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The influences of sonic sensory awareness in the production and consumption of screened nature documentaries

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Abstract: Multiple commercial and technological factors influence the soundscapes experienced by audiences of nature documentaries. As a genre, nature documentary is a consensual term for fauna and wildlife screened programmes whose storylines need very specific audio and visual data content. Often what audiences hear in these documentaries echoes what they see. However, this illusion of perceptual unity between sight and sound can be exposed by examining the asynchronous production of moving images and sounds. The paper provides a discussion of the ways in which the commercial production practices of nature documentaries reveal aspects of sonic environments in relation to human modes of perception. As well, it examines the production constraints generated by technologies that enhance sonic perception and alter engagements of sound-makers and audiences. This account examines the phenomenological practices of listening to sonic nature and the audio-visual assemblage integral to screened representations of nature. Audience experiences of nature documentaries highlight the perception of a hyper-real environment that might ultimately obscure the sonic landscapes found in nature.

Introduction

Technologically mediated experiences of soundscapes can lead to an epistemological questioning of human relationships to the self, physical environments, and audio-visual creative practices. In this article, a documentary about nature is understood as a text that meets commercial, narrative, and aesthetic conventions while focusing on specific species and behaviour. Sound plays an important role in the creation and reception of these filmed representations. Natural soundscapes, and sometimes the distinctive sounds of animal species, are often quietened in post-production, and they have to compete with dramatic music and human commentary or voiceover that often attempt to anthropomorphically convey non-human behaviours. Industrial regulations and aesthetic fads reflected by the presence or absence of voice and music are the product of targeted audiences, broadcasting imperatives, and commercial interests. For instance, a 55-minute program may contain as little as two minutes of audible sounds originating from “natural” soundscapes and devoid of under-laying music or over-laying narrative voice. In this article I examine the ways sound for nature documentary can influence the creation and consumption of seductive representations of the environment humans share with other species. This discussion notes the evolution of technological and commercial constraints leading to an interrogation of the spatial and temporal notion of nature perceived by audiences. A phenomenological framework of inquiry is supported by interviews I conducted with sound professionals with extensive experience in film and television nature documentary. In conclusion, the evolution of modes of making and dissemination of nature documentary allows for a re-assessment of sound as a major perceptual player in the audio-visual discovering of nature shared by all species.

Ways of absorbing sonic natures

Over the years, acoustic ecologist and musician R. Murray Schafer, who coined the expression ‘soundscape’, noticed that ‘the sounds of nature are being lost’ (1994, p. 83) due to increasing mechanistic and anthrophonic sonorities. Bryan Pijanowski and other practitioners of soundscape ecology propose that a soundscape is ‘the collection of biological, geophysical and anthropogenic sounds that emanate from a landscape and which vary over space and time reflecting important ecosystem processes and human activities’

(Pijanowski et al. 2011). Pijanowski includes human activities as an intrinsic element of soundscapes and concerned acoustic ecologists and environmentalists are advocating for a reduction in man-made noise to let the biological and geophysical sonic worlds talk and be heard. In 1968 sound designer and environmentalist Bernie Krause was recording 15 hours of soundscapes to obtain one hour of sound full of rich animal life and devoid of anthroponic signals. Around 2001 it was taking almost 2000 hours of recording to obtain one hour of sonic data of similar material and quality (Krause 2002, p. 27).

Soundscapes can reveal sonic elements integral to relationships between humans and the environment that we dermically absorb. Natural soundscapes reflect the interrelationships of living organisms, weather conditions, and topography. Composer and listening teacher Pauline Oliveros coined the term 'sonosphere' as a space reflecting a perceptual amalgamation of all sounds 'that can be perceived by humans, animals, birds, plants, trees and machines' (2010, p. 22). Oliveros explains the impact of the sonosphere, the sonic envelope of the Earth:

Humans sense [the Sonosphere] according to the bandwidth and resonant frequencies and mechanics of the ear, skin, bones, meridians, fluids and other organs and tissues of the body and its layers from the core to the magnetic fields as transmitted and perceived by the audio cortex and nervous system. (All of this with great variation of course.) All cells of the earth and body vibrate. (p. 22)

From a 'human point of vibrating', the unique and evolving combinatory natures of the sonosphere and its biophonic, geophonic and anthroponic 'sono-porous' territories can be felt by most species. Regardless of the purity of the signal, vibrations trigger a coenaesthesia, a general impression of organic sensations distinct from our five defined senses, followed by a phenomenological listening to sounds. Nature is not 'only out there' but the flesh of all living entities provides a medium, leading coenesthesia to trigger an ecomimesis: an 'authenticating device' (Morton 2007, p. 33) that allows for individual sonic differentiations and can induce acts of listening. The amalgam of vibrational waves, including auditory signals, occurring at the same time over a given area loosely forms soundscapes that can be sensorially appreciated from musical and aesthetic points of view.

The interpretation of sonic signals and resulting soundscapes relies on the structure of sounds, their interactions with other environmental factors and ‘the listener’s knowledge of context’ (Truax 2012, p. 194). Hearing seems then close to listening but focus and attention provide a distinction between these two ways of perceiving vibrations: the act of listening involves ‘subtle shifts in acoustical agency’ (Rice 2015, p. 100). A ‘pure listening’ experience involving only the auditory apparatus is impossible due to reverberations of sound waves through flesh and bones. In the same vein as a ‘synchresis’ that emphasises the immediacy of the conjunction between visual and sonic perception (Chion 2009, p. 492), a hearing of vibrations triggers ways of knowing that effect intuitions about visual meaning. As suggested by Michel Chion, humans’ propensity to *feel* instinctively the meaning of a movie scene, for example, originates from neuro-physical disposition and not from cultural conditioning. Nevertheless, the binding between ocular and acoustic events also depends on expected perceptions. In our mediated culture we may see a lion on screen while hearing a bird call, and understand that the unseen bird is alerting its fellows of the lion’s presence. Sonic effects describe the contextual interactions ‘between the physical sound environment, the sound milieu of a socio-cultural community, and the “internal soundscape” of every individual’ (Augoyard & Torgue 2006, p. 9). The ensuing sensory ‘re-organisation’ of these audible and non-audible parameters allows unique individual perspectives on sonic vibrations while the valorisation of some sounds requires the perceptual attenuation of others (p. 124).

Within the realm of these different modes of perception, moving images, and sound asynchronicity or absence, sounds become instruments for seeing. In this sensory context, human exposure to media representations of the lived world reveals innate physical and psychological modes of perceptual illusion and virtual experience also known as ‘presence’ that reveal our capacity for acceptance of incoming information. Evolutionary psychology shows that to counter survival risks, humans have had to rapidly develop a causal knowledge between physical and social worlds. Scholar Giuseppe Mantovani explains,

We act in a world in which it is important to respond promptly to situations, while accuracy usually is not the top priority. The result is that human cognitive systems have developed adaptively the tendency to treat all representations as if they were true, except when there is proof to the contrary. (1995, p. 680)

Mantovani adds that the richness and flood of information alters human filtering capacities, which could partly explain why humans need to find truth in representations regardless of the mediated content to which they are exposed (pp. 680-81). The technologically mediated 'presence' is influenced by framing technological factors, individual propensities, social expectations as well as notions of control, multi-sensory modality, a sense of realism, anticipation of events, selective attention, and a willingness to suspend disbelief (Lee 2004, p. 494). An interviewee for a phenomenological study on the ways in which televised-nature representations shape the public notion of "nature" in the United States mentioned that he liked televised nature because:

it takes away the bugs, it takes away the smell, it takes away the heat and all the stuff like that ... When I watch nature on television I know if I was standing there next to Jeff Corwin bugs would bite me and the snake may bite me too so it seems real. (in Adams 2005, p. 524)

Such descriptions of perceptual anticipation rarely mention correlations between visible points of reference to audible aspects of sensorial awareness: mediatised encounters with nature, more often than not, meet expectations of sensuous experiences that emanate from visual and kinesthetic information rather than sonic perceptions.

Documenting audio-visual dislocation

Audiences often assume that audio-visual elements of documentary have the 'authenticity of evidence' (Nichols, 2001, p. 37), and represent the integrity of the environment being recorded with both audio and visual elements simultaneously captured. Nichols' comment that 'documentaries offer the sensuous experience of sounds and images organized in such a way that they come to stand for something more than mere passing impression' (2001, p. 65) seems at times distant from perceptual televised experiences of wildlife in their habitats. For example, sound is often understood as a characteristic of the visual objects from which it could emanate. Thunder, for example, is associated with lightning as a consequence of the visual event, whereas in reality thunder is an aural object that is integral to and follows the visual event of lightning. A lightning bolt shown on screen is, most of the time, simultaneously coupled with thunder. In the natural world such sensory juxtaposition might be deadly because it is the interval between the vision of the electrical rod of the lightning

and the audibility of the thunderous sound that signifies its danger. As consumers of nature documentaries, we might be mistaken to have 'spontaneous confidence' in the realism and actuality of audio and visual outputs in terms of their resemblance and 'conformity' to 'reality' (Baudrillard 1987, p. 14).

As 'every film is a documentary' (Nichols 2001, p. 1) and no documentary seems devoid of subjectivity, audiences should expect a variety of different audio-visual and narrative approaches to elicit knowledge and emotions while representing the world. Many categories of documentary form and conventions have been devised and hybrids and sub-genres defined. Since 1983 Bill Nichols has expanded a framework made of six main documentary modes of representations and conventions in relation to the historical world, to historical socio-cultural contexts, and to evolutions of audio-visual practices (1991, pp. 32-75). Nichols' classification includes 'the participatory mode' which involves interviews between filmmakers and subjects. 'The expository mode' privileges voiceover, also known as the 'Voice of God', whereas 'the observational mode' attempts to observe life as it happens. The 'reflexive mode' involves aspects of the expository mode as it draws attention to the making of the documentary. The 'poetic mode' dispenses with many filmic conventions to emphasise the aesthetic features of the documentary while the 'performative mode' involves filmmakers as participants, and thus leaves audiences to form their own opinion of the mediated world they are exposed to. Over the years the relative rigidity within Nichols' typologies and chronologies of conventions started to blur as documentaries started to mix conventions, consequently altering audiences' perceptual experiences.

Nature film expert Derek Bousé questions the adequacy of the word "documentary" when applied to nature programmes because, 'Conceptually, technically, procedurally, and formally, if not also thematically, it seems that some of the leading models of documentary filmmaking simply may not apply to films with wild animals as subjects' (1998, p. 121). He wrote that 'for example, *direct cinema*, *ethnographic film*, *cinéma vérité*, and *observational cinema* are defined by technique and approach, rather than by content' (p. 119; emphases in original). Bousé continues, suggesting that '*observational cinema* ... is not an accurate model for wildlife films, where information voice-over narration remains a constant, if not a necessity ... but ... it could fit the *ethnographic film* genre' (p. 121; emphases in original). *Kestrel's Eye* (1998) could be considered an observational nature documentary providing an

ethnographic perspective on a small Swedish village. This documentary focuses on the life of a family of kestrels over an entire year, it does not feature music or vocal narration, and there is no re-constructed post-production sound. Its sonic nature was captured at the same time as the images, although the visuals do not always refer to sound sources because, for example, we hear rather than see jets approaching distant runways. Although the film is about wildlife it also brings to the fore human lives and behaviour. From their nest the Kestrels observe village life, react to its sonic activities, heads turning to the technologically perceived sources of *their* natural habitat: a car alarm, snow being swept in the cemetery, the black cat crossing the street, and the unseen wedding and funeral bells and associated activities. We hear an alarm and witness a bird finding its source and looking at it. The kestrel moving its head to adjust vision to a sonic source transposes us in our common sonosphere.

This approach to sound as a nexus for sensations to provide an understanding of the world is also transmitted through screens. During an interview with the sound post-production team at Natural History New Zealand (NHNZ), audio post-production manager Tom Koykka mentions that the goals of professional documentary production teams are ‘to entrance and almost hypnotise the viewer. If we have done our job well, you are glued to that screen, whether it be a reality show or documentary, feature film ... If something doesn’t feel right or is visually wrong, it will break you out of that hypnosis’ (Koykka 2016). Both Oliveros’ perspective on vibrational life and Koykka’s comments acknowledge the body as an organism absorbing sonic manifestations not only in the natural world at large, but also when mediating audio-visual representations. Our understanding of both transmitted worlds relies on a perceptual feeling of certainty, regardless of the making of their representations.

For sound creators and spectators of nature documentary the fixation of sound onto media that incorporates playback facilitated an expansion, as well as a contraction, of sonic perceptions in filmed representations of nature. Jonathan Sterne notes that the construction of audio and visual media is based on an assumption that ‘audiences might be listening in a state of distraction’. In that context, television soundtracks were structured to entice domestic audiences to come and see what was happening on screen if they were in another room at the time (Sterne 2015, p. 71). Therefore, the circumstances of a programme’s

viewing influence the sonic sensorial aspect of its watching. A study of audiences of wildlife documentaries in the United Kingdom (Austin 2007, pp. 131-133) suggested that many television viewers consider watching this type of program as an event shared with family and friends with varied levels of focus and interest for the program itself. A lack of attention might sometimes explain why audiences can be largely unaware of surreptitious post-production practices that make up for the limited amount of material filmed on location and that can dwarf the sound recorded in specific habitats.

Most of what can be watched and listened to on television in relation to natural settings and associated life is staged, dramatised, socially constructed, scripted, re-used, and relies heavily on post-production techniques. Narrative formats and film techniques inform content and representation when documenting landscapes and living species. Sound making processes for nature documentaries epitomise sound-vision asynchrony in that most animal species visible and/or heard through screen have been assembled, dissimulated, or created or re-created at different times and places.

Sociologist and philosopher Jean Baudrillard outlines four processes of signs' transformation, from dissimulating substance to dissimulating nothingness, while discussing the levels of simulacra and "false" representation exuded by images and obtained through simulation (1983, p. 11). The four stages of simulations go from a reflection of 'basic' reality to perversion of basic reality, to the masking of an absence of basic reality, to finally reach a simulacrum of reality with no link to the original experience at all. Mediated representations of nature deliver a sonic hyper-reality based on a disguised absence: our common sonosphere is dissected and some of its layers rejected, notably its anthrophonic qualities. Because location sound is often cleaned of anthrophonic noise for example, or 'skimmed of certain substances and enriched with others', Chion asks: 'Can we hear a great ecological cry – "give us organic sound without additives?"' (1994, p.96).

Audience expectations for sound-vision synchrony lead to the presence of 'additives' and are therefore closely related to what audiences think they should be witnessing. David Gunkel notes that Baudrillard wrote little about sound but that his limited attention to sound theory and reproduction has nevertheless been ignored by his contemporary thinkers (2007). Although occasional, his direct references to the fidelity and quality of recording and

observation in our obsessive will to attain a high-fidelity threshold of reproduction are clear and prescient as expressed during his 1986 talk at the conference *Futur*Fall: Excursions into Post-Modernity* in Sydney. For Baudrillard, high-fidelity signifies the death of music itself, a disappearance 'in the perfection of its materiality, in its own special effect' (Baudrillard in Apple 2016). Baudrillard, reacting to the perfection of the sonic reproduction and 'the virtual world' of binary recording that accentuated the absence of the original, noted that 'They've even felt the need to re-introduce noise and static to give it a natural effect, or an effect of the hyper-simulacrum of the natural' (2004, p. 66).

Technology: Broadcasting the sonsphere

Animal behaviours dictate the ways in which audio-visual data is recorded and used to represent species. Entertainment requires action and numerous protagonists, therefore it is rare that the same animals will be present from the beginning of a televised programme to its conclusion. To dedicate time to observing the behaviour of one particular individual in its specific habitat necessitates a considerable budget. Therefore, audio and visual segments of a specific documentary, for example, can contribute to the making of different programmes or series over many years. Wildlife and nature documentaries have a long shelf-life and their content can be re-used in many ways. Visual extracts, sometimes as short as two seconds, can be bought at varying costs online from specialised archives. Contrastingly, sound doesn't command as much money because a lot of different elements can be found online at no or very low cost, except for musical tracks that demand royalties.

Music has been an important element in the development of nature documentaries' soundtracks. In the 1960s the technology of on-site recordings by professionals and amateurs alike changed with the invention of the 8 and the 16mm movie camera and portable sound recorders. Enthusiastic amateurs expert in vegetation and animal lives became interested in documenting wildlife and natural history before the British Broadcasting Corporation (BBC) involvement in the production of nature documentaries. Sound recordist Chris Watson suggests that these dedicated amateurs started the British tradition of wildlife filmmaking (2015). According to Watson, who doesn't decry the skills of these non-professional documentarists, their mute home 16mm films eventually become

accessible to television editors at the Natural History Unit who started adding the sound most easily available to them: musical scores.

Musical score has become a predominant way to entertain audiences despite the sophistication of audio-visual technology that provides us with the capacity to discover the sonic intricacies of the world around us. The isolation and indexing of sound as historical and spatial events through audio-recording have bound audio and visual tracks in irremediable ways. The advent of digital technology has contributed to more discerning ways of capturing and listening to the integrity of the natural world, thus potentially cultivating sophisticated sensory knowledge of soundscapes. The subtlety of sound and its natural constituents can be recorded in minute detail and domestic audio-visual devices aim to deliver high audio-visual definitions and enhance perceptual experiences.

Digital technologies have transformed audio devices to be at once multi-sensory receptors, transmitters, recorders, and amplifiers. Thus, different instruments designed to interfere with sound waves have developed technical effects that have changed the production, nature, audition, and diffusion of sounds. Amplification and deamplification, for example, allow the modification of the loudness of the electronic signals that convey the original source of the recorded sounds (Chion 2016, pp. 134-5). This factor changed the practice of recording in analogue and digital mode as mentioned by sound mixer Errol Samuelson during an interview with the NHNZ sound post-production team: 'We used to have to record things loud onto the tape. Because, if it was too low and you tried to crank it up, you would get hiss. We only had 42 dB signal to mic. Whereas now we have 98 and it doesn't matter' (Samuelson 2016).

Paradoxically, digital data compression can restrict audiences' perceptual exposure to delicate sonic information that can be recorded within sonic natural environments. To be fully attentive to sonic intricacies, or to "better feel" recorded or broadcasted sound we might increase the volume of play. Nevertheless, it seems that audiences' ears do not always disagree with loudness, but rather with unbalanced content. Entire programmes had to be remixed when BBC1 viewers complained about sound quality and discrepancies of some audible elements over others, for example muffled speech competing with an overpowering music. Music had to be "pulled down" for the vocal narration to be intelligible (Hillman &

Pauletto 2016, pp. 82-3). No producer likes its viewers to shift channel: public opinion is what sells, even if, like the BBC, the broadcaster is not a typical commercial entity. Across the media landscape it is the ratings that sell and allow for more productions to see the light of day. As television budgets have been eroded over the years, and when budgets have to be cut, it is the sound department that will be the first casualty (Koykka 2016).

Still, some “natural” sound is actually recorded on location but, in all its successive incarnations, it will have to be adapted in order to perfect a “truthfulness” of visual continuity. Errol Samuelson explains: ‘you shoot a troupe of monkeys during the day, the background changes all the way, noises change, so you have to smooth it, the transitions. So, you can’t tell that there are different places’ (Samuelson 2015). The logic, and constraints, of production emphasises the need for post-production and audio-visual cohabitation, as explained by Tom Koykka:

You may have a bunch of cicadas in the day where they are just chirping and you have that ambient noise in the jungle. In the afternoon, there is not so much of that. When you are cutting, you’re intercutting parts of the day to make it look like a seamless sequence. You end up having to smoothe and homogenise the track to make it sound like it was all shot at the same time, even if it was shot over the course of a few months, or different times of the day. (Koykka 2016)

Many sound professionals working on feature films and documentary production consider that a vocal narrative or a visual commentary should not be disturbed by “poor” environmental soundscapes. The usual culprits are terrestrial or aerial traffic noise, a rumble or a hiss distracting an audience and taking spectators away from the visual narrative or the vocal commentary. Sonic simulation and dissimulation become part of creating an imaginary reality in order to hide a terrestrial reality that might be asynchronous to the audience. Until the arrival of digital technology, the duration of a synchronised sound and image recording was dependent on the 12-minute duration of a magnetic rolling tape. Samuelson recalls that filming news or documentaries required rehearsals on the part of the interviewees because when ‘you would get an interview, the film was just about the same length’. He adds, ‘Now people just record everything on five cameras and there is a deluge of rubbish’ (Samuelson 2016).

In recent years, technical factors have strongly impacted the quality of sound recording. Of note to the industrial practices surrounding nature documentaries is that many people recording sound in the field have not had much formal training as sound recordists. Within the industry of nature documentary, both the abundance of sonic data and the scarcity of commissioned data recorded at the same time and location as their visual counterpart can substantially affect the quality of soundtrack productions and television broadcasts. The accessibility of lower cost professional equipment has also impacted on the quality of location recording. This factor is exacerbated by poor monetary reward to sound operatives, a disinterest for vocational-based audio engineering training, and a fragmentation of the workforce with more free-lance sound operatives and independent directors with uneven field skills (Hillman & Pauletto 2016, p. 82). Natural History New Zealand sound operatives unanimously confirm that the producers often send out a director who may not have substantial experience in recording or editing sound. Tom Koykka explains that directors are often in charge of shooting footage, recording sound, and building the project to its final editing stage. A consequence of this multi-tasking is that 'sound is forgotten more often than it should be in the field, so what comes back to us, it is very light, sound-wise' (Koykka 2016).

The wide accessibility of digital audio workstations (DAW) seems to privilege audio and visual post-production rather than experiential locative sound capture. Humans are sometimes unaware of their sonic impact, as Samuelson and Stacey Hertnon, both sound mixers at NHNZ, suggested during our interview:

Errol Samuelson: On a wildlife shoot, generally it is good for pictures, but not for sound. You are better off finding a quiet location away from the zoo and road. So if you have got a director beside the cameraman, he's never going to be somewhere else. You might be better in the quiet of dawn, or the early evening, rather than at midday when the sun is right out. Inherently, you're never going to get good sound on a trip now. With sound in the field, once you strike a problem with wind that you don't realise you have, you've had it. Too much wind behind an interview is hard to get rid of.

Stacey Hertnon: It's distracting. Especially if it is used as a talk track and you don't actually see the person on screen talking. All you hear is wind hitting the mic.

Errol Samuelson: They don't know what they don't know.

The exigencies of nature documentary production corroborate Michel Chion's contention that there is a slim chance of sound being recorded on location at the same time as images. He wrote that 'this sort of given maintains a relationship of identity with the milieu from which it originates that implies isomorphism: the transfer onto the sound itself of the virtues or properties of the place where the sound was recorded, and so forth' (2016, p. 119). In the context of nature documentaries, isomorphism and instinctive knowing of what the visualisation of a locative experience *should* sound like exemplify Baudrillard's thoughts on the representational value of some entities, like Disneyland for example. Made to hide the "real", these texts of sensory consumption are perfect iterations of 'entangled orders of simulation' (1983, p. 23): the hyper-realisation originating from an absence of reality also leads to a perversion of experiential time and audio-visual asymmetry .

Dislocated realities and simulation

Screened nature transmits environments in which audio-visual fabrications do not reflect the sensory origins of the representations offered to audiences. In the context of producing nature's sonic "reality" via post-production enhancement, the creation of a "sweetened nature" starts with devising a phenomenological product made by dissociating and decanting audio and visual realities to produce emulations of a long-gone sensory era – a nature without ubiquitous human presence. When transposed to the reality of sound production for nature documentaries, the identification of the original sonic location has become close to pointless because the veracity of visual information takes precedence over audio perception. Therefore, sound production for nature documentary does not always maintain the properties of the place they were recorded. Watson recalls recording a Madagascar Hissing Cockroach by putting his microphone three millimetres from the insect's carapace. Used twice in documentaries about the rainforest of Madagascar, the defence sound of the insect was recorded in an apartment in New York and the careful positioning of the microphone ensured it was devoid of the urban 'ambient' sound (Watson 2015). While making sense in a production context, this practice masks the basic audio reality of the sounds of nature perceived in a location where the fulcrum is the recordist and a microphone sensing the full vibrational presence of the sonosphere. It is the non-

transmission of what human bodies absorb that reveals the triumphal ubiquity of the hyper-real in the re-presentations of nature.

Whereas the history of film 'can be told as an endless movement of integrating the most disparate elements' (Chion 1994, p. 183), the relationships between content, sounds, and images integral to televised nature documentaries are by necessity more homogenous: a lion will rarely roar outside our visual field unless it is part of a clan. Transforming the chronological reality of sonic sensations and natural phenomena supplants the original perceptual immersion to better synchronise vision with familiar expectations of kinaesthetic mapping. As explained earlier, the audio-visual simulation of the electric rod of the lightning, regardless of its scientific relevance, has to be physically offered so that audiences *feel* its authentic re-presentation without being cognitively side-tracked. This ensuing synchresis, described by Chion as a 'forging of an immediate and necessary relationship between something one sees and something one hears' (1994, p. 5) is presented as a spontaneous phenomenon in nature documentaries that does not require a vocal or textual commentary.

Synchresis is central to *Microcosmos: le Peuple de l'Herbe* (1996). This French film takes the point of view of insects to tell the story of a day in the life of insects inhabiting one field. The pre-production took two years and the filming took three years. *Microcosmos* was financed by scientific research grants, private production companies, governmental agencies, and regional funds. The documentary is a filmic anomaly that defies classification and is described as 'a documentary [that goes] beyond the assertive stance it takes toward the world it presents and the extratextual indexing, or labeling, of the film as nonfiction' (Vermillion 2007, p. 11). In the DVD accompanying featurette, Marie Pérennou, who is one of the two biologist/directors, states in French that an intention of the documentary was not to take a didactic path in directly teaching audiences about nature but rather to give 'le parfum d'un monde qui nous fasse un petit peu rêver' ('a taste or scent of a world that makes us dream', my translation) (*Microcosmos* 1996). The vocal narration by Kristin Scott Thomas (in the English version) is reduced to a bare minimum: 43 seconds, enough to explain the premise of the documentary and to end with 'but to observe this world we must fall silent now and listen to its manners' (*Microcosmos* 1996).

Created by following the seasons and ensuing life cycles in the same field, most of the visuals were artificially filmed in a studio which opens its doors to that specific meadow. Music, biophonic and geophonic sounds merge seamlessly: *Microcosmos* is a delicate sonic observation of the merging of drama and beauty in a world filled with sonic activities. The film is visually astonishing and includes slow and fast motion as well as time-lapse used to perfection to accentuate cycles of life. The documentary could be viewed without sound at all: the morphing of lives over the seasons sets an obvious narrative. Nonetheless, it is the space of sound and its play with our sensations that creates this near scientific non-fiction: a bee drills our ear and takes us on its back to zoom between red poppies, we become its compound eyes. It is a real un-reality, a surreal simulation that we truthfully live and accept, but does it document life as we expect it to be?

When asked her interpretation of the word “documentary” and its relation to “reality”, filmmaker Jill Godmilow noted that it seems ‘everyone *thinks* they know what it means’ and therefore what is ‘called documentaries is the conceit of “the real”’ (in Shapiro 1997). Godmilow prefers to describe what is usually labelled as ‘documentary’ a film that claims to represent a non-fictional world without using professional actors. These texts are ‘films of edification’, or ‘edifiers’ that educate without claiming truth but rather by providing the audience with a ‘sophisticated or refined notion of what *is*’ rather a straight-forward account of reality and truth (Shapiro 1997; emphasis in text). With this definition in mind, *Microcosmos* can be understood as a poetic edification that transports our flesh into the world we inhabit. *Microcosmos* takes our whole body literally amongst the grass, at eye level with its fantastic inhabitants. This documented “near-fantasy” can be believed: it allows audiences to edify their prior assumptions of knowledge, marvel at, and be confronted by, the minutiae of inconspicuous lives.

In the same vein, the ‘*is*’ that is edified and documented has found alternative ways to fill our screens. Slow cinema and a renaissance of observational documentary might be able to avoid ‘the additives’ mentioned by Chion by emphasising their absence. Slow cinema and documentary offer contemplative and observational perceptions of the world, and privilege long takes to give more emphasis to the passage of time. Inspired by European Nordic Countries’ liking for a mode of ‘slow’ television production and consumption described as an ‘antidote ... to the conventional grammar of television in which everything

gets faster and faster' (Plunkett 2015), BBC Four daringly introduced the slow documentary genre in the United Kingdom and broadcast it during peak hours. This proved a successful move and more programmes were commissioned due to the large numbers of spectators attracted to the holistic richness of our environments and sonosphere.

On Christmas Eve 2015, BBC Four screened the slow programme *All Aboard! The Sleigh Ride* (2015). This two-hour documentary was enthusiastically promoted for its naturalistic approach and its lack of music and narration and the prominence of atmospheric sound: 'No narration. No editing. You'll hear the wind, hooves on snow and the light tinkling of bells, but nothing more. It sounds amazing' (Heritage 2015). Captured from the point of view of a reindeer herder, the documentary takes the audience on a two-hour sleigh ride in minus 20 degree Celsius temperatures through northernmost Norway on a postal and travel route used by the indigenous Saami people. The making of the documentary was arduous but its core method is simply described by camerawoman Justine Evans:

We did the same journey for four days and just chose the best one. We did a little bit of stopping to change the camera angle. People assume that all you have to do is sit on a sleigh and point your camera roughly in the right direction and all will be well. Actually it's much harder than making a normal film where you can edit out all the dodgy and wobbly bits – a two-hour natural history film would normally use two years' worth of footage. Whereas we had to shoot what we were going to use. (in Webb 2016)

Sound is integral to this visionary mediated phenomenological experience. Sometimes producers encourage a rough visual aesthetic that might physically transpose the audience more easily in the 'is' expressed by Godmilow: a shaky camera aims to invite spectators to *become present* by propelling them in the moment, by making their own flesh move. In *All Aboard! The Sleigh Ride* it is the sturdiness of the visuals that leaves room for subtle sound to model at the same time the documenting of the sonosphere and the uncluttering of our thoughts and sensations.

Conclusion

Many different technologies have changed the ways audio-visual material at large is devised, produced, made, distributed, and perceived by various stakeholders. Filmed documentary

displays ‘the same complexity and challenge, the same fascination and excitement as any of the genres of fiction film’ (Nichols 2001, p. xiv). Thus media industry practices used to create sound for documentary and sound for fiction film have many similar effects on audiences albeit following different production constraints. Understandably there is no set formula in the making of documentaries about nature, but the industrial parameters of the genre and its dependence on programmes being entertaining but also factual, offer different views on the practice of documenting sonic habitats of wildlife. In that context, one can argue that the digital media practices that endeavour to dwarf sonic nature don’t allow audiences to experience a “truthful” perception of sonic environments.

The noisiness of the world generated by the industrial revolution has impacted the means and forms of representation of human environments: sonic production and post-production reflect sounds of a nature that can rarely be perceived nowadays. However, the popularity of slow documentary in European Nordic countries and in the UK suggests that modes of representations of wild nature can include non-simulated and non-diluted sonic truth. This acknowledgment of sound as it is *heard* can be part of a representation of human natural life *to be listened to*. Furthermore, the success of another BBC slow documentary *All Aboard! The Country Bus* (2016), with its soundtrack devoid of music or vocal narration, was watched in August 2016 on BBC4 by almost one million viewers. This latest success in watching life as it goes past, “sonic warts” and all, suggests that alternative media representations of the nature that we share with non-human species are providing an impetus to listen to our sonic environment differently. One day we might be able, as a hyper-mediated collective, to withstand the unsweetened current sonosphere that is wider than both our habitual field of vision and the surface of our screens.

Author biography

Over the past few years, Isabelle Delmotte has been exploring aspects of sonic environments in relation to cinema sound making, perceptual agency, and acoustic ecologies. Isabelle is a lecturer in Screen and Media Studies at the University of Waikato (New Zealand) and a multi-media practitioner. Previous artistic endeavours and phenomenological academic enquiries have explored notions of consciousness, affect, and perceptual environments.

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