy, which can be interpreted only as a manifestation and projection into images of Dionysian states, as the visible symbolizing of music, as the dream-world of a Dionysian intoxication' (*The Birth of Tragedy*, 92). Nietzsche, in turn, is much more Hegelian than he might wish, in bringing the Apollonian and Dionysian together (see 128–33 and passim).

20. Adorno also ties Hegel and the Dionysian, when writing that 'the "Spirit" in Beethoven, the Hegelian element, the totality, is nothing other than nature becoming aware of itself, the chthonic element' (*Beethoven: The Philosophy of Music* [Cambridge: Polity, 1998], 166). Furthermore, this is both 'demonic' and 'ideal' (rather than just being a resolution of the difference between them) (167).

21. Debussy offers another take on this idea: 'the more music was written, the more precursors there were. If certain periods were lacking precursors, the following period would

simply have to invent some' (*Debussy, Writings on Music* [London: Secker & Warburg, 1977]).

22. Nyman, *Experimental Music: Cage and Beyond*, second edition (Cambridge: Cambridge University Press, 1999).

23. Schoenberg, 'My Evolution', 'The New Music', in *Style and Idea: Selected Writings* (London: Faber & Faber, 1975), 79–92, 137–9 respectively. Emphasis in the original.

24. The Futurists quelled this particular 'uproar' by launching themselves into the crowd, beating up the dissenters (*The Art of Noises*, 33).

25. Marinetti, 'The Founding and Manifesto of Futurism', in Umbro Apollonio (ed), *Futurist Manifestos* (London: Thames & Hudson, 1973), 19–24.

26. Pratella, 'Manifesto of Futurist Musicians', in *Futurist Manifestos*, 31–8.

27. Ouellette, *Edgard Varèse* (London: Calder and Boyars, 1973). Ouellette is referring to Varèse's own manifesto that appeared in *391*, no. 5.

28. Varèse certainly also saw himself renewing, even as he innovated within, the world of orchestral music. His work was largely percussion based, and the ensembles unusual as a result. He, like Satie before him, would incorporate sirens, and other non-musical sources of sound (mostly percussive). His aggressive, relatively simple works stand in stark contrast to most other musical avant-gardism of the mid-twentieth century, and hence it is only with the growth of *musique concrète* and electronic music that he came to be regarded as significant.

29. Schoenberg, 'Eartraining through Composing', and 'Theory of Form', in *Style and Idea*, 377–82, 253–5 respectively.

30. Henry and Sidney Cowell, *Charles Ives and His Music* (New York: Oxford University Press, 1955).

31. Schoenberg, 'Human Rights', in *Style and Idea*, 506–12.

32. Satie, *Écrits* (Paris: Éditions Champ Libre, 1977). Translations my own.

33. For the connection between Satie's 'furniture music' and John Cage's use of silence, see Kahn, *Noise Water Meat*, 179–81. Kahn also notes the initial involvement of Darius Milhaud (179).

34. Kahn also argues the move to 'silence' is one 'from noise to panaurality' (*Noise Water Meat*, 159), where listening makes musical, and noise disappears, even as it ostensibly occurs.