

Transmutations of Noise

Willim, Robert

2013

Link to publication

Citation for published version (APA): Willim, R. (2013). Transmutations of Noise.

Total number of authors:

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study or recognise.

- You may not further distribute the material or use it for any profit-making activity or commercial gain
 You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: https://creativecommons.org/licenses/

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

TRANSMUTATIONS OF NOISE

I couldn't hear my baby crying over the noise of the hairdryer (www.quietmark.com).

For sleeping, there's nothing like the ultimate white noise Fan CD and Fan Noise mp3 download! Let the gentlly [sic] purring hum sound of a running electric fan noise lull you to sleep without actually running a fan! Sounds of a window fan is [sic] an exceptionally effective white noise sound to fall asleep by in any season of the year (www.purewhitenoise.com).

Noise is commonly understood as an excess of undesired sound. But just as definitions have often been problematic in the other cases of overflow discussed in this volume, it is difficult to define noise. What is experienced as noise in various contexts? The two websites from which the previous quotes were taken described noise as either annoying or pleasant.

The first of the two quotes is to be found on the website of *Quiet Mark*, which, according to the text on the site: '...is the international mark of approval award programme from the UK Noise Abatement Society encouraging worldwide companies in the development of noise reduction within the design of everyday

1

machines and appliances'. Its aim is to reduce what it calls excessive noise in people's surroundings, in order to improve health and reduce stress.

The second quote is from the *Pure White Noise* company, which, according to its website:

...is an audio research and development company studying and recording white noise and its many applications, solutions and benefits to children and adults since 1985. As audio specialists, we combine the science of both sound and relaxation technology with the art of white noise to create superior audio solutions and sound files to successfully promote relaxation and sleep in babies, children and adults.

Noise belongs to the sonic and the visual realm, but can also be located in any process of communication in which someone is trying to distinguish signal, message and meaning from random fluctuations. Noise is a polysemic concept. It is usually defined as unwanted – glitches, hiss and buzz – messing up a message. But it is not merely the polysemy that makes it such a thought-provoking concept; it is also the difficulties of capturing and delineating the nature of noise once it has been defined. It appears to shift, both by definition and by the ways in which people approach and experience it. When noise is framed or delimited, it becomes charged with meaning. Framing practices, such as the application of noise filters to clean an electronic signal, force people to decide when noise begins and when it ends. Similarly, definitions of what is experienced as a convenient and preferable sonic environment by different people show what is experienced as noise and by whom.

When the UK Noise Abatement Society defines a sound as noisy, it is automatically framed as a problem – as something to be reduced. The aim for Pure White Noise, on the other hand, is to sell noise as a packaged product. Its products are available on CDs or in MP3 format, and the noise produced by this company is meant to mask and block other noise. By packaging and defining noise as a *commodity*, the company is transforming unwanted noise into appreciated noise. On a CD entitled 'Calming Electric Fan' (from the previous quote) or 'Soothing Air Conditioner', sounds have been transformed from annoying and disturbing to valuable.

In this chapter, I scrutinize shifting understandings, framings and experiences of noise, with the help of the term *transmutation*. The word provokes associations to mercurial shapeshifting, alchemy and cultural complexity (see e.g. Löfgren and Willim, 2005). By using the word 'transmutation', I want to emphasize that the unwanted or the unexpected is transformed into the appreciated and, to some extent, the manageable.

I focus here on noise in relation to sonic and visual media. The products of Pure White Noise serve as examples of transmutations of noise, but I concentrate on ways in which noise is approached within electronic music, visual arts and the use of digital media. I start with a broader discussion about noise, and then present various artistic approaches, ending with some reflections on how the concept of noise can be used as a cultural analytic tool.

The alluring abundance of noise

Loud sounds can be overwhelming and disrupting, revolting and nausea inducing. Such uncomfortable sounds are commonly defined as sonic noise. But a discreet low-intensity background hum, like the analogue hiss from a radio when a station is not tuned in, can also be called sonic noise.

Visual noise is an expression used to suggest that an image is uninterpretable, but it can also be experienced as a slight blur of an image. In signal theory, the 'noise floor' is the background against which communication occurs. Its source can be atmospheric radiation, interference among various types of equipment or the limitations of electronic circuitry and components. The noise floor is the inconspicuous and overlooked background that people normally ignore in order to concentrate on what they consider to be significant in a certain situation. According to Douglas Kahn, who introduced the issue of noise in his seminal work on the history of sound in the arts, noise '...can be understood in one sense to be that constant grating sound generated by the movement between the abstract and the empirical' (Kahn 2001: 25). In order to create meaning, people need to delimit, cleanse, overlook or abstract. Noise

... needs not be loud, for it can go unheard even in the most intense communication. Imperfections in script, verbal pauses, and poor phrasing are regularly passed over in the greater purpose of communication, yet they always threaten to break out into an impassable noise and cause real havoc (Kahn, 2001: 25).

In this sense, noise is conceptually related to clutter, waste and irregularity.

A universal definition of noise is probably impossible. As Kahn said, noise indeed exists, but '…trying to define it in an unifying manner across the range of contexts will only invite noise on itself '(2001: 21). A good sample of the wide spectrum of noise studies and thoughts related to the history of music is presented in Christoph Cox and Daniel Warner's *Audio Cultures*: everything from the political visions of Jacques Attali to accounts from experimental musicians.

When noise is mentioned without specification, the first association is often with sonic noise. All sounds, if experienced intensely, or loud enough to be distressing or painful, are probably experienced as noise. But, as Kahn stressed, noise need not be loud. In his over-900-page exposé of the cultural history of sonic noise, Hillel Schwarz wrote about everything from the Big Bang and reverberating echoes to tinnitus and hearing loss. Noise can have a monumental eruptive character or be peripheral and inconspicuous. He proposed that noise is manifested in relationships.

...noise is never so much a question of the intensity of sound as of the intensity of relationships (...) As a register of the intensity of relationships, noise has a fourfold history. First, the chronicle of changing soundscapes: how each era and culture lives within its own ambience of sounds. Next, the annals of sounds earmarked as pleasant or obnoxious: how each era, culture, and rank hears (or does not hear) and welcomes or disdains the sounds around it. Next, the career of noise itself as variously apprehended: how each era, culture, occupation or discipline reconstitutes the notion and nature of noise.

Contingent upon these, finally, are narratives of noisemaking and noisebreaking: how noise in each era, culture, and class has been denounced

or defended, defiantly produced or determinedly deadened (Schwarz 2011: 21).

Noise is culturally charged, therefore, evoked by definition, by the earmarking and categorizations of sounds, depending on settings and situations. It is often associated with an historical trajectory in which people create environments time after time, with more sounds than had existed previously. Noise can be associated with places, with cultural distinctions, with age or gender, with ideas about convenience and the rights of people. Urbanity (and the modern industrialized society) is often coupled with noise, associated with (noise) pollution, with sounds out of control, in overflow, in conflict. There is no doubt that a number of human activities typical to urban settings – large-scale systems of construction and transportation, for instance – are sources of sounds experienced primarily as discomforting. When, in the 1960s, R. Murray Schafer introduced the term 'soundscape', one of his purposes was to point to what, he contended, was an overabundance of acoustic information in the present world. Urban environments were especially identified as problematic and described as lo-fi – in contrast to rural settings, which, according to Schafer, are generally more hi-fi.

The country is generally more hi-fi than the city; night more than day; ancient times more than modern. In a hi-fi soundscape even the slightest disturbance can communicate interesting or vital information. The human ear is alert, like that of an animal. (...) In a lo-fi soundscape individual acoustic signals are obscured in an overdense population of sounds. The pellucid sound—a footstep in the snow, a train whistle in the distance or a church bell across the

valley—is masked by broad-band noise. (...) There is cross-talk on all the channels, and in order for the most ordinary sounds to be heard they have to be monstrously amplified. In the ultimate lo-fi soundscape the signal to noise ratio is 1 to 1 and it is no longer possible to know what, if anything, is to be listened to (Schafer 2004: 32).

Schafer advocated practices and competencies of careful listening, through which the cacophonic sonic textures of various places could be tuned out in favour of a concentration on sound which he called well tempered and balanced (Kelman, 2010). Schafer's ideas about soundscapes have provided inspiration for later practices of noise abatement and sound design. The notion of 'the tuning of the world', from his book by the same name, and of sanitized and organized soundscapes vs. noisy lo-fi disorder may be stretched to more unpleasant ideas about social and spatial order and about various people and cultures being noisy, loud and disquiet. Since the 1960s, the word *soundscape* has been utilized in many contexts, and has differed in meaning and range, often quite disconnected from Schafer's ideas (Kelman, 2010).

Noise abatement is an obvious example of overflow management in relation to the sonic noise. If a sound environment is experienced as being out of control and unmanageable, it is likely that it is defined as noisy. Transmutation – turning bad noise into good noise – is a method of management. And, to some extent, the processes of transmutations I write about here can be seen as a kind of noise abatement – but not a simple one. In spite of its strong associations with the unwanted, with discomfort and disgust, noise can be associated with pleasure, as accentuated in the marketing of Pure White Noise. An association of noise with pleasure is also evoked in a number of creative practices.

The Pure White Noise company frames the noise it sells as something authentic and *pure*. Within acoustics white noise can be defined as:

a complex signal or sound that covers the entire range of audible frequencies, all of which possess equal intensity. White noise is analogous to white light, which contains roughly equal intensities of all frequencies of visible light. A good approximation to white noise is the static that appears between radio stations on the FM band ('Noise', *Encyclopædia Britannica*. *Encyclopædia Britannica Online Academic Edition*, see also Krapp, 2011: 69).

White noise is a complex signal or sound, yet it is not necessarily experienced as complex and varied. The possibilities for interpreting white noise, whether loud or not, are limited (or endless). Its complex variations create what can be experienced as static similarity. The rapid flow of water is one of the sources of sounds experienced as white noise. In a waterfall, the overflowing and crashing of the water induces a wall of sound, experienced primarily as static. A similar sound is produced by heavy rainfall, or even by electric fans, air conditioners or vacuum cleaners.

White noise may be experienced as intrusive, but also as relaxing. Hillel Schwarz, for instance, wrote about soothing, low-intensity white noise. He referred to Pure White Noise and to white-noise machines, which, according to him:

...became the mainstays of birthing chambers, nurseries, offices, and bedrooms, like The Sharper Image Heart and Sound Soother, "your own personal sound environment," with buttons for rain, ocean, brook, summer

night, and white noise, "Real digital recordings. Not tape." Or maybe a CD for fussy babies, each track with "nine peaceful minutes" of "the soothing hum of a vacuum," "the constant whir of a hairdryer," "the continuous rumble of a lawnmower." "Or truly Pure White Noise® baby CD and MP3 baby audio files in baby's nursery, or wherever you hug or rock your baby. Our collection of baby soothing sounds includes Baby's First White Noise, a variety of nature sounds (ocean waves, surf, brook, rain), motor noises (vacuum cleaner, dishwasher, blow dryer, clothes dryer, washing machine, fan, car motor)." Motor noises? What an odd turn of events, that sounds once heard as obnoxious and disruptive should become a sonic backdrop marketed without qualm as "pure white noise" (Schwarz, 2011: 835).

As noted previously, when the issue of noise is raised, it is often the sonic that is meant. But there are also noisy images. Visual white noise is often referred to as 'snow' or 'static' – the type of image that occurs on a television screen when no broadcasting channel is tuned in. Both sonic and visual white noises are difficult to interpret. The complex character of white noise can be soothing, but these complex sonic or visual textures can also be the source of paranoid interpretations. It is virtually impossible to locate the source of white noise if no cue is presented, which gives white noise an enigmatic aura, resulting in various occult speculations. The search for hidden paranormal messages in the static complexities of white noise is a common theme in popular culture. In several movies, ghost hunters or similar characters look into the static of TV screens or listen to the static noisy hiss of some aural signal, in search for hidden messages from other dimensions. A web search using the words 'white noise' and 'EVP' results in a large number of pages and sites

about spiritual communication. The abbreviation EVP stands for Electronic Voice

Phenomenon and describes a concept based on the assumption that paranormal

voice messages are being transmitted in the noise of electronic media. The random

complexities and overflow of white noise is an alluring invitation to apophenia – to

the search for patterns or meanings that may not exist.

The art of noise and malfunction

Filter it out or amplify it (Krapp, 2011: 60).

The history of media and communication technologies reveals a long quest for pure messages and signals. High Fidelity (Hi-Fi) and High Definition (HD) are two terms which have been used to label certain technological qualities of representation and mediation of audiovisual content. These terms evoke associations of purity, accuracy, distinctness and faithfulness towards what is being represented. Various noise-cancelling technologies have been developed in order to eliminate unwanted interference and overflow.

Once noise has been defined and therefore framed, one can choose either to filter it out or to transform it into valuable noise. Within the art world, and subsequently within digital culture, utilizations of the noisy and erroneous have become escape routes from the predictably structured and from mundane processes of business as usual.

In his book *Noise Channels – Glitch and Error in Digital Culture*, Peter Krapp discussed the relationships between digital culture and creative processes. He noted

that '...the productive ambiguity of noise emerged from the consideration that it is too much information – and precisely unexpected information.' (2011: xi). According to this statement, noise is an overflow of information. But such an overflow is difficult to manage. Krapp quoted N. Katherine Hayles, who suggested that noise can interfere with signal, thereby becoming part of the message (Krapp, 2011: x). It is this potential intermingling of noise with both the background and the foreground that renders it fascinating. Noise is always lingering at the border of manageability.

One's experience of noise is dependent upon context and upon the way attention is directed. In most cases, the so-called noise floor or background is ignored. But when attention is directed towards it, noise will become the foreground. It is at this point that it can be either filtered out or appreciated.

When noise is framed as appreciated, it can be used to contest concepts of purity. In the history of music and art, questions about purity, norms and conventions, have been intrinsic to the development of new forms, genres and expressions. The hybrid, the irregular and noisy, has also occurred in the borderland between ethnographic methods and literature (see e.g. O'Dell and Willim, 2011). At the end of the last century, Ulf Hannerz wrote about the ways in which flows and hybridity were related to anthropological ideas. He quoted Salman Rushdie as saying:

The Satanic Verses celebrates hybridity, impurity, intermingling, the transformation that comes of new and unexpected combinations of human beings, cultures, ideas, politics, movies, song. It rejoices in mongrelization and fears the absolutism of the pure. Mélange, hotchpotch, a bit of this and a bit of that is how newness enters the world (Rushdie quoted by Hannerz, 1996: 65).

The overthrowing of previous ideas of purity and high quality has been pertinent to much art since early 20th century Modernism (Krapp, 2011). Expressions once considered unwanted and problematic have been appropriated, used in creative processes and subsequently often commodified.

All of this has happened within a number of creative practices, from the early 20th century 'noise art' of the Italian Futurists, to the Dada bruitism and other strands of artistic avant-gardes (Kahn, 2001). The borders of what to consider art (and music) have been stretched and moved. Artistic boundary work has characterized practically all of the 20th century; composers like John Cage and Pierre Schaeffer have contested the boundaries among noise, sound and music, and borders have been challenged within genres and movements like conceptualism, fluxus and musique concrète (Kahn, 2001; Toop, 2004).

Art can view noise as uncontrolled and metaphorically wild, to be domesticated and transformed into something manageable. Playing with the wild and that which is out of control has often occurred in artistic boundary bending. The making of art is, to some extent, based on combinations of controlled methodological work and the utilization of chance and serendipity (Willim, forthcoming). Such approaches to noise are related to the utilization of failure and error. According to Lisa LeFeuvre, who edited an anthology of writings about art and failure, failure has achieved a different currency in the realm of art than in other parts of the society.

Failure, by definition, takes us beyond assumptions and what we think we know. Artists have long turned their attention to the unrealizability of the quest for perfection, or the open-endedness of experiment, using both

dissatisfaction and error as means to rethink how we understand our place in the world (LeFeuvre, 2010: 12).

Accidental discoveries have often been mentioned as the genesis of various artistic concepts. Such stories frequently report an accidental action or an unexpected event as the spark that ignited a process of transmutation, through which noise was remade into something valuable. The description of German music producer Stefan Betke (a.k.a. Pole) on the website of Matador Records serves as an example:

Structurally, the music of Pole is based on abstract, irregular rhythms created by a defective analogue sound filter Betke uses, namely the "Waldorf 4-Pole" filter. These rhythms principally are defect frequencies full of interference (in audio terms commonly referred to as "noise"), not unlike the crackling sounds of vintage vinyl, except for a harder, purely digital quality, which makes them very immediate (Matador Records, 2000).

According to the story, Stefan Betke accidentally dropped a Waldorf 4-Pole filter device, thereby discovering that the clicks, cracks and pops of the malfunctioning apparatus could be used as raw material for new compositions. The resulting music became a minimalistic 'post-techno', wherein the small glitchy sounds from the filter were used to engender an empty spacious sonic atmosphere. He utilized these glitches from the malfunctioning device, thus turning an accident into an opportunity.

There are many stories of accidental discoveries, but there are also stories about the intentional misuse of tools and technologies. In the 1990s, some musical practices utilizing noise were associated with post-digital aesthetics.

..."post-digital" aesthetic was developed in part as a result of the immersive experience of working in environments suffused with digital technology: computer fans whirring, laser printers churning out documents, the sonification of user-interfaces, and the muffled noise of hard drives. But more specifically, it is from the "failure" of digital technology that this new work has emerged: glitches, bugs, application errors, system crashes, clipping, aliasing, distortion, quantization noise, and even the noise floor of computer sound cards are the raw materials composers seek to incorporate into their music (Cascone, 2000: 12–13).

Kim Cascone wrote about the 'aesthetics of failure' and 'post-digital tendencies' in 2000, but artists and musicians had already been experimenting with the ways digital technologies could be utilized as machines of noise and glitch creation for some years. A genre called glitch had emerged within electronic music, often associated with the German record label, *Mille Plateaux*.

Many types of digital malfunction were sought by artists in the late 1990s. Cascone mentioned Oval, who manipulated the surfaces of CDs to create glitches when the discs were played (2000: 13). The skipping CD was also mentioned by other writers:

If there were an emblematic sound of today's digital music, it would be the sound of a skipping CD. First encountered as an error in a playback process, then utilized as musical material in itself, this sound-meme spread like a virus through the network of electronic music producers. What distinguishes this

strand of laptop music from its predecessors (both academic and popular) is the explicit use of the concept "glitch" by its producers and the whole conceptual framework of digitality surrounding this music (Vanhanen, 2003: 46).

Utilizations of malfunctioning CDs had been preceded by similar uses of earlier analogue technologies. Phonographs and analogue turntables were favourite tools of a number of artists who used them to turn noise into music. The opportunity to interact physically with and misuse the stylus, the needle and the turntable rendered them suitable equipment for stage performances. Practices like the scratching of records had been used within hip-hop for some time. The (noisy) sounds of scratched vinyl were widespread, accepted and commodified in ways similar to the earlier sounds of fuzzboxes and the distortion of electric guitars.

Noise and glitches, encountered as errors, have subsequently been utilized as material in creative workflows – something that has characterized several practices. And although noise and malfunction can be transmuted into intended output, these practices are debated. Rosa Menkman, who has written about glitch art and software artists, demonstrated how some critical glitch artists avoid the domestication and commodification of noise and error.

There is an obvious critique here [from some artists]: to design a glitch means to domesticate it. When the glitch becomes domesticated into a desired process, controlled by a tool, or technology – essentially cultivated – it has lost the radical basis of its enchantment and becomes predictable. It is no longer a break from a flow within a technology, but instead a form of craft. For many

critical artists, it is considered no longer a glitch, but a filter that consists of a preset and/or a default: what was once a glitch is now a new commodity (Menkman, 2011: 55).

Menkman's discussion of the commodification of glitches is reminiscent of the discussion about pure noise and various commodifications of noise. The noises and shortcomings of earlier technologies have been turned into aesthetic effects, and subsequently incorporated into such products as guitar pedals and software plugins, the pedals delivering distortion and overdrive and the plugins adding vinyl record crackle, tape distortion or speaker cabinet noise to sounds. There are also examples of computer-based sound glitches and noises being emulated and packaged into products – such as the plugin Glitch by Kieran Foster (a.k.a. dblue):

Glitch features a pattern-based effects sequencer that takes the incoming audio, breaks it down into user-defined slices, and then applies different effects to each slice. The sounds it generates range from quite subtle to extremely bizarre, depending on how much you tweak the controls. Effects can either be programmed by hand to create specific desired patterns; chosen pseudo-randomly based on each effect's probability level, with a user-defined seed value that optionally allows the same sequence of "random" effects to be chosen each time; or combined into a mixture of both methods to suite your own tastes (Kieran, 2008).

A similar example of visual software marketed as a way of intentionally creating glitches is the *After Effects* plugin, Data Glitch, aimed at filmmakers and visual artists

interested in prefabricated glitches. The plugin could be used to make glitches or to 'corrupt' moving images:

Simulate Realistic Digital Image Glitches with Ease!

Data Glitch is a native After Effects plugin that creates awesome realistic digital image glitches with total ease. Something you would see during a satellite transmission or a cable broadcast or from a damaged disk. Bad TV plugin is great for analog TV look, but this is 2010 and you hardly see anything that's analog anymore. This plugin simulates a realistic digital glitch effect.In real-life most of the glitches occur due to problems in encoding/decoding and sometimes data corruption. This plugin does exactly that. It encodes the data, glitches the data and then decodes it similar to the real life situation (Aeplugins, 2010).

Murphy's Law states

Anything that can go wrong

Will go wrong.

Why wait for it to happen? (From Data Glitch demo video, 2010).

The marketing blurb says that one can create 'awesome realistic digital image glitches with total ease' with this tool. Yet when a tool aimed at creative practices is associated with 'total ease', it often loses credibility among practitioners, as Rosa Menkman implied in her quote. With tools of 'total ease', the associated practices of transmutation may be coupled with ideas about 'cheap gains' and prefabricated design – distant from ideas about pure noise and unpackaged glitches. The question

once again is how to draw the line at what is really manageable (see Willim, forthcoming).

Authentic noise?

Some obvious commodifications of noise are the products of companies like Pure
White Noise, which evoke feelings of authenticity in their commodities. This notion is
well illustrated by the marketing text for the product, Calming Electric Fan:

This fan sound doesn't just sound like a fan; it is a recording of a real fan!

There are no fan sound effects or other sound gimmicks here. Our Calming

Electric Fan sound captures the sound [of] an actual running fan, which [has been] digitally remastered to optimize its white noise benefits

(www.purewhitenoise).

The ad stresses that this is the recording of a *real* fan, with no artificial effects or gimmicks, marketed as real, pure noise. But, one could legitimately ask, to what extent is a CD with fan noise more authentic than the unrecorded sound of a real fan whirring in the room? The authenticity of the CD is evoked by associations, not merely to real-world noises, but also to a process of professional engineering and design of noise. When the company states that it is a better noise provider than other noise providers, it is describing its skills and its thorough methods of noise making.

As pioneers in the field of white noise, we have been working refining our Pure White Noise® for over 20 years. By researching, developing and testing

version after version of our pure white noise, making improvements in quality and effectiveness with each new version, we have perfected the science of relaxation and noise masking with pure white noise. What we offer now is simply the finest white noise available period (www.purewhitenoise).

This designed noise is made to be consumed. If one compares this noise to audio plugins like Glitch, by Kieran Foster, some similarities become obvious. Using a designed plugin for noise means using a predesigned tool for creating sounds. These sounds relate to accidentally arising electronic glitches, similar to the ways in which the recorded and designed noise of a fan relates to the sound of a real fan. The qualities of these sounds are thought not to be disruptive or annoying to users. The tool is meant to be used in an intentional, controlled way, but the sounds it produces can still be called noise. If the sound of an electric fan were to be played at a high volume, however, disturbing neighbours, it would regain some (more genuine?) qualities of (irritating) noise. Furthermore, suppose that the Calming Electric Fan CD were scratched, and began to skip while being played. The playback of the glitchy sound from the malfunctioning CD from Pure White Noise would be a good case for questioning: 'What are the parameters of noise?'

Noise as a tool for cultural analysis

Notions of noise are based on what people call noise and frame as noise. The framings are culturally engendered and dependent upon the ways in which people relate to, conceive and use technologies. In this sense, noise can be used as a culturally analytic tool for understanding when technologies would be experienced

as intrusive. When do people feel and think that a medium distorts or enhances? When is unwanted noise induced or when is noise transmuted into an appreciated effect? A technology can be used to filter out noise, but the filtering can, in itself, be experienced as intrusive.

In his book on the use of broken media technologies for the creation of music, Caleb Kelly referred to multimedia artist Paul DeMarinis, who had suggested four dimensions or sets of sounds which can be distinguished when records are played through a phonograph (Kelly, 2009: 297). The first set is the intended sound of the recording of the performance, the second refers to all the environmental sounds captured by the recording equipment: background noise and ambient sound, for example. According to DeMarinis, the phonograph made people more aware of recorded background noises and their relationship to the intended recorded sounds. The third set of sounds is that of the phonograph itself, or of the recording equipment used – the noise of moving components and electric circuitry, the sound of the medium. DeMarinis called this dimension 'the shadow of technology' (Kelly, 2009: 297). The fourth dimension is what DeMarinis called 'autobiographical': sounds created from the use of records; sounds of wear and tear; inscriptions, like scratches and ingrained dirt on the surface of a record. The act of playing a record causes the slow destruction of the medium.

DeMarinis's demarcation is one way of scrutinizing notions of noise. The division into sound sets provides a tool which helps to map the way certain sounds (or concepts, for that matter) related to media use can be approached, perceived, conceptualized, described and brought to one's attention. To what extent can noise be designed? This question is relevant for the theme of managing overflow. To what

extent is overflow out of control? When noise or another kind of overflow is managed, it changes, in the sense that it is conceived differently.

In discussing the cultural value of noise, its relational aspect is of particular importance, as Hillel Schwarz has suggested. What is heard as pleasing and wanted or as abhorrent and irritating depends on the way different cultures, occupations and disciplines 'reconstitute the notion and nature of noise' (Schwarz, 2011: 21).

The relational aspect of noise, the ways in which it is connected to the uses of technologies and media as well as to processes of transmutation, filtering and framing may help in our understanding of the way people approach and experience the sonic, the visual and other sensory experiences. But noise is related not merely to sound, image and the sensory; nor is it easily captured in models of communication and information transfer. The fluidity of noise, seen as overflow, renders it intriguing, and applicable as a conceptual tool in several contexts. It can be a help in reconsidering what is actually examined in investigations of technology or in studies of the role of sound, the visual and the sensory. There is an intriguing tension in the interplay between noise being at times abated, and at other times packaged and sold. There are many further questions based on the conceptions of noise: What is noise in an organization, for example, in an economical transaction, in a story or in a variety of everyday situations?

Field material

Aescripts + Aeplugins (2010) *Data Glitch*, http://aescripts.com/data-glitch/, accessed 2012-12-27).

Foster, Kieran (2008) *Glitch*. http://illformed.org/, accessed 2012-04-02). Matador Records (2000). *Pole 3*. (http://matadorrecords.com/pole/biography.html, accessed 2012-12-25).

Pure White Noise. (http://www.purewhitenoise.com, accessed 2012-12-25). *Quiet Mark.* (http://www.quietmark.com/, accessed 2012-12-25).

References

Cascone, Kim (2000) The aesthetics of failure: "Post-digital" tendencies. *Computer Music Journal*, 24(4): 12-18.

Cox, Christoph & Warner, Daniel (2004) *Audio culture: Readings in modern music.*New York: Bloomsbury.

Encyclopædia Britannica Online Academic Edition. Noise.

Hannerz, Ulf (1996) Transnational connections. London: Routledge

Kahn, Douglas (2001) *Noise, water, meat: A history of sound in the arts.* Cambridge, MA: MIT Press.

Kelman, Ari V. (2010) Rethinking the soundscape: A critical genealogy of a key term in sound studies. *Senses & Society, 5*(2): 212-234.

Kelly, Caleb (2009) *Cracked media. The sound of malfunction.* Cambridge, MA: The MIT Press.

Krapp, Peter (2011) *Noise channels: Glitch and error in digital culture.* Minneapolis, MN: University of Minnesota Press.

Le Feuvre, Lisa (ed.) (2010) Failure. Cambridge, MA: MIT Press.

Löfgren, Orvar, and Willim, Robert (2005) *Magic, culture and the new economy*. Oxford: Berg.

Menkman, Rosa (2011) *The glitch moment(um)*. Amsterdam: Institute of Network Cultures.

O'Dell, Tom, and Willim, Robert (eds.) (2011) *Irregular ethnographies* (Special issue of *Ethnologia Europaea*, 41:1). Copenhagen: Museum Tusculanum Press.

Schafer, R. Murray (1994) *The soundscape: Our sonic environment and the tuning of the world.* Rochester: Destiny Books.

Schafer, R. Murray (2004) The music of the environment. In: Cox, Christoph, and Warner, Daniel (eds.) *Audio culture: Readings in modern music*. New York: Bloomsbury, 29-39.

Schwarz, Hillel (2011) *Making noise. From Babel to the big bang and beyond.* New York, NY: Zone Books.

Toop, David (2004) *Haunted weather. Music, silence and memory.* London: Serpent's Tail.

Vanhanen, Janne (2003) Virtual sound: Examining glitch and production.

Contemporary Music Review, 22(4): 45-52.

Willim, Robert (2013). Out of hand. Reflections on elsewhereness. In: Schneider,

Arnd, and Wright, Christopher (eds.) Anthropology and art practice. Oxford: Berg.