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Beyond the money shot; or how framing nature matters? Locating *Green* at Wildscreen

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Abstract

Natural history films use technological mediations to frame aspects of nature so as to communicate information, in part through engendering particular viewer affects. As an entertainment industry embedded in capitalist social relations and concerned with competition for finance and ratings, natural history film-making is also a search for 'the money shot' - associated with extremes including rarity, sensational behaviour, and otherwise un(fore)seen views. I highlight this sensationalising impetus through ethnographic fieldwork conducted at the biannual Wildscreen film festival in 2010. Here, wildlife films were frequently presented as action dramas with a rhythm of anticipation, climax and satisfaction. I argue that, through generating significantly disconnective affects, such framing may work against composition of a caring ecocultural ethics that entwines human with more-than-human natures and futures, thus paralleling the similarly disconnecting effects documented for pornographic film. In contrast, I engage with the differently constructive frames guiding the low-budget, open access, activist film *Green*, which, perhaps paradoxically given the thrust of the natural history film industry, won the prestigious WWF Gold Panda Award at Wildscreen 2010. I follow framing theorist George Lakoff to emphasise that since cognition is both embodied and embedded in diverse inter-relationships, affective registers generating mimetic connection are as significant in communicating information regarding 'the environment' as the text and words by which nature might be framed. I conclude that attention to affective registers and embodied (dis)connections in natural history film may enhance a turning of capitalist spectacle against itself, so as to work for composition of abundant socionatural futures.

Keywords: Wildscreen; *Green*; natural history film; framing; mimesis; affect; pornography

Delia wondered how a man so fond of nature programs could object to a harmless cat (Tyler, 1995, p. 152)

When species meet, the question of how to inherit histories is pressing, and how to get on together is at stake (Haraway, 2008, p. 35)

Tell stories that exemplify your values and rouse emotions (Lakoff, 2010, p. 79).

Framing nature matters

In recent years, attention has been drawn to the constitutive significance for environmental communication of how nature-beyond-the-human¹ is scripted, framed and performed through film (see, for example, Mitman, 2009(1999); Bouse, 2000; Palmer, 2010). From words to images and via varied communications media, the frames through which more-than-human multiplicity are copied, captured and conveyed are increasingly understood to matter (Lakoff, 2010). This is both for how 'wildlife' and 'nature' are encountered by people, and for how relationships between human and other-than-human worlds are understood and conducted (Mitman, 2009(1999); Bouse, 2000). Engaging with how nature is framed thus illuminates how people make and are made by the nature frames they privilege, whilst inviting enquiry into relationships between cultural meanings and the natures they are woven with, the latter being at once both material and communicative (or biosemiotic, after Wheeler, 2006; also Taussig, 1993; Kohn, 2013). As such, and as commented on as far back as Aristotle (1951, Book 1) in his *Poetics* of 335BCE, the ways that life and 'nature' are uttered, imitated, represented and thereby brought forth by humans have meaning as constitutive of the world (Latour, 2010), as does the medium through which such utterances are made (McLuhan, 1964).

¹ I use the term 'nature-beyond-the-human' (after Kohn, 2013) when referring to organisms. entities and contexts other than the modern common sense understanding of the biological species Homo sapiens. At times I also use the terms 'more-than-human' and 'other-than-human' nature(s) - rather than 'nonhuman nature' - so as to move away from defining 'nature' in a negative sense as 'not human', and in acknowledgement that the human world is always a subset of 'the natural world' but never the other way around (after Abram 1996, 2010). At the same time, I note that naming nature is fraught with further constructive complexity. In many 'animist' and amodern cultural contexts, for example, embodiments other than the modern biological species category of *Homo sapiens* may be perceived ontologically as representing different bodily perspectives – different natures – that nonetheless are embraced by a broader, inclusive, communicative category of cultured human persons (Viveiros de Castro, 2004; Descola 2013). This acts as a reminder that what is known as 'nature' is, like other social(ised) phenomena, always caught within specific 'regimes of truth' that can be diagnosed as well as altered (cf. Foucault, 1982). Natural history film itself acts beyond representation so as to variously effect such diagnosis and alteration. A consideration of the directions towards which this may pull is the focus of this paper.

In this paper I identify and reflect on two framing and compositional tendencies in natural history film making, as I perceived these to be constituted at the natural history film industry event of Wildscreen 2010² (explored further below). I have termed these tendencies 'the money shot' and '*Green* – an activist film', respectively.

The first confirms various analyses of the genre of natural history film-making (Mitman, 2009(1999); Bouse, 2000; Brockington, 2009; Palmer, 2010) by emphasising its compromised ability to comment on and move beyond the structures of advanced techno-capitalism within which the industry is embedded. Contemporary intensifications of the circulation and 'prosumption' (Büscher and Igoe, 2013) of variously spectacular images work to mediate, and thereby to constitute, relationships between people (Debord, 1992(1967)]), as well as between people and nature (Igoe, 2010; also Thompson, 1991). This is connected with modern recording technologies and their products, particularly visual images, and their thorough embeddedness in capitalist socio-economic relations, the combination of which may generate particular separations and connections between that which is captured or copied, the replication and distribution of the image, and its consumers (Sullivan, 2011). I complement these analyses by affirming that competitive industry demands on wildlife and natural history films may tend towards the production of disconnective and disembodying cognitive effects and affects, in a manner that parallels those argued to be generated through similar production trends in pornography (Paul, 2006; Hedges, 2010; Hilton, 2010). Capitalist and expensive technological structuring of the industry thus sends wildlife and natural history film spiralling towards extremes ('the money shot') so as to grab and stimulate the attention of viewers (measured by industry ratings), in ways that can deflect empathic connection with the natures thus (re)presented.

The second constructive tendency I associate with the film *Green*, whose somewhat paradoxical selection as the winner of the 2010 WWF (Worldwide Fund for Nature) Gold Panda Award (for best film overall submitted to Wildscreen) seemed to puncture an overall impetus towards 'the money shot'. *Green* combines several features which instead signal film-making as a world-making possibility that contests the disconnective impetus described above. These include: real-time and relatively unmediated³ capturing of the dynamics and activities of 'real' other-than-human-natures; an associated support for identification, felt proximity, and connective/empathic affects through encouragement of mimetic capacity – or the 'gift of seeing resemblances' (Benjamin (1978(1933), p. 333; also Taussig, 1993; Massumi, 2014); uncompromising portrayal of the ways that political economic and technological structures (of which the natural history film industry is part) frequently are demolishing the natures thus framed; and strategies for low-tech production and open access

² www.wildscreen.org, last accessed 8 June 2015.

³ As Bey (1994, p. 7) asserts, the degree of mediation associated with commodification processes tends to be entwined with the extent to which a 'standing-inbetween' has occurred, effecting a split (or 'alienation') that drives unfulfilled desires for evermore consumption.

distribution that subvert industry norms towards profit and technological competition, and which make of *Green* an anti-capitalist 'activist film'.

Through an elaboration of these two tendencies (in section four below), I draw attention to how natural history film, through the narrative and affective images and frames that are deployed, might emphasise a (false) framing of nature 'as separate from, and around, us' (cf. Lakoff, 2010, pp. 76-77); or, conversely, work through representations intended to create affective and mimetic experiences of nature that expand environmental perception, in part through enhancing identification, connection, interdependence and empathy (cf. Aristotle, 1951(335BCE); Lorimer, 2007; Ivakhiv, 2008). I proceed to a conceptual section outlining the ways that Lakoff's framing theory moves beyond discursive analyses of texts and images to emphasis the emotional, embodied and ecological dimensions of cognition, and thus to stress the roles of activated affects that engender learning and communication in part through encouraging mimetic capacity. This is followed by a methodological section in which I describe the collaborative event ethnography at Wildscreen 2010 that forms the basis for the field research underlying this paper. After this I elaborate the two identified tendencies in natural history film, as I perceived these at Wildscreen 2010. My concluding section brings the paper full circle by returning to the themes of framing, affect and mimesis and their constitutive implications in natural history film.

Why Lakoff matters for framing nature-beyond-the-human: from framing to mimesis via affect

Cognitive scientist George Lakoff has long been at the forefront of framing theory (see Lakoff, 1987, 2008), turning recently to the urgency of how human-environment relationships are (re)made via repetitive utterances that privilege particular narratives and ways of knowing (e.g. Lakoff, 2010). In an invited paper to the *Journal of* Environmental Communication, that according to the journal's website is currently its most highly cited and read paper⁴, Lakoff notes that "[f]rames include semantic roles, relations between roles, and relations to other frames" (Lakoff, 2010, p. 71). He argues that as these are consolidated and repetitively activated as knowledge structures they also become "physically realized in neural circuits in the brain", such that "the synapses in neural circuits are made stronger the more they are activated" (p. 71). Further, "since frames come in systems, a single word typically activates not only its defining frame, but also much of the system its defining frame is in" (Lakoff, 2010, p. 72-73). Lakoff here is evoking the cognitive emic frames that arise through performative and mimetic (imitative) use of particular categories and metaphors and the chains of associations (or sympathy) these both conjure and make (cf. Taussig, 1993; Tsing, 2005; Donohue et al., 2011).

Lakoff (1987, xiv-xvi) additionally asserts that categories and associated frames

⁴ As of 6 June 2015.

are constructed through, rather than transcendent from, bodily experience within environmental and cultural contexts, and that "many frame-circuits have direct connections to the emotional regions of the brain" (Lakoff, 2010, p. 72). Categories and cognition are grounded in bodily felt experiences and affects (sensed via interoceptive awareness), as well as through environmentally-located/embedded mobilities (proprioception). The feeling of emotion thus is necessary for thought, as well as for the making of rational and socially appropriate choices. As such, 'affect' refers here both to being moved emotionally, and to acting in connection with other bodies so as to cause a change: triggering the vital energies that motivate involvement in a concern, to paraphrase Lorimer (2007, p. 911). For Lakoff, then, categories, frames and associated affects matter due to their influences on ways of knowing nature that are simultaneously embodied, cognitive, emotional and environmental⁵.

In the last few years, Lakoff has become concerned with connections between dominant frames and associated categories, and the ideological systems they invoke and support, arguing that much communication on environmental issues amplifies rather than transforms the ideologically-driven structures seen as contributing to projected eco-catastrophe (e.g. Lakoff, 2010, pp. 74-75). Repeated dominant frames coupled with the mass media power of communications technology, and particularly the 'mimetic machinery' of film via the advent of the camera (Taussig, 1993 after Walter Benjamin), are seen to assist with the embedding of frames for knowing nature in embodied cognitive systems, neural circuitry and reified collective cultural norms, perhaps creating "limited possibilities for changing frames" (Lakoff, 2010, p. 72). At the same time, understanding how frames work to effect such consolidations, coupled with embrace of recent work emphasising the latent potential of the plasticity of neural circuitry (Doidge, 2007), may clarify possibilities for communicating frames that compose more systematically progressive ecoethical effects (Latour, 2010; Curry, 2011; Sullivan, 2013). Strategically for purposes of environmental communication, Lakoff's (2010, p. 72-76) work clarifies that "negating a value frame just activates the frame", that new/different languages, terms and categories activating different values and actions will require repetition so as to "build... up neural circuitry to inhibit the wrong frames", and, importantly, that "counter-frames" will need to "work emotionally", i.e. to communicate through resonant affects and affective intensities. This approach is consistent with a poststructuralist invocation of bodies not "as stable things or entities, but rather as processes which extend into and are immersed in worlds", to form aspects variously dynamic and persistent "assemblages of human and non-human processes" (Blackman, 2012, p. 1; Sullivan, in press). Key here is the activation of both responsibility and empathy, which Lakoff (2010, p. 76, also 2008) asserts "has a physical basis in the mirror neuron system..., which links us physiologically to other

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⁵ This is even as it remains impossible (and undesirable) to propose these influences as conferring deterministic causal relationships in which everyone in specific circumstances will be disposed to respond to media and associated frames in the same way.

beings ... in the natural world" and "leads us to see inherent value in the natural world".

To put this another way, following Michael Taussig in his extraordinary meditation on *Mimesis and Alterity*, the activation of "mimetic yielding" - sentient knowing effected through empathic resonance with and copying of other bodies - is key to generating something other to "Enlightenment science's aggressive compulsion to dominate nature" (cf. Taussig, 1993, p. 46, 99). For Taussig it is the mimetic faculty, suppressed through "the erosion of experience in modern times" (Taussig, 1993, p. 71), that potentially widens the circle of the cultural to (re)connect humans and naturesbeyond-the-human in a "great social continuum" (Descola, 2013, p. 7; also Viveiros de Castro, 2004). As such, the mimetic faculty and the animisms and anthropomorphisms it activates have the potential to refract the modern unreached yearning for ontological purity of 'culture' and 'nature' - subverting the problematic desire of the former to create pacified and mute objects of the latter (cf. Deckha, 2010; Dobson, 2010; Sullivan, 2013). My suggestion is that it is in part by coaxing into play what Benjamin (1978[1933], p. 334) refers to as 'man's' unique "mimetic genius" that strategies in 'natural history film' might achieve such refractions of its otherwise spectacularising and disconnective impetus.

This brief summary of how framing nature matters thus moves beyond the discursive to emphasise the significance for fabricating empathic communication and associated actions of activating embodied affect via 'the mimetic faculty'. Of "thinking through the body" (Whatmore, 2002, p. 3) so as to identify with, rather than split-off from, phenomena affecting other-than-human species with which, of necessity, we humans are entwined (Weintrobe, 2013). In what follows I ask some questions of how the affective framing deployed in natural history film might collude with, or contest, the circumstances contributing to the demise of the species and ecologies that are the industry's bread and butter. I move first to introduce Wildscreen 2010 as the setting for the field research on which my reflections are based.

Collaborative Event Ethnography and Wildscreen 2010

Natural history film is a key means through which 'nature' is copied and framed in forms that are packaged and conveyed to viewers/consumers. It is also a massive industry with associated events that bring together its diverse ecology of filmmakers, producers, script-writers, cameramen (and sometimes camerawomen), technicians, presenters, and so on. Such events, the social interactions they foster, and the natures they produce, can be studied empirically through participant observation combined with discursive and frame analysis of the literature and filmed materials presented therein. This is the premise on which the present study is based. It derives from participation in a collaborative event ethnography (CEE) (Brosius and Campbell, 2010) conducted by a team of humanities and social science scholars at the 2010 Wildscreen (natural history film) Festival held in Bristol, home of the British Broadcasting Company's famous Natural History Unit.

Wildscreen is a Bristol-based charity whose mission is currently articulated as

"to share awe-inspiring images of all life on Earth to empower conservation around the world". In association with WWF and primary sponsors Animal Planet and BBC Earth, Wildscreen organises the largest natural history film festival in the world – a globally critical industry biennial event for natural history filmmakers and all associated with the industry. The Wildscreen festival attracts participants from hopeful new film-makers to major celebrities in the industry, all sustained by how to convey, as well as make one's way from, life on earth (Brockington, 2009; Blewitt, 2010). During Wildscreen 2010, held from October 10th-15th, I attended a range of sessions and screenings, and interacted informally with many attendees, filling a notebook with observations on words spoken, social interactions, projected films of 'the natural world' and what struck me at the time as significant structuring emphases and dynamics. One particular intervention punctured what otherwise seemed to me to be an overwhelming emphasis on market and technological aspects of the industry. This was the showing of the film *Green* and its somewhat paradoxical selection as the winner of the 2010 WWF Gold Panda Award for best film overall submitted to the festival.

In keeping with an emphasis in CEE for both planning and discussing the day's 'participant observation', I met in the mornings and evenings with the team of researchers gathered for the event by geographers Daniel Brockington and Mike Goodman. Our guiding questions for participation in Wildscreen 2010 included the following:

- what sorts of nature(s) and what varieties of conservation are promoted?
- what sorts of interactions between nature and conservation are emphasised?
- via what sorts of social networks (and media) are these promoted?
- what role does Wildscreen play in the interactions between the natural history film industry and the conservation movement? what kinds of communities are being (re)produced in the process?
- and how do different ways of 'making nature' via film communicate through the engendering of affects?

My particular intention in this paper is to consider some of the dominant and resistant framings of nature present at Wildscreen 2010, with an emphasis on the affects I perceived to be explicitly evoked and conjured by different styles of film-making and the associated intentions of their protagonists. Without wishing to essentialise - since natural history film-making is both diverse and dynamic – I structure the following section around two key tendencies entitled 'The money shot' and '*Green* - an activist film'. As noted above, these emphasise some different ways in which productions of 'natural history film' may both collude with and refract the capitalist/consumerist

⁶ www.wildscreen.org, accessed 8 June 2015.

As a team of CEE researchers at Wildscreen 2010 we were so struck by the ruptural effect of *Green*, as well as by the communicative quality of the film itself, that several of us worked together to establish a study site for the film at http://studyinggreen.wordpress.com/. This paper began life as a short essay for this website.

socioeconomic relations associated so systemically with contemporary dominance and destruction of 'the natural world'.

Affects and the mimetic alchemy of composition

The money shot

Natural history and 'wildlife' films create and compose revealed nature through frequently spectacular technological mediations that engender particular viewer affects. This is an *entertainment industry*. At Wildscreen 2010 the buzzwords were *pitching* and *ratings*. How to pitch an idea for a film such that it attracts investment and TV network support (brevity, bullet points, innovation, knowledge of network schedules, etc.)? And how to capture audience ratings, as an indication of both income and likely future work? It is an industry embedded within capitalist social relations that needs to generate income and profit so as to continue and grow – producing "more bang for your buck" as one session was called. As stated by National Geographic's Senior Vice President of Strategic Development and Co-Finance in one of Wildscreen's introductory sessions, "we are a commercial network and we have to do stuff that fits in a commercial world. Don't waste your time on your passion if it's not commercial".

As such, there is an in-built tendency for natural history film-makers to seek to produce the affects perceived to guarantee viewer numbers on commercial networks. In a session entitled "Wild Stories"⁸, filmmakers thus were instructed on the need to "hunt the big idea" and tell stories that are compelling. To arouse anticipation through "rollercoaster emotional rides" and to satisfy with drama. These seem positively correlated with the degree of danger and discomfort experienced by the film-maker(s), such that aspects of this industry are infused with heroism, adrenalin and not a small amount of machismo. As psychoanalyst Sally Weintrobe (2013, pp. 208-209) writes, natural history film frequently is associated with presenters in the mould of "self-aggrandizing hero". Amidst "pumped-up" soundtracks and dramatic visual effects, these rugged individuals generate excitement and arousal by "taming" and eroticising nature, ultimately emphasising power over, rather than mutuality with, nature-beyond-thehuman (Weintrobe, 2013, p. 209). Presenters in a masterclass at Wildscreen 2010 entitled "Constructing truths and other ethical dilemmas" thus spoke of the tendency to appeal to a male demographic with "fightshots, blood and bedlam" so as to produce "primetime for Joe six-pack". This, they commented, is enhanced if accompanied by a gorgeous female presenter – "a bit of a babe" - especially if she is in great danger and we can "pump up" the feeling of her fear. As Chris Palmer (2010, p. 149) writes, "when your prime goal is to get male viewers eighteen to thirty-five to watch your channel, programs like *Bear Feeding Frenzy* [featuring violent attacks on lifelike human mannequins] will get broadcast".

⁸ By Frank Ash of bbcacademy.com, a commercial training site for filmmakers outside the BBC.

Indeed, Andrew Jackson, Head of the BBC Natural History Unit, asserted in a session on the industry's "Movers and shakers" that natural history film is "the decent man's pornography". As in pornography, impetus and drive is related to the search for ways of finding and making 'the money shot': the image or sequence of images that will generate the heart-stopping moment⁹. Such images tend to be associated with extremes: with rarity, sensational behaviour, and otherwise un(fore)seen views and activities. There is often also a disproportionate emphasis on copulation. Palmer (2010, p. 145) again writes that in such literal "nature porn" "[m]ating scenes are shown repeatedly without context, explanation or any type of narrative device whatsoever", sometimes "freeze-framing at the point of entry during intercourse" and featuring "[c]lose-ups of male and female genitals". The image framing possibilities are enhanced by a swathe of digital film technologies, from the latest Computer Generated Imaging (CGI) to 3D, the latter referred to in a session on the industry's "New frontiers" as "a brilliant, brilliant new playground for us all" (by Celia Taylor, commissioning editor of factuals and features for Sky TV). The industry is continually looking to the future to see where to go next, and to capture the 'value' that comes from being the one who gets to or invents the cutting edge first: hence session titles such as "Inventing the future" and "Where on earth is technology taking us?" In combination these create and confirm the frontier of wildlife film-making - the *making* of 'wildlife' with film – as a hyper-mediated, stateof-the-art action drama. The rhythm of this frontier is one of building anticipation – as George Schaller, "nature's greatest defender" noted in a session devoted to his life's work, you don't want to "hit folks with the money shot right away" – so as to lead inevitably to climax and apparent satisfaction.

These contexts tend towards excitement, hyperbole and hyperstimulation. While acting to connect people with 'wildlife' by bringing distant and exotic creatures and spaces into the familiarity of our living rooms via TV, they also can generate and reinforce profound alienations from the immediacy of immersion in immanent 'real natures'. As applauded in Wildscreen's "Grand Opening Event" by a VIP speaker from Abu Dhabi's environment agency, this is an industry that enthrals viewers with images and footage of the planet to create "a window to the excitement that nature provides", thus "bringing nature into peoples' lives where they would not normally have access to it". There is a disconnective aspect to all this. It seems to emphasise that 'real nature' is somewhere else. It is not to be found in the mundane and rather less dramatic natures amongst which 'we' live and share our lives daily. And it can make our embodied interactions with material nature, as opposed to the virtual natures made possible through digital technology, somewhat less exciting and energising as a result. As such, the impetus towards increasingly intensified spectacles of nature can generate and reinforce profound desensitisations and separations (Weintrobe, 2013). In addition, the

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⁹ Indeed, the 'grand opening event' of the festival was called "The moment my heart stopped!", and billed in the festival diary as a 'spectacular' of "unforgettable wildlife film excerpts" that "promises to be an assault on the senses".

need to attend to audience entertainment and satisfaction so as to secure ratings mitigates against communication of the contexts of destructive ecological transformation within which wildlife film stories are frequently embedded. As noted in the Wildscreen session on ethics mentioned above, there's an in-built avoidance of "bursting the bubble at the end of a film" to show the reality of the threats to the nature on which the film might be based.

There are some uncomfortable aspects to this set of observations. A corollary here might be the way(s) in which pornography - the mass circulation of text and film images with explicit sexual content - structures expectations and experiences of bodies, sexuality and relationships (Paul, 2005; Hedges, 2010). The porn film industry similarly extends into 3D and CGI, as well as into variously and often sado-masochistically violent scenarios that are disembodied and larger-than-life, the latter having little to do with real people, fleshy bodies, erotic sensuality and the humdrum of relationship. Yielding repetitively to such images is known to generate cathartic physiological satisfactions that actively disrupt brain neurochemistry, encouraging insatiable addictive cravings that can only be satisfied by an associated demand for enhanced stimulation through evermore monstrous imaged scenarios (Doidge, 2007; Hilton, 2010). As documented by psychiatrist Norman Doidge (2007) in his work on neuroplasticity, and neurosurgeon Donald Hilton (2010) in his work on brain drug addiction, contemporary porn viewing activates release of the excitatory neurotransmitter dopamine, quickly creating actual addiction to the pleasure-high this 'reward drug' generates. As with other addictive cravings, tolerance and desensitisation increase with repetition of what can become compulsive cycles, such that momentary satisfaction of addictive desires requires evermore extreme stimulation. In pornography, as in some natural history film contexts, these are accompanied by "progressively more shocking images" so to satisfy pleasure/excitement cravings (Hilton, 2010, online, and references therein). Such cycles simultaneously generate disconnection with real persons and bodies, as well as diminishing judgment regarding consequences of actions (as documented in Paul, 2005; Doidge, 2007; Hedges, 2010). Doidge (2007) thus reports a frequent side-effect of such addictive cycles to be a dramatic reduction in the capacity to love and to feel empathy, accompanied by a dehumanised splitting of sexual rewards from qualities such as friendship, affection and caring that support sustained relationship with real bodies and persons.

This may seem a little extreme, but there are echoes of these dynamics in the spectacles made and circulated by elements of the natural history and wildlife film industry. Palmer (2010, p. 9), for example, repeatedly notes the adrenaline rush created by a focus on aggression, sex and violence in some wildlife films, and claims that "[p]eople who consume a heavy diet of wildlife films filled with stage violence and aggression" will be more disposed "to think about nature as a circus or freak show". To follow Lakoff in the conceptual framework articulated above, such frames and their affective effects mitigate against connective and empathic feelings and behaviours towards the diversity of beings with whom we share our environs and the planet as a

whole, and on which the natural history film industry itself depends. Indeed, the framing intention in this contexts is explicitly towards drama, extremes and hyperarousal, rather than towards identification, empathy and connection. It may also impair judgement in terms of processing consequences arising from the compulsive making and consuming of natural history film spectacles (cf. Hilton 2010), many of which are ultimately environmental.

The above comments gesture towards the paradoxical character of the natural history film industry. The natures the industry copies, creatively re-presents and circulates are simultaneously often the victims of the capitalist socioeconomic relations which the industry perpetuates and is situated within (as discussed by Mitman 2009(1999); Bouse, 2000; Brockington, 2009), whilst also comprising the increasingly scarce phenomena that enable the industry to thrive within this economic system. As such, it is relevant to consider ways in which the natural world can be framed so as to encourage this copying, representing impetus to work against its own tendency towards the negation of sensuous, immanent knowledge of the natural (cf. Taussig, 1993). To disrupt and 'reroute' spectacle through the techniques and technology of spectacle, as Debord (1967) famously encouraged¹⁰, and thereby to affirm the world-making (and thus political) ontology of poetics (cf. Aristotle, 1951(BCE335); Merrifield, 2011, p. 11) in service towards (re)connective and yielding culturenature affects (Taussig, 1993)¹¹.

Green - an activist film

This takes me to a consideration of the different modes of imaging and communication deployed in the film *Green*. Made by French independent film-maker Patrick Rouxel and available online for free viewing¹², *Green* attracted attention at Wildscreen 2010 through winning a prestigious WWF 'Gold Panda Award' for best film submitted to the festival. Awarded by a final jury consisting of five judges all of whom are directly involved in the natural history film industry¹³, *Green* is described as particularly

¹⁰ The practice urged by the *Situationist International* of Paris in the 1960s (the arts and activist collective of which Guy Debord was a key participant) is of *détournement*. Through this the original, or the original 'copy' (as in the captured images of film), is subverted *jiu jitsu* style so as to throw its intended effect back on itself (cf. discussion in Merrifield, 2011, pp. 26-27).

In saying this I am not blind to the 'filtering mechanisms' of the human body that 'endow certain species' more than others with particular attractive charismas (Lorimer, 2007, p. 916), or the ambivalences and detachments that are also conjured by real specific natures, manifestations of which may stimulate senses of horror, disgust and fear as well as identification and empathy (Flusser, 2011(1987); Franklin, 2013). Indeed, as Weintrobe (2013, pp. 200-201) articulates, "genuine love", as opposed to the narcissistic entitlements reinforced through the splitting impetus of much over-dramatised and spectacularised natural history film, makes a virtue of the tolerance of "very ambivalent feelings" towards other-than-human nature.

¹² Formerly at the bespoke website <u>www.greenthefilm.com</u>, and currently at http://greenplanetstream.org/all films/green/, last accessed 8 June 2015.

¹³ Thank you to Nicola Reeves, Operations Manager for Wildscreen, for this information, email to author, 3 June 2015.

successful in "raising greater awareness of the wonders of the natural world and the threats it faces"¹⁴. This 'green Oscar' is usually associated with the often spectacular natural history film work that can arise with much larger budgets, and made available through more formal and lucrative distribution channels. Frequently these document the activities of other-then-human natures without situating the latter in human cultural landscapes or as under threat by human economic activity¹⁵. Directing the Golden Panda Award to *Green* at Wildscreen 2010 might thus be interpreted as an articulation of disquiet by the judges regarding the embeddedness of the natural history film industry with a political economy that generates the devastating ecological effects documented in the film.

In the film *Green* we witness the violent stripping of vibrant, diverse and dynamic Indonesian forest landscapes to make way for industrial palm oil monoculture. Communities of elephant, families of orang-utan, and the multispecies weave of oldgrowth forest are felled to make way for the single West African palm species (*Elaeis* guineensis Jacq.) and its attendant ecology of workers, consumers and machines. We are soothed by the voice of the forest, as it speaks in layers of animal and bird calls, wind rustling through trees, and running water; only to be aurally assaulted by the harsh and relentless noise of machines, themselves intimately associated with the fossil fuels that palm oil biofuels seek to replace. Both landscapes are green, and both might claim the nomenclature of 'forest'. But the qualitative biophysical, economic, cultural and affective differences between them are acute. The complex commodity assemblage that arises in service to palm oil production communicates and interacts with us in a different mode to that of the forested cultural landscape it displaces. The former comprises the language of industrial and finance capital, and of life and labour as alienated commodity. It replaces a language of socio-ecological relationships rooted in places, with one of extraction and conversion to satisfy distant demands and hungers.

In between is a wound that can never be fully masked. The transition between these two green landscapes requires nothing less than a scorched earth policy (cf. Tsing, 2005). Palm monoculture plantations can only be planted in cleared land. They encourage the ripping away of unique forest expressions of emplaced evolution to create a ground zero moment of apocalyptic desolation. In *Green* this is signified by a haunting image of an isolated orang-utan mother and baby scrabbling up the last

¹⁴ http://greenplanetfilms.org/blog/green-wins-the-golden-panda-at-wildscreen/, accessed 1 June 2015.

¹⁵ A recent example is the BBC's 2013 series *Africa* presented by Sir David Attenborough. Replete with descriptions of Africa as 'the world's wildest continent' (e.g. http://www.bbc.co.uk/programmes/p010jc6p), the series opened with an episode celebrating the "ancient" and "unchanging" "wilderness" of 'the Kalahari' – constructed here to include the Namib desert and Skeleton Coast of west Namibia, as well as the Kalahari desert of Botswana and east Namibia. Neither the varied indigenous cultural landscapes of this region of humanity's apparent genetic 'birthplace' (Henn et al., 2011), nor the significant current industrial threats to the region's biodiversity - including prospective uranium mining in the 'protected areas' filmed in the programme - were mentioned.

remaining tree in a futile attempt to escape the savage destruction within which they are unwittingly immersed. The dehumanising brutality of this transformation speaks further as we watch a retrieved, lone orang-utan being transported in the back of a truck. None of the onlookers appear able to identify enough to stop the orang-utan's head from repetitively hitting the hard metal of the truck floor, or to comfort and connect through simple physical contact. And it is almost too shocking to write of the monstrous image of an orang-utan stretched out on bare earth between cords tied to ankles and wrists.

In *Green* this story of the impoverished 'second nature' that is culturally made through industrial processes in service to commodity markets, emerges through the nonlinear juxtaposition of images, powerfully combined with the communicative auditory mediations (Revill, 2014) and ideophonic (Nuckolls, 2010) sensualities of sound. This style is evocative of the non-narrative film provocations of the Qatsi trilogy (1982, 1988, 2002) and *Baraka* (1992), associated with director/producer Godfrey Reggio and cinematographer Ron Fricke, as well as with the radical political history TV series/montages made by BBC producer Adam Curtis¹⁶. As such there is no narration, no pumped-up soundtrack, no dramatic roller coaster - although the journey is indeed an emotionally powerful one.

The film's pace instead is that of the movement of its images in real-time. The forest generally is slow and entangled: each movement generated and connected seamlessly with that of something else, each sound an unscripted call from the natures framed on film. The scenes of chainsaws converting ancient hardwoods to logs on their way to become floorboards and pulp for paper, and of the industrial palm oil production line, are more jagged, linear and abrupt. Those of supermarket and fuel station consumption of palm oil end products are somewhat more frenetic. The effect is a "darting hither and thither ... from detail to detail" (Taussig, 1993, p. 107) to form a rhizomatic spread of visual and aural images that communicate through evocation rather than by the direction of an authoritative presenter-narrator. Arguably, the absence of a linear and spoken/textual narrative provides affective space for a yielding into the visual and sonic images of particular animals, forests, workers and transformations, becoming an encouragement to enter into the trauma of forest destruction and to feel the painful displacements this effects. Through this nonlinear, non-narrative space, the film is able "to generate its meaning", whilst we as witnesses can be "quiet in our knowing" (Taussig, 1993, p. 61), as we are faced with the consumptive and political economic realities that bind the viewer with the framed devastation captured in the film.

Green also communicates the deforestation of Indonesian tropical forest through the narrative device of a piecemeal story of an apparently particular injured and displaced orang-utan, who in the film is called 'Green'. This device brings forth additional subversions of the natural history film tendencies summarised above. The

¹⁶ For example, *The Mayfair Set* (1999), *The Century of the Self* (2002), *The Power of Nightmares* (2004) and *All Watched Over by Machines of Loving Grace* (2011) (http://www.bbc.co.uk/blogs/adamcurtis/).

latter tend to dramatise and glamorise the 'wildness' and 'nonhuman charisma' (Lorimer, 2007) of filmed species, a reflection of the similar mobilising of such 'flagship species' for conservation to elicit public support and funding (Walpole and Leader-Williams 2002 – as in the well-known panda symbol as the flagship of WWF). These instrumentalisations of other-than-human natures tend to celebrate, project and variously perform the majesty of selected species as simultaneously beyond the social, desirable for their wild alterity to culture (Whatmore, 2002, pp. 9-16). In Green we instead see multiple reductions - rather than hyperbolic celebrations - of this 'majesty': as the habitat of filmed animals is reduced around them; as individual orang-utans are horribly abused and debased by those involved with the deforestation; and as the adult orang-utan forming one focus of the film is swaddled in an oversize nappy in the 'carehome' to which she is relocated, ultimately to be bundled away in a black plastic refuse bag as this individual meets its final demise. As viewers we are encouraged to yield to the familiarity of the agential reactions by filmed orang-utans to bewildering circumstances they cannot control. To identify empathically with their retreat for survival to smaller and smaller islands of habitat suitable for sustenance, with their apparent despair at finding there is nowhere familiar to which to go, and with their immediately understandable bodily gestures - hands covering ears - to shut out the violent and incomprehensible noise of encroaching fossil-fuel powered machines.

All these somatic actions and reactions are recognisable to the embodied human in us, via what Taussig (1993), following Benjamin (1978[1933]), embraces as the 'mimetic faculty' – the compulsion to know, empathise with and *become* the other through a sensuous, imaginative and playful capacity for copying and identification (cf. Deleuze and Guattari, 1988(1980), especially plateau 1730; also discussion in Lorimer, 2007; Sullivan, 2010; Massumi, 2014). The affective and mimetic possibility encouraged here is of "the active yielding of the perceiver in the perceived... so that [in an echo of the method and intention of Goethean science¹⁷] the self is moved by the representation into the represented", and nature might thereby "speak back" in this mimeticised world (Taussig, 1993, pp. 71, 96). Through these mimetic, representational and compositional strategies, then, *Green* destabilises the more conventional norms noted above for the natural history film industry. In doing so it punctures the "organized"

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¹⁷ As philosopher Isis Brooks (2009) documents, the 18th century poet and scientist J.W. von Goethe "developed a particular way of finding out about things" (p. 31) built on a methodology of both careful observation and the mobilisation of imagination and intuition so as to "enter into" (the sensed images) of observed phenomena. Brooks (2009, p. 32) writes that the practice of this 'Goethean science' encourages "the experience of making a perceptual shift", i.e. "of engaging with the world in such a way that the world I experience changes", whereby "the thing studied suddenly arrives" in all its "thingness", which intrinsically includes its myriad interconnections with other 'things' as well as its ephemeral changing aspects in time. Brooks describes the effect of wonder, passion and love suddenly arising for the entity thus observed and identified with, the sense of being entwined with this entity and the mesh of its interconnectedness, and the possibility of thereby nourishing "new organs of perception that are receptive of and respectful to nature" (p. 38).

control of mimesis" (Taussig, 1993, p. 68, after Adorno and Horkheimer, 1997(1947)) located in the capitalist spectacles of natural history film. *Green* does this through activating affective and mimetic identifications (or yieldings) that rupture the turning of the mimetic faculty – the sensuous knowing of the other – against itself, as I have argued occurs in the tendencies towards 'the money shot' identified above.

In addition, through explicitly raising the effects of industrial forest clearance on 'biodiversity' Green might be located in the industry as "conservation film", defined by Palmer (2010, p.163) as "films that motivate viewers to take action" so as to compose abundantly diverse socionatural futures. But additionally, *Green* subverts industry norms for producing natural history film by being made to very low budget and distributed for free. As such, Green is an 'anti-capitalist' activist film in which skill and art is passionately deployed to convey critique with political content and thus to motivate for change. Activist film is a post-modern genre that maximises the production and distribution possibilities enabled by a rapidly changing and more democratically available digital technology, and that seeks to startle and galvanise through the affective identifications generated by the careful construction of image and auditory bricolage. Particular to activist film is an emphasis on making material available at low or no cost: to inform as a means of encouraging action and to share material as freely as possible through open access mechanisms¹⁸. Green, which can be downloaded for free, has been made with Rouxel's poetic activist intent of informing through both radical content and revolutionary sharing. Value here is beyond monetary recompense or even viewer numbers. This is film-making as a more systematic attempt to make a difference rather than a profit, in which any 'money shot' is radically emptied of monetary value. 19

To conclude: "[c]apturing what, and for what end?"20

¹⁸ Thus, at social movement gatherings over the last ten or so years I have been given, or acquired through minimal monetary donation, similarly made image-montage films highlighting the contexts giving rise to circumstances such as those documented in *Green*, as well as associated resistances. Examples that have particularly impressed me for their raw rendering of the socioecological devastations associated with capitalist market enterprise, resistances to these devastations, and state-corporate resistances to these resistances, include *Trading Freedom: The Secret Life of the FTAA* (http://www.indybay.org/newsitems/2005/02/18/17225011.php), *The Fourth World War* (http://www.bignoisefilms.com/films/features/89-fourth-world-war), and *Venezuela Bolivariana* (https://www.youtube.com/watch?v=CU2MTn9tG68) .

¹⁹ As I was completing the revisions for this paper my attention was drawn to the 'film and audio-visual installation' *Clyde Reflections*, created through a collaboration between a film-maker and a social ecologist (whose creative process are described in Hurrel and Brennan 2014). Available to stream online for free (at https://vimeo.com/89793693), the film combines meditative and evocative images of the seascapes composing the Firth of Clyde (west Scotland) with a nonlinear narrative comprised of interspersed fragments from a series of interviews with people differently invested in this environment. At once aesthetic and informative, the film brings to the fore the heterogeneity of views and experiences of one environmental context, and thus works to highlight the always present complexity of deliberative processes and management choices for such contexts.

I have argued that a more reflexive natural history film industry has not emerged because to succeed in this industry filmmakers frequently are required to add to the disconnective tendencies of spectacle, as observed through the socialisation processes documented at Wildscreen 2010. The structuring of the industry thus acts against the use of spectacle against itself, as I have suggested *Green* - the paradoxical winner of the Wildscreen 2010 Golden Panda Award – succeeds in to some extent. I have deployed framing concepts associated with cognitive scientist George Lakoff because of his attention to the roles of affect, emotion, embodiment and environment in processes of cognition and thus communication, rather than on discursive and visual nature frames only. I have extended Lakoff's arguments by following Taussig (1993) in invoking the 'mimetic faculty' as the possibility for perceiving resemblances, and thus for encouraging affective and effective identification, empathy, connection and ethical action. And I have suggested that a tendency towards drama, extremes and hyperarousal in natural history film drives a disconnective spectacularising impetus, whilst mitigating against possibilities for extending environmental connection through the mimetic perception of resemblances.

At the same time, it is not my intention to construct natural history film-making as a monolithic enterprise that, through its silences regarding the political economic structures within which it is embedded, combined with the viewer excitations it colludes with and amplifies, contributes to the demise of that which it celebrates. There are, of course, notable exceptions in the wildlife and natural history film industry itself²¹. Conversely, *Green* is itself a screened and mediated representation of what for most viewers are distant animals in far-off lands, that, through its success in the Wildscreen 2010 Panda Awards, perhaps has also been recuperated by the natural history film industry. Following the tendency in natural history film to create spectacles of nature divorced from culture, *Green* also makes no comment on the indigenous *human* ecologies that once inhabited the forests razed to make way for palm oil (Tsing, 2005). In this it colludes with a tendency in natural history film to convey 'wild' and 'pristine' natures seemingly removed from all human cultural shaping.

These paradoxes and silences notwithstanding, *Green's* intimate and uncompromising portrayal of the fate of specific orang-utans in the face of relentless destruction of their forested home, seems to go some way towards Haraway's (2008) call for the honesty and curiosity of attentive (if mediated) encounters with nature-beyond-the-human, as well as towards the affective quality of mimetic yielding into the natures conjured by these visual and aural images (cf. Taussig, 1993). Such interventions perhaps permit 'Nature herself' to teach 'the choice of the proper measure' in terms of filmed content, as Aristotle (1951(335BCE), p. 93) asserted for the art of poetry so many centuries ago.

But further, the explorations above affirm that capturing and framing nature via

²¹ I discuss this further in https://studyinggreen.wordpress.com/green-going-beyond-the-money-shot-2/, accessed 20 June 2015.

film is an ethically charged endeavour. This is because the affective possibilities generated through mimesis of the natural world - the 'imitation-and-sentience' (Taussig, 1993, p. 66) effected through copying, representation and yielding to the image - are entwined with the 'ethical quality' (cf. Aristotle, 1951(335BCE), p. 27) of the identifications, actions and outcomes that images 'of nature' may activate (also see Whatmore, 2002, pp. 4-5; Lorimer, 2007; Bennett, 2010). Returning, then, to Lakoff: for framing and communication strategies to refract the competing frames that normalise socio-ecological devastations (such as those revealed in *Green*), they will need to coax and seduce viewers into different affective and embodied, as well as political, identifications. Technology can support and mediate these, not only through honest portrayals of pressures on nature-beyond-the-human, but also through encouraging mimetic and affective identifications, resonances and empathies. As such, I have framed *Green* as a composition that uses film-making technology to enhance (re)connections between human and other-than-human natures, to become a corrective to the disconnecting, spectacularising zeitgeist saturating much conventional natural history film. In contrast to the disconnection and disembodiment that can be associated with extremes, titillation, voyeurism and special effects, I have affirmed that filmmaking can change behaviours through compositional strategies encouraging embodied resonance, familiarity and kinship.

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References

- Abram, D. (1996). The spell of the sensuous: Perception and language in a more-than-Human World. London: Vintage Books.
- Abram, D. (2010). *Becoming animal: An earthly cosmology*. New York: Pantheon Books.
- Adorno, T.W. & Horkheimer, M. (1997[1947]). *Dialectic of enlightenment*. London: Verso Books.
- Aristotle (1951[335 BCE]). *Poetics*. (S.H. Butcher, Trans.). New York: Dover Publications Inc.
- Benjamin, W. (1978[1933]). On the mimetic faculty. In P. Demetz (Ed.), Reflections.

- (E. Jephcott, Trans.) (pp. 333-336). San Diego: Harcourt.
- Bennett, J. (2010). *Vibrant matter: A political ecology of things*. London: Duke University Press.
- Bey, H. (1994). Immediatism: Essays by Hakim Bey. Edinburgh: AK Press.
- Blackman, L. (2012). Immaterial bodies: Affect, embodiment, mediation. London: Sage.
- Blewitt, J. (2010). *Media, ecology and conservation: Using the media to protect the world's wildlife and ecosystems.* Totnes: Green Books.
- Bouse, D. (2000). Wildlife films. Philadelphia: University of Pennsylvania Press.
- Brockington, D. (2009). *Celebrity and the environment: Fame, wealth and power in conservation*. London: Zed Books.
- Brooks, I.H. (2009). Dualism, monism and the wonder of materiality as revealed through Goethean observation. *Philosophy Activism Nature*, *6*, 31-39.
- Brosius, P. & Campbell, L. (2010). Collaborative event ethnography: Conservation and development trade-offs at the fourth world conservation congress. *Conservation and Society*, *8*, 245-255.
- Büscher, B. & Igoe, J. (2013). Prosuming' conservation? Web 2.0, nature and the intensification of value-producing labour in late capitalism. *J. Consumer Culture*, *13*(3), 283-305.
- Curry, P. (2011). *Ecological ethics: An introduction*. Cambridge: Polity Press.
- Debord, G. (1977[1967]). The society of the spectacle. London: Rebel Press/Dark Star.
- Deckha, M. (2010). The subhuman as a cultural agent of violence. *Journal for Critical Animal Studies*, 8(3), 28-51.
- Dobson, A. (2010). Democracy and nature: speaking and listening. *Political Studies*, *58(4)*, 752-768.
- Deleuze, G. & Guattari, G. (1987[1980]). A thousand plateaus: Capitalism and schizophrenia. (B. Massumi, Trans.). London: The Athlone Press.
- Descola, P. (2013). Beyond nature and culture. Chicago: University of Chicago Press.
- Donohue, W.A., Rogan, R.G. & Kaufman, S. (eds.) (2011). *Framing matters:*Perspectives on negotiation research and practice in communication. New York: Peter Lang Publishing Inc.
- Flusser, V. (2011[1987]). *Vampyroteuthis infernalis*. (A. Novaes, R.M., Ed. & Trans.). New York: Atropos Press.
- Foucault, M. (1982). The subject and power. Critical Enquiry, 8(4), 777-795.
- Ginn, F. (2013). Sticky lives: slugs, detachment and more-than-human ethics in the garden. *Transactions of the Institute of British Geographers* doi:

- 10.1111/tran.12043
- Hedges, C. (2010). *Empire of illusion: The end of literacy and the triumph of spectacle*. New York: Nation Books.
- Henn, B.M., Gignoux, C.R., Jobin, M., Granka, J.M., Macpherson, J.M., Kidd, J.M., ... Feldman, M.W. (2011). Hunter-gatherer genomic diversity suggests a southern African origin for modern humans. *PNAS 108(13)*, 5154–5162.
- Hilton, D.L. (2010). Slave master: how pornography drugs & changes your brain. *Society, Sex, Science, 13* online. http://www.salvomag.com/new/articles/salvo13/13hilton.php
- Hurrel, S. and Brennan, R. (2014). Clyde Reflections: a film and audio-visual installation. Pp. 38-51 in Griffith D. (Ed.) Imagining Natural Scotland. Creative Scotland: Edinburgh and Glasgow.
- Kohn, E. (2013). *How forests think: Toward an anthropology beyond the human*. London: University of California Press.
- Lakoff, G. (1987). Women, fire and dangerous things: What categories reveal about the mind. Chicago: University of Chicago Press.
- Lakoff, G. (2008). The political mind: Why you can't understand 21st century American politics with an 18st century brain. New York: Penguin Group.
- Lakoff, G. (2010). Why it matters how we frame the environment. *Environmental Communication: A Journal of Nature and Culture, 4(1),* 70-81.
- Latour, B. (1993). *We have never been modern*. Cambridge, Massachusetts: Harvard University Press.
- Latour, B. (2010). An attempt at a compositionist manifesto. *New Literary History, 41* (3), 471-490.
- Massumi, B. (2014). *What animals teach us about politics*. Durham: Duke University Press.
- McLuhan, M. (1964). *Understanding media: The extensions of man*. New York: McGraw-Hill.
- Merrifield, A. (2011). *Magical Marxism: Subversive politics and the imagination*. London: Pluto Press.
- Mitman, G. (2009(1999)). *Reel nature: America's romance with wildlife on film*. Seattle: University of Washington Press.
- Nuckolls, J.B. (2010). The sound-symbolic expression of animacy in Amazonian Ecuador. *Diversity* 2, 353-369.
- Palmer, C. (2010). Shooting in the wild. San Francisco: Sierra Club Books.
- Paul, P. (2006). Pornified: How pornography is transforming our lives, our

- relationships, and our families. New York: Owl Books.
- Revill, G. (2014). *El tren fantasma*: Arcs of sound and the acoustic spaces of landscape. *Transactions of the Institute of British Geographers*, *39*, 333-344. doi:10.1111/tran.12034
- Sullivan, S. (2010). 'Ecosystem service commodities' a new imperial ecology? Implications for animist immanent ecologies, with Deleuze and Guattari. *New Formations: A Journal of Culture/Theory/Politics* 69: 111-128, Special issue entitled 'Imperial Ecologies'.
- Sullivan, S. (2011). Conservation is sexy! What makes this so, and what does this make? An engagement with *Celebrity and the Environment. Conservation and Society 9(4)*, 334-345.
- Sullivan, S. (2013). Nature on the Move III: (re)countenancing an animate nature. *New Proposals: Journal of Marxism and Interdisciplinary Enquiry 6(1-2)*, 50-71.
- Sullivan, S. (in press). (Re-)embodying which body? Philosophical, cross-cultural and personal reflections on corporeality, in Thomas-Pellicer, R., de Lucia, V. and Sullivan, S. (eds.) *Law, Philosophy and Ecology: Exploring Re-Embodiments*. London: Routledge.
- Taussig, M. (1993). *Mimesis and alterity: A particular history of the human senses*. London: Routledge.
- Thompson, W.I. (1991). The American replacement of nature: The everyday acts and outrageous evolution of economic life. New York: Doubleday Currency.
- Tsing, A. (2005). *Friction: An ethnography of global connection*. Princeton, NJ: Princeton University Press.
- Tyler, A. (1995[1982]). Ladder of years. London: Chatto and Windus.
- Viveiros de Castro, E. (2004). Exchanging perspectives: the transformation of objects into subjects in Amerindian ontologies. *Common Knowledge* 10(3): 463-484.
- Walpole, M.J. & Leader-William, N. (2002). Tourism and flagship species in conservation. *Biodiversity & Conservation* 11, 543-547.
- Weintrobe, S. (2013). *Engaging with climate change: Psychoanalytic and interdisciplinary perspectives*. London: Routledge.
- Whatmore, S. (2002). Hybrid geographies: Natures cultures spaces. London: Sage.
- Wheeler, W. (2006). The whole creature: Complexity, biosemiotics and the evolution of culture. London: Lawrence & Wishart Ltd.