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Moving Image Methodologies For More-Than-Human Geographies

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Abstract

There is a growing interest in cultural geography in the potential of moving imagery and moving image methodologies for grasping the more-than-human and non-representational dimensions of life. This paper explores this potential to develop moving image methodologies for witnessing and evoking human-nonhuman interactions. Drawing on recent work in Deleuzian film theory, anthropology and ethology, it develops both a practical methodology and a critical, affirmative vocabulary for unpacking the work done by circulating imagery and engaging with its micropolitical power and promise. The paper argues that although geographers have been slow to engage with the potential of moving imagery, there is much to be gained here. This analysis is illustrated through a focus on elephants and images of their behaviours, ecologies and interactions with diverse humans. It first outlines how video techniques can be used to witness and make sense of elephant encounters. It then maps four of the many affective logics according to which elephants are evoked in popular moving imagery, documenting the techniques employed by image-makers to palpate these logics. It reflects on the politics of such palpations and their potential contribution to a wider cosmopolitics of nonhuman difference and differentiation. Elephants provide an accessible, popular and telegenic nonhuman case study. In conclusion the paper reflects on how the techniques and ethos outlined here might be

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[1] The majority of the work for this paper was carried out while the author was a post-doctoral fellow in Oxford University's Centre for the Environment

expanded for research on and interventions through moving imagery of a wider array of nonhuman forms and processes.

Introduction

There is an urgent need to supplement the familiar repertoire of humanist methods that rely on generating talk and text with experimental practices that amplify other sensory, bodily and affective registers and extend the company and modality of what constitutes a research subject (Whatmore, 2004, 607)

Elephants are moving animals. They range widely through space and time; tramping their own networked ecologies and voyaging in translation amongst the global assemblages of art, religion, tourism and conservation. Diverse elephants inhabit human histories. Incarnated as foodstuff, as war machine, as predator, pet or spectacle they have co-evolved with people. As mutable companion species, they bear the scars and traces of past encounters and adaptations. Elephants move people. As giant vehicles of affect they inspire awe, love, fear, wonder and veneration. As fellow mammals they also feel. Elephant anger, affection, terror and grief run through their bodies. Elephants are moving animals; they are mobile, mutable and emotional and perform a diverse repertoire of nonhuman agencies.[2]

Such moving animals are difficult to capture and represent – both with words and fences. They elude universal categorizations and the stable confines of modern dualisms. Capturing animals has been a long-standing concern of the modern sciences (both social and natural). Taxonomists seek species and cladistics; zoologists want specimens and genomes; psychologists desire archetypes; while film theorists and

anthropologists have pursued symbols, totems and textual animals. Living, moving animals are often absent from or deadened within these schemes which aim for fixed objective identities and give little space to nonhuman agency or the affective energies that pass between species. Elephants prove especially elusive here – they have never been wild (in the romantic sense) nor safely domesticated, they are too sociable and sagacious to be objects but not human enough to be subjects. They are too lively to be purely symbolic.

These intellectual shortcomings are well documented and there is now a growing, interdisciplinary collection of 'more-than-human' scholars concerned with animating theory to rethink animality and the modern animal. Within and between ethology, animal studies, cultural geography, non-representational theory, art and film theory new approaches are emerging that seek not to capture animals but instead to witness and evoke their movements and the forces that pass between human and animal bodies.[3] While theoretical thinking in this field is now well developed, methodology and methods lag behind. There is a frequently diagnosed need for methodological innovation and experimentation to put new concepts to the test.

In this paper I take up this challenge and explore the potential of 'moving image' methodologies for witnessing and evoking human-nonhuman interactions.[4] There is a growing interest in cultural geography in this potential and a desire to engage with moving imagery. Here I seek to nurture this enthusiasm by first reflecting on the nature of moving imagery before outlining and illustrating two ways in which more-than-human geographers might engage with and employ it. I develop both a practical methodology and a critical, affirmative vocabulary for unpacking the work done by

circulating imagery and reflect on the micropolitical power and promise of moving images. I illustrate this analysis by engaging with a variety of moving images of elephants and their encounters with diverse humans. Elephants provide an accessible, popular and telegenic nonhuman case study. In conclusion I reflect on how we might expand the techniques and ethos outlined here for research on images of a wider array of nonhuman forms and processes.

More-than-human geographies

The key components of more-than-human geographies will be familiar to readers of this journal and have been comprehensively summarized elsewhere.[5] It is not my intention to revisit old ground but it is useful to briefly reiterate that this approach encompasses at least three interwoven strands:

- A sustained inquisition of the modern cartographies that establish which forms and processes have agency, challenging the ontologies of humanism to draw attention to the diverse objects, organisms, forces and materialities that populate an emergent world and cross between porous bodies.[6] For example, a great deal of work has been done to unpack the category of 'the animal' to recognize the difference this subsumes and the diverse and familiar modes of lively being it contains;[7]
- Such ontological manoeuvrings have epistemological consequences. Rethinking humanism involves rethinking what forms of intelligence, truth and expertise count. Attention has turned away from cognition to issues of embodiment, performance, skill and affect, understood as relational and distributed forces and competencies that cut across any lay-scientist and human-nonhuman divides;[8]

- There are distinct politics and ethics to this movement, which overlap with those of non-representational theory. Appreciating nonhuman agencies and diverse intelligences foregrounds both our material connections to the earth and the varying ways these can be made to matter. The focus here is on forms and modes of relational and/or affirmative ethics and cosmopolitics that are open to difference (understood as a process) and the excessive and unpredictable nature of life. These are affective, micropolitical experiments, less certain about what a body can do or become and how humans and animals can and should live together.[9]

These more-than-human inclinations do not sit easily with the orthodox methodologies and methods of the humanist social sciences. Many of these are geared towards the collection and interpretation of discursive materials, generated through interviews and the textual analysis of words and images. As several commentators have noted, such approaches produce 'dead geographies' that struggle to appreciate the multi-sensory, non-representational energies and intelligences of human and nonhuman bodies, gestures and events (as well as of images and texts themselves).[10] There is a widely shared sense that methods are lagging behind theoretical developments and that the discipline requires methodological innovation. In response, there has been a flurry of recent experiments which has proceeded along three broad and interrelated trajectories:[11]

- First, efforts have been made to stretch existing textual methods so that they might witness, analyse and evoke the more-than-representational dimensions of imagery and the written word. For example historical geographers have sought to attune to the sensual and poetic dimensions of archives.[12] While cultural geographers have

experimented with creative writing, diagrams and montage as means to evoke affect and practice.[13] This work has benefited from collaborations with artists and other creative practitioners.[14]

- Second, work informed by ANT and other materialist approaches has acknowledged the agency of diverse objects in the distribution and ordering of life. Detailed ethnomethodological techniques have been developed for following things and tracing assemblages to disentangle hybrid contemporary political ecologies.[15] Such work can be connected to explorations in a new mode of cultural materialism that explores the relationships between matter, memory and place.[16]

- Third, a rich panoply of embodied and performative techniques has been developed to witness the practical, sensual and affective dimensions to human-nonhuman interactions. These involve firsthand autobiography reflections on the processes of 'learning to be affected' in the field (broadly defined) and creative, mimetic techniques for sensing the world differently through the body of another.[17]

At the heart of these endeavours is a concern for 'witnessing' and 'evoking' practice, affect and performance. These two terms are often set in distinction to 'capturing' thought and 'representing' meaning and imply a more fluid, open-ended mode of research engagement, requiring a looser and more mimetic understanding of sense, less grounded in the (im)possibilities of language and representation. Advocates are at pains to point out that this approach does not aim to belittle representation. Instead, they argue that any critical understanding of discourse and representation needs to attend to its material, practical and affective dimensions.[18]

This bout of methodological innovation in non-representational and more-than-human geographies has also involved a growing interest in the diverse potentials of moving image methodologies. This engagement is still in its infancy and although video material increasingly animates conference presentations and lectures little has so far been produced for public screening or been employed for critical discussion.[19] In the remainder of this paper I engage with and seek to nurture this movement, but before doing so it is important to reflect on the nature of moving images.

Moving images

As Nigel Thrift and others have noted, much of the world lives in the 'age of the screen', enmeshed in extensive and skilful assemblages dedicated to the production, circulation and consumption of moving imagery.[20] We are surrounded and enveloped by moving images which have become the primary media through which we make sense of the world. Michael Shapiro argues that we now live in an audiovisual, rather than a literary age in which the boundaries between moving images and that which they imagine are increasing blurred.[21] These new, distributed, transmedia ecologies are inhabited by diverse virtual nonhumans and constitute the spaces in which most people encounter distant peoples, organisms and landscapes. Such ecologies perform unprecedented biogeographies of international connection and are vitally important in shaping popular attitudes towards and ways of engaging with contemporary issues – both explicitly and implicitly. In Doel and Clarke's terms film (and other moving imagery) frames our 'optical unconscious' organizing the horizons of the visible and the sensible.[22]

By and large geographers have been reluctant to develop techniques for recording, editing and analysing moving images; in contrast to anthropology, and in spite of its visual character, the discipline lacks a documentary tradition. Furthermore, when we have engaged with moving images we have often done so according to the structuralist and psychoanalytic traditions that have dominated film theory. Here film is explored primarily as a means for or mode of signification and representation.[23] While such work is undoubtedly important, here I am interested in developing an additional way for geographers to engage with these media which would explore the more-than-representational dimensions of moving imagery and examine its potential to witness practice and affect, to reflect on the strategic interactions between affect, ideology and representation and to enable micropolitical interventions.

Although they are central to moving imagery, affect and emotion have received surprisingly little attention from mainstream film theorists. For many these were either trivial phenomena tangential to structuralist concerns with content, or the negative manifestation of psychoanalytic desire. However, there are some notable exceptions to this trend which help inform the approach taken here. The first is the growing body of work in ecological psychology and film cognition that explores film as 'an emotion machine' mapping the techniques employed by film makers to elicit emotional responses from their audiences.[24] This work draws attention to the role of narrative and characterization, shot selection and editing, sound and lighting in cueing emotions.

Similarly anthropologists informed by phenomenology have theorized moving images as rich, mimetic, multi-sensory and affective media. For example, Totora argues that we should understand cinema (and by extension other modes of moving imagery) as

> the ultimate synaesthetic art, incorporating sound, voice, music, colour, movement, narrative, mimesis and collage in a fashion so visceral and emotive that it can frequently move spectators to think and feel beyond the sensorial limits of sight and sound.[25]

For writers like Laura Marks and Vivian Sobchack it is the 'haptic visuality' of moving images – or their visceral, more-than-representational dimensions – that give them their allure and evocative power.[26]

This understanding of moving images chimes with or is indebted to Deleuze's revolutionary rethinking of cinema through the philosophy of Henri Bergson. In his Cinema works Deleuze develops a vitalist philosophy of cinema, which maps a taxonomy of 'images' and explores how they are strategically combined and juxtaposed by different directors to evoke form, affect and time.[27] Herzog argues that through Deleuze we should understand film

> not as not a model of perception, nor a reflected image of reality, but as a unique image with its own duration … the result is a fundamental destabilization of the very idea of a representation, displacing notions of signification and association in favour of acts of creation and images of

thought … film has the potential to create its own fluid movements and temporalities.[28]

Deleuze provides radical new means of understanding and evaluating moving images, which dispense with critiques relating to signification or desire to explore how films can provide a sensual shock to thought, catalyzing or restricting lines of flight and (dis)affirming new modes of differentiation. Critical analysis of moving images in this Deleuzian vein examines the techniques employed to relate images, sound and narrative in styles that 'palpate' particular 'logics of affect' towards various political ends.[29]

For political theorists like William Connelly who draw on these concepts, moving images should be understood as important micropolitical mechanisms through which 'cultural life mixes into the composition of body-brain processes' to frame thought and action.[30] In Donna Haraway's terms moving images create 'fingery eyes' (after Hayward), performing 'heterogeneous infoldings of the flesh' (after Merleau-Ponty) that trigger embodied senses of 'response-ability'.[31] Jane Bennett and Michael Shapiro argue that this approach 'foregrounds the connections between affective registers of experience and collective identities and practices' and thus provides the foundation for a positive micropolitics whose:

> aim is to encourage a more intentional project of reforming, refining, intensifying, or disciplining the emotions, aesthetic impulses, urges and moods that enter one's political programmes, party affiliations, ideological commitments and policy preferences…The claim is that politics in the

broadest sense … requires not only intellectual codes … but also an embodied sensibility that organises affects into a style and generates the impetus to enact the principles, programs and visions – or to reveal the singularities they exclude.[32]

This radical rethinking of the relationship between moving imagery, affect and politics chimes with recent work in non-representational and more-than-human geographies on relational ethics and cosmopolitics, mentioned above. As I hope to demonstrate in the analysis that follows it also provides powerful critical and affirmative resources for engaging with moving imagery.

Moving images methodologies for more-than-human geographies

In the remainder of this paper I illustrate two of the different ways in which more-than-human geographers might engage with moving images. In the first, moving images are generated and analysed as a means of witnessing various forms of knowledge, skill and embodied practice that can escape text- and talk-based approaches. Here film (and now video) provides a useful supplement for field observation and helps generate a rich data set for subsequent analysis. The second methodology explores how moving images evoke affect and to what ends. It maps the techniques employed by image-makers to (dis)order their work and move their audiences, it seeks to categorize images according to the logics of affect they invoke and to trace the micropolitical work done by different evocations couched in different affective logics. To illustrate these two ways into engaging with moving images I will draw on some ongoing work exploring the biogeographies of elephant conservation and domestication.

Witnessing animals, witnessing elephants

According to the eminent zoologist Bob May, elephants are the sole occupiers of the most highly researched order of species – Proboscidea.[33] May's calculation discounts social scientists – whose taxonomic foci might elevate certain domesticated species – but it helps explain the diversity of methodologies and technologies that already exist for tuning into elephant behaviours and their encounters with humans.[34] What do moving images add to this mix? How do they critically extend our abilities to witness and analyse moving elephants and help enliven our accounts of their behaviour, culture and interactions with humans?

Animal behaviours

Ethologists have used film for researching animal behaviour for a long time. Early pioneers like Julian Huxley, Nico Tinbergen and Konrad Lorenz all experimented with the medium, developing innovative techniques and technologies for recording, analysing and narrating the natural world.[35] Successive further rounds of development have extended lay and scientific vision into previously inaccessible spaces, creating new mediated ecologies for comprehensive surveillance and analysis. The moving images generated by these new infrastructures create rich new data sets and allow ethologists to manipulate time and space to subject new species and spaces to both detailed, slow motion analysis and accelerated time-lapse monitoring and visualizations.

Clip one shows Rani, a female adult Asian elephant who currently resides at a sanctuary for domesticated elephants in Sri Lanka. She previously belonged to a

wealthy private individual who no longer has the time and money to look after her. Rani's silent, mesmeric rocking motion is a stereotypic behaviour characteristic of elephants and other mammals which have been confined in environments lacking exercise, company and external stimuli. Rani has been lonely and bored for most of her adult life. This evocative video material bears witness to a negligent history. Videoing Rani was straightforward. She remained stationary, chained to a ring for hours on end. However, the film does not speak for itself. Watching Rani I had initially assumed that her metronomic nodding was a sign of affection – like a dog wagging its tail – and it was only after conversations with elephant keepers and cross-referencing her recorded behaviour to existing literatures and online video clip archives that I learnt otherwise.[36] In this example, affective moving images make (different) sense when used in conjunction with talk and text-based techniques.

Human-animal interactions

In parallel to ethology, there is an equally long tradition in anthropology of using film as a tool for witnessing field practices – including interactions with objects and animals. In the early days, the aim was to capture an objective representation of natural behaviour. Applications are now more reflexive, participatory and experimental and seek to capture on film the systems of signification of different cultural groups.[37] Moving images have been employed differently within the sub-discipline of ethnomethodology, where the main concern is less with the symbolic content of practices and more in attempting to witness the liveliness, rhythms and contingency of their performance and the embodied dimensions to making sense.[38]

Ethnomethodological approaches have been developed by cultural geographers like Eric Laurier, who (with his co-authors) has used video recordings to explore subjects as diverse as travelling sales, eating, gestures, driving, fishing and dog walking. In this work they explore skilful negotiations with objects (like fishing rods), embodied and situated practices (such as seeing fish or communicating), reciprocal human-animal interactions (like walking and playing with dogs) and relational forms of canine mind and movement. These authors have written extensively on these methods and the analysis of generated materials.[39]

Clip 2 is a montage of elements from a film I made for a conference presentation.[40] It shows three sets of embodied encounters between Western visitors to South Asia, Asian elephants and their mahouts. It is comprised of archive footage of Queen Elizabeth II and Prince Philip hunting tigers from elephant back in Nepal in 1961 and excerpts from video material I generated in Sri Lanka in 2007 of a game of elephant polo and of Sally, a volunteer washing an elephant. I have subsequently employed these diverse moving images to explore three of dimensions of the more-than-human geographies of human-elephant interactions.

First, these images help witness bodily practice – in particular what the ethologist Vincianne Despret terms 'isopraxis' – the time-deepened, skilful modes of relating that enable inter-species communication.[41] The presence or absence of these within the multicultural and multispecies triangle formed here between elephants, mahouts and visitors helps account for both the regimented order of the tiger hunt and the disarray of elephant polo. Video helps document the material specificities of this communicative performance and draws attention to the haptic interrelationships

between the mahouts' calls, gestures and bodily actions and the elephants' responses.[42] Watching Sally, a skilled horsewoman, on top of the elephant we can sense her uncertain attempts to translate an equine mode of engagement to a proboscidean. For example, she orientates her scrubbing towards anatomical areas (the forehead) that give pleasure to horses but are sensed differently by elephants.

Second, these moving images illustrate the uncertain processes through which human and nonhuman protagonists 'learn to be affected' by the unfolding of events.[43] For example, attending mimetically to Sally's gestures and expressions we can begin to viscerally sense her experience. We feel her excitement and apprehension as the elephant descends into the water, the cold, wet shock as she is splashed and then the sensual, rhythmic (almost erotic) enfolding of her scrubbing. Watching the elephant in this encounter we note the scuttling fear induced by the ankus – the long pole wielded by the mahout. In Laura Marks terms there is a 'haptic visuality' to these moving images; they touch us in a multisensory fashion.[44] To interpret Sally's actions we watched the footage back and discussed the images. Her faltering articulations of her feelings echoed my gut instinct as an observer. This recursive and participatory filming and viewing helped document her attachments and ethics. In contrast, in the footage of the tiger shoot we can detect the stern affectations of the (mem)sahib on the faces and in the gestures of the royals and their entourage. This is a dispassionate mode of comportment with a long colonial history.[45]

Third, these moving images help deepen analyses of the power relations that run through the three multi-species, multi-cultural triangles on display. They foreground the complex micropolitics of domination, subservience, transgression and resistance

played out in this unequal context. For instance we can note both the meek comportment of the elephants in the presence of the mahouts and their powerful potential for active or unwitting disobedience.[46] Between the human protagonists we can also sense both the respect of the visitors towards the mahouts and their public deference – a complex sensibility with a long history that manifests itself in much postcolonial heritage tourism. These moving images thus help us to think through the materiality of duration. The montage of the elements that comprise clip two draws attention to the persistence of particular modes of human-nonhuman engagement. This unsettles any simple colonial-postcolonial division and foregrounds the complex ways in which the past is materialized in the bodies, landscapes and technologies of the present.

Shooting video in the field requires a familiarity with the technologies, a sense of where best to direct attention to witness the phenomena of interest in a fashion that will be coherent later and an understanding of editing software and the grammatical conventions of an accessible output. Reflexively therefore we can understand video methods for witnessing as a complex process of learning to be affected both by the camera and by those you are filming (with). This takes time, training and skill and involves developing a repertoire of techniques that will not be familiar to many cultural geographers. Furthermore, the camera has a presence. It draws attention to itself more clearly than a notebook or a Dictaphone and demands a performance. Moving images are not naturalistic; video cameras do not provide a more 'realistic' representation. This need not be a problem, so long as we appreciate and channel their catalytic agency.[47]

Evoking animals, evoking elephants

As Jonathon Burt argues in *Animals in Film*, most existing analyses of animals in moving imagery are concerned with 'textual animals'.[48] These are understood to be impoverished representations of 'real' animals that should be subjected to critical deconstruction to unpack their symbolic content and discursive power. This approach has produced a rich and important body of research that has revealed diverse ideological undercurrents in and political economies of animal representation.[49] However, the lively and affective animal is absent from many of these accounts which pay little attention to either the agency of the moving animal itself or the ways in which moving animal imagery mobilizes the complex affective logics associated with animals to cue strong emotional responses (often in support of the ideological commitments that concern the textual animal detectives).

Elephants are charismatic and telegenic and provide an excellent example of the virtual animals that flourish in contemporary distributed mediated ecologies. Virtual elephants proliferate even as their fleshy kin decline and are mobilized for diverse purposes – some directly connected to the bodies, ecologies and fates of their threatened progenitors, others more closely linked to art, commerce and entertainment. In all of these cases, different elephants are strategically evoked through presentations that catalyse different logics of affect.[50] Each of these presentations has material effects of varying nature and magnitude on the animals themselves.

My aim in the final section of the paper is to map four of the multiple registers of moving animal imagery in which elephants are (not) evoked. These are loosely

categorized according to the affective logics they employ, the model of the moving animal they present and the more-than-human micropolitics they perform.[51] For each register I explore the practical techniques employed by image-makers to elicit affection and examine how and to what ends the affective, haptic visuality of moving images catalyses a complex landscape of micropolitical association and response. The ultimate aim here is to nurture the potential of moving images to open thinking and feeling spaces for the mobile, mutable and emotional dimensions of difference (in this case elephants) and thus push towards different political/ethical sensibilities towards nonhuman others.

The methodology for this analysis involves both autobiography and a reflexive awareness of the cultural and political landscape in which any encounter with moving imagery occurs. Learning to be affected by moving imagery on a personal or group level is both straightforward and incredibly complex. On the one hand it involves going with the film, turning down the academic's instinct to detach, and being swept through the emotional landscape on offer. On the other hand, to understand how particular affects are achieved requires a constant deconstructive attention to the grammar of moving imagery – attending to types of shot, sequencing, sound, music, etc. Furthermore, to be able to speak for the wider evocative power of an image we must situate it with the cultural norms of the audience – paying attention both to the evocation of universals and the constant possibility of confusion, transgression or offence at an unfamiliar or unexpected response.

Four registers of elephant evocation

1. **Sentimentality**

Animals are a staple component of popular animation, where they appear in anthropomorphic forms and allegorical narratives to play on and affirm familiar human emotions. Diverse affective logics are at work in this genre but one dominant mood in mainstream popular animation is sentimentality. Here moving images are used to trigger and develop basic and often clichéd feelings in the audience. Emotions like love, pity, anger and comedy are evoked in fantastical styles that often drift towards mawkish nostalgia. Such renditions are powerful and are achieved through a repertoire of filmic techniques which have been developed over the long and distinguished history of animation. Elephants are popular protagonists in such animal cartoons, which feature luminaries like Elmer, Babar and most famously Dumbo.

Dumbo is an award winning animated feature film that was produced by the Walt Disney Company in 1941. It is perhaps the simplest and most moving of Disney's feature length animations and tells the story of an unfortunate baby circus elephant whose large ears and clumsy demeanour initially lead to his rejection from the troop but ultimately result in his salvation when he learns to fly. Its affective force is created by at least three interwoven sets of techniques. The first is the universality of its story. We identify with the main character and his relationships, which are framed within ubiquitous themes – here we have a bullied outcast, separated from his mother who finds acceptance and success through heroic endeavours. Our affections are clearly directed from the start and are conducted by sophisticated narration and shot sequencing.

Second, it is the quality, credibility and evocative power of the animation that makes the film work. Disney animators did not aim to provide realistic representations but

sought to caricature, reducing the complexity of an animal and accentuating the features and behaviours that they expected to be most affecting to their audience. This is perhaps best conveyed in their evocation of the cuddly charisma of infant mammals, of which Dumbo is an archetype. Indeed, Dumbo is the only Disney feature film in which the lead character doesn't talk. All of his characterization is mimetic and the powerful associations we form with him are created and sustained through the careful use of close-up 'affection-images'.[52] For example, Dumbo's weeping and gazing eyes (and uncommonly expressive eyebrows) and his prehensile touching trunk foreground basic human anatomical features which have been identified by phenomenologists like Heidegger (the hand) and Levinas (the face) as triggers for human affection and ethical concern.[53]

Third, Dumbo is a particularly stylized cartoon that works to a logic of sensation. The animators used broad brush strokes and great washes of colour to suggest mood. At times this is riotous and uplifting – with imagery steeped in the gaudy visual vernacular of the circus (all primary colours) – at other moments the gloomy light and inclement weather combine pathetically to mirror Dumbo's dejection. These visual effects are accentuated by the pastiche musical score which ranges wildly from weeping strings to triumphant horns, punctuated by elephant trumpets and the full grammar of cartoon sonic punctuation – crash, bang, wallop, and the rest. This brash and familiar sonic landscape provides the glue that holds the narrative together and propels us through its emotional peaks and troughs.

Clip three shows one of the most famous sequences from the film in which many of these techniques are brought together. Pay close attention to Dumbo's eyes – at first

we see his drooping face and shuttered weeping eyes. On his way to see his mother his eyes open and brows rise and we sense his anticipation. Then having touched and entwined their trunks his eyes glaze over in happiness as he is cradled and rocked. The affective force of this sequence is heightened by the crepuscular colouring of the animation, the weeping strings and the lilting lullaby *Baby mine*.

Disney's animations are incredibly successful at evoking an affective logic of sentimentality. They work off a lucrative formula that guarantees tear-jerking, heart-warming and teeth-grinding moments to sympathetic audiences. Childhoods steeped in such viewings no doubt influence citizens' sensibilities towards charismatic animals in later life. Indeed, it could be argued that efforts to conserve species such as elephants, pandas and tigers would have got nowhere without the moving images of Disney and his colleagues in the middle of the twentieth century. Sentimental appeals exert a powerful influence on the wallets and politics of the urban middle-classes.

However, sentimentality has its critics, who can be found at different points on the political spectrum. Some of the most trenchant of these are in avant-garde post-structuralist philosophy – perhaps most famously in the work of Deleuze and Guattari for whom these safe and lucrative renditions of individual animals serve merely to affirm an anthropomorphic affective landscape and tread a familiar narrative path full of cliché.[54] The micropolitics they perform is conservative, it involves repetition and the continued reterritorialisation of affect according to an Oepidal order of the same. Such evocations do not provide a shock to thought, nor do they do justice to the living difference of animals and their ecologies.

Many of these criticisms can certainly be applied to Dumbo. In Deleuze's terms, much of this film is classic movement-image cinema in which the grammar and narrative of the imagery propel the viewer smoothly through a familiar if dramatic affective landscape towards an expected conclusion. There is little that surprises in this film, which was produced in 1941 against a backdrop of global rearmament and political upheaval for an American public seeking comfort in the sentimental nostalgia of animated elephants. The notable exception to the slick striations of the film is the famous 'pink elephants on parade' scene (clip four), in which an inadvertently drunk Dumbo hallucinates surreal, shape-shifting and transgressive kinfolk who drink, dance and make merry. These trippy images resonate with scenes from both *Fantasia*, Disney's avant-garde experiment, which was produced in the previous year to little commercial success and *Destino* – his (recently completed) collaboration with Salvador Dali. Although this sequence is runs counter to the conservative logic of the main narrative, the psychedelic elephants it features have become yet more human, standing upright like Orwell's pigs to skate, jive and play musical instruments. In short, even in its most surreal moments, *Dumbo* as allegory reduces the alterity of emotional, living elephants to an anthropo-identity.

2. **Curiosity and awe**

Elephants have been popular subjects for documentary film from its inception. Celluloid elephants abound in the archives of early moving imagery. These are littered with short clips of performing circus elephants, of elephants being hunted, ridden and on procession in colonial Africa and South Asia.[55] Most of these early images were shot at the turn of the last century as film was being invented. They show little interest in the animal itself but feature elephants (alongside other beguiling or

freakish phenomena) as large, lively and charismatic beings that illustrate the affective potential of film and to help draw in larger audiences.

The desire to witness and present the 'real' behaviour and ecology of animals emerges later in the 1930's and 40's with the pioneering work of ethologists (as described in the previous section).[56] Their early wildlife documentaries adopt a curious sensibility towards life in the nonhuman world. They use moving images to research behaviour and ecology and to educate their audiences in the insights of their new science. These filmmakers translated the didactic tone, erudite language and visual and affective vernaculars of their new discipline into moving imagery, employing what Greg Mitman has termed a 'calculating aesthetic of distance', which stands in stark contrast to the sentimentality and anthropomorphism of Disney's animations.[57]

This ethos of calculating curiosity towards elephants and their ecology is perhaps best expressed in *The Life of Mammals* – one set of programmes that feature the animal from the BBC's flagship *Natural World* nature documentary strand. Here the hushed patrician tones of David Attenborough narrate a story of ecological and evolutionary processes. The featured elephants are anonymous, almost incidental, and we learn little about their emotions. Individuation and audience identification are discouraged by the frequent use of aerial photography, flyovers and sweeping panoramas of depopulated and objectified landscapes. Close-ups illustrate behaviours, not emotions. We also find these techniques employed in some of the documentaries dedicated to elephants as a species. Unlike in some of the films we encounter later, here the animals remain anonymous.

Wildlife films in this register also invest heavily in sensation. Aided by bigger budgets and technological developments (like High-Definition, Imax and Crittercams), they increase the emotional intensity of their presentation to evoke a sense of awe and drama. Here the calculating ethos of curiosity is largely supplanted by the affective logic of the sublime. Sophisticated nonlinear editing packages allow filmmakers to compress time and space and manipulate sound to accentuate behaviours and events and thus create tension and excitement. The narrative voice goes base and the tone becomes epic; the score is orchestral, full of soaring wind and crashing percussion. New or digitally enhanced sound effects complete the effect in postproduction. For proboscideans, this dramatic, awe-ful affective logic reaches its contemporary apotheosis in episode six of the BBC's CGI driven series *Walking with beasts*. In clip five digitally created mammoths battle ice age conditions, Neanderthals and cave lions as they migrate, graze and fight their way across the snow-covered plains of Western Europe in the Pleistocene.[58]

The moving animals evoked in this register are fundamentally wild and different. Great attention is given to portraying their alien ecologies, unfamiliar anatomies and inhuman behaviours, and in so doing to eschew the anthropo-identities that characterized the previous register. The affective logic on display here and the nonhumans it evokes have a long cultural tradition, linked into Romanticism and the cult of wilderness with its anti-anthropomorphic fetish of the wild.[59] The sincerity of the respect for nonhuman difference expressed in this imagery is often open to question. There is a tendency to drift towards the pornographic in these evocations– we are presented with an improbable feast of expansive and unpopulated locations inhabited by exotic animals, which are forever fighting, fucking, eating, migrating and

dying for their impatient channel-surfing audiences. Rooted in the linear temporal logic of the movement-image, these images seek closure in the presentation of gory excess and a romantic affirmation of a pure and thrusting nature.

3. Sympathy and shock

The affective logic of curiosity that characterized early wildlife filmmaking has been taken in another direction in diverse recent moving imagery which replaces a calculating aesthetic distance with an attention to the lived experiences of individual animals and the humans they encounter. We can see this expressed in much recent documentary filmmaking on elephants, as well as in the campaigning imagery of animal welfare organisations protesting against the treatment of circus elephants. The affective logic in these films is one of sympathy, which drifts towards but can be differentiated from a logic of sentimentality.

In the context of elephant documentary, this affective logic of sympathy is best conveyed in the work of the photographer and cameraman Martyn Colbeck, who directed and filmed the BBC's three-part series *Echo and Other Elephants*, amongst several others.[60] These films follow the lives of *Echo*, a matriarch African elephant, and other individuals from her multi-generational family in Amboseli National Park in Kenya. They are informed by the extensive expertise and caring ethos of the elephant ethologist Cynthia Moss and are centred on 'pachyderm personalities' as they are understood by Moss and Colbeck.[61] This approach breaks down the aesthetic of distance and bestows celebrity status upon individual animals.

To create this affective logic of sympathy Colbeck employs many of the techniques I identified at work in Dumbo. Individually and together the *Echo* films have a coherent narrative. Their success relies on us becoming familiar with the presented pachyderm personalities and the universal mammalian stages and events they experience. The central narrative conceit is the role of the matriarch and her relationships with her children. Over their 15 year duration we are skilfully conducted through a dramatic range of emotions common to both humans and elephants. We witness tragedy, pain, joy, play, bravery and grief and these movements are framed around familiar rhythms and events. We learn of the seasons, of cycles and generations and are treated to disasters, novelty and spectacles.

As in Dumbo, sympathetic affections are triggered and the momentum of the films is maintained by the careful montage of images, sounds and music. In clip six for example, great use is made of close-up 'affection images'. At moments of high emotional intensity the image flow repeatedly cuts to the elephants' eyes (rather confusingly as without Dumbo's dynamic eyebrows they are fairly inexpressive organs). Attention is paid more effectively to the touching and lithesome intertwining of trunks. The samba score is keyed to evoke drama and to signal play, while emphatic trumpets and deep sonic rumble of elephant vocalizations adds a mysterious yet evocative sound track.

The Echo films are overwhelmingly movement-image television in which temporality and plot are ordered, and the narrative reaches for meaning and resolution. However, the director is modest and uncertain enough to acknowledge the unknown and to hint at elephant difference. This is achieved (perhaps inadvertently) through the use of

elephant calls which often transgress the narrative; supposed shrieks of pleasure sound like pain, while distant seismic rumbles interfere making the hair stand up on the back of your neck. Similarly, the continual cuts to the elephant eyes are disconcerting – we can not be sure that they express what Attenborough wants us to believe – there is a gap, an aporia in the tight interspecies attunement supposedly on display. It is at these points that these films are most experimental and thought provoking and do most to reach for those dimensions of elephant behaviour effaced by the beguiling logic of Dumbo.

An affective logic of sympathy is evoked more explicitly in moving images produced by animal rights organisations which aim to both inform and to shock audiences about the treatment of animals in captivity. The online TV channel of People for the Ethical Treatment of Animals (PETA TV) hosts a wealth of such campaigning materials, including several films documenting cruelty to circus and tourist elephants. These films and their accompanying materials are didactic, moralistic and have a strong political message. Their discursive impact depends in part on the force of their argument but it is also reliant on the successful deployment of a range of affective techniques.

Clip seven is a short film entitled *Elephants in Circuses: Training and Tragedy* that was produced by PETA as part of their campaign against the use of captive elephants in circuses in North America.[62] The film comprises footage shot by amateur or undercover observers or taken from news bulletins. In contrast to the professional camera work and slick editing of Disney or the BBC, this film aims for gritty (and often grainy) realism. This type of low resolution quality footage and haphazard

amateur editing is ubiquitous in the age of the screen – it is generated continuously on cheap video cameras, mobile phones and CCTV devices – and is shared amongst limited networks via hosting sites and viral emails. It is rarely given the oxygen of prime time TV. As such it has an illicit feel, which is employed strategically to make us believe that these are shady practices happening in hidden places. Here the camera takes us where we would or could not go, revealing spaces, bodies and events generally obscured from contemporary visual horizons. Such images are primed to erupt spectacularly into public view, courting controversy and reaction.

The majority of the footage in this film is composed of lingering mid- and long- shots, taken from a standing point of view. There are few cuts and viewers find themselves in the scene as distant observers. The poor quality of the photographic equipment and the need to stay away from the elephants prevents the recording of affective close-ups. Without this weapon of film grammar we are not given the same sense of elephant emotion and do not identify with individual animals. However, the film works hard to create mimetic triggers that engender sympathy and outrage. Images of rampaging elephants being shot are sensational and shocking and would seem to demand a response.

In differing ways these films employ the haptic visuality of moving imagery to open mimetic spaces of sensation that provide a shock to thought. In the Echo trilogy, this is done subtly. Colbeck's films create 'fingery-eyes'; using technology, imagery and sound to bring the lives of elephants to our screens and allowing momentary deterritorialisations in which we get a sense for the mysterious life of other beings.[63] PETA's interventions are more blunt and visceral. They target the gut instincts of

repulsion and disgust, trusting that an exposure to such imagery will make it impossible to sit idly by. In comparing the micropolitical efficacy of these two approaches it is clear that brute shock can be effective but is a difficult logic to sustain. Such radical, moralized deterritorialisations can lead to exhaustion, apathy and even cynicism. Many of the PETA images appear fantastical to cosseted eyes and in keeping with much of the amateur animal imagery to be found online, feel both voyeuristic and horrifically pornographic. My sense is that shock is too uncomfortable an emotion upon which to base a micropolitics, it is reactive and requires an active, positive corollary. Colbert's subtle and curious sympathy would appear to offer a more sustainable foundation on which to base a critical environmental politics but its pleasant palatability makes it all too easy consume – there is little that niggles after the credits have rolled.

4. Disconcertion

The affective, deterritorialising force of moving imagery is more explicitly and radically channelled in a final genre, which can loosely be termed experimental image-making. This encompasses a diversity of fields, including surrealist wildlife documentary and postmodern animal art and experimental video. All of which share a desire to disconcert the viewer, using the haptic visuality and affective force of moving imagery to provide shocks to thought, challenging the grammar of orthodox imagery and its associated animal evocations and inventing new techniques for imagining animal life and human-animal interactions differently.

For example there is a rich minor tradition of experimental filmmaking in French wildlife documentary, which can be traced back to pioneers like the surrealist Jean

Painleve. Painleve's films (largely produced between 1929-1965) set the balletic movement of marine organisms to experimental electronic music. Here the narrative is sparse, discontinuous and irreverent. The settings are wonderful and alien and the score is jaunty and jarring; avant-garde in its obvious presence. Painleve's approach influenced Jacques Cousteau and it is clearly echoed in more recent work by the directors Claude Nuridsany and Marie Pérennou.[64] Together their works explore interspecies commonality and difference, employing what Knox terms an 'elliptical anthropomorphism' that aims to unsettle, educate and provoke curiosity by revealing unsentimental, absurd, violent and erotic universals that cut across species and spaces.[65]

In his comprehensive review of the 'postmodern animal' the art historian Steve Baker identifies the use of similar techniques in the moving animal imagery of a number of contemporary multimedia artists – including Mark Dion, Damian Hirst and Joseph Bueys.[66] In some of their experimental, non-representational work these artists – alongside others like Bill Viola – embrace the potential of what Deleuze terms 'time-image cinema', where standard linear narratives are confused and left open and the affective force of the imagery is emergent and underdetermined.[67] Chaotic and discontinuous images of animals and humans, together and apart, are layered over each other, repeated and reversed to catalyse comic, confusing and disturbing affects. With differing degrees of normativity, these works play with and challenge the clichéd affective logics of the popular vernaculars reviewed above and seek to provide disconcerting mimetic resources for rethinking and appreciating nonhuman difference.

Elephants are poorly represented in this genre, perhaps for the very reasons that make them so popular in images informed by affective logics of sentimentality and sympathy. Experimental, avant-garde artists and filmmakers have tended to shy away from anthropomorphic animals and have instead focused either on the wild, the alien, the abject and the out of place – on disconcerting animals performing various challenging modes of radical alterity – or on unlikely and enchanting cross-species encounters with mundane nonhumans in unromantic, quotidian spaces. This absence of experimental elephants from this later genre is to be expected, but the lack of monstrous and outlandish moving elephants is perhaps surprising given the preference expressed for the animals by surrealist painters like Dali and the success of recent urban elephant installations, like *The Sultan's Elephant*, designed to enchant, educate and provoke curiosity.

The micropolitics of disconcertion expressed in experimental image making operate in different registers to the cloying sentimentality, awe-ful respect or sympathetic outrage of the three previous genres. At its most deconstructive and critical this work is steeped in postmodern irony and cynicism, concerned with either challenging modern divides or ridiculing obsessions with the cute and cuddly. In its more affirmative incarnations (that eschew the Romantic preoccupation with the wild and the sublime) it attends to mundane nonhumans and forms of practical, cosmopolitan companionship. Moving images forged in this model open space for the emergence of unexpected affections and connections. Invoking Spinoza, we do not know what an image can do; these images set out to palpate this potential in a style that is more open-ended than the three others reviewed previously. Given the absence of surreal moving elephants it is difficult to judge and compare the political potential of this

logic of disconcertion, though the colourful political history of experimental image making hints at some interesting and fertile possibilities.[68]

Conclusions

I opened this paper with moving elephants and the challenges such moving animals pose to the theories and methodologies of modern natural and social science. In the analysis that followed I have explored the relationships between moving animals and moving images and, through a focus on elephants, outlined moving image methodologies that help witness and evoke the more-than-human agencies, knowledges and politics that circulate in contemporary mediated nature-cultures. The broad contributions this analysis makes to overcoming the identified challenges of moving animal research are twofold:

First, the paper highlights the importance of moving images and contributes to ongoing efforts to develop practical visual methodologies for cultural geography. We live in an age of the screen, in which moving imagery and its infrastructures proliferate, helping configure the everyday geographies, knowledges and sensibilities of diverse publics. Geographers have been slow to engage with the affective and evocative potential of moving image technologies and at present there remain a number of obstacles to our successful practical involvement with moving imagery, not least our limited disciplinary history and capacity and our default literary skill-set. However, the stage is now set for a new generation of experimentation and collaboration; moving images have much to offer more-than-human geographies.

With this in mind this paper has outlined techniques for witnessing and interpreting human and nonhuman practices, interactions, knowledges and affects. It argues that video techniques have great potential to act as a powerful supplement to the growing repertoire of more-than-representational methodologies. They generate a rich panoply of primary audio-visual data that bear witness to phenomena that often escape talk and text based methods. They also provide lively materials for subsequent presentation and evocation. By attending to the affective logics mobilized in moving imagery and identifying a subset of the techniques employed by moving image makers to evoke these logics, the paper has also helped develop new means for categorizing and critically interpreting existing imagery. There is much more work to be done here to unpack the relationships between moving imagery and affect to explore how images amplify or undermine the power of dominant discourses and ideologies.

Second, starting with elephants, this paper has explored the affective micropolitics of moving imagery with the intention of developing a critically affirmative vocabulary for making sense of and directing evocations of nonhuman difference. The micropolitics of elephant evocation is richly affective and is characterized by a complex topography of responses. Moving images produced by diverse actors palpate multiple affective logics for distinct political, commercial and artistic ends and these images have explicit and implicit consequences for the corporeal animals themselves as they circulate and reframe cultural sensibilities, ethical values and political infrastructures.

Broadly speaking analysis has identified two contrasting tendencies in the affective micropolitics of elephant evocation. In their extreme forms, the first seeks to engender sympathy or sentimentality for individual animals by reducing them to anthopo-identities. Through the strategic use of comic and tragic clichés and resolved narratives we are here taught to be affected by animals that are just like us. A counterveiling tendency seeks to inspire awe and respect through the pornographic presentation of extremes of difference. Here we have sensational animals performing in wild spaces. Although they are beguiling and lucrative, the affective, mimetic resources made available at either of these extremes offers few useful resources for relational environmental ethics – the former effaces elephant difference, while the latter holds the animal at an impossible remove.

Between and in oppositions to these dominant strands I identified more useful resources in those images that seek to open thinking and feeling space for animal difference – drawing attention to connections, proximities and shared histories while leaving open the gaps and uncertainties that accompany interspecies encounters. These works engender an irresolvable curiosity, a nagging and persistent sense of disconcertion and a sympathetic but uncertain feel for the life of other beings. Here moving animals are kept fluid and alive. These responses are manifested in different intensities – from the gut shock of the PETA film to the enchanted sense of unease produced by Painleve and Viola. In different ways these images provide a shock to thought, challenging cliché and affirming difference in the face of the narrow identities and affective logics that characterize mainstream representations. There is much that we can learn from these disconcerting images to guide our own image-making.

In choosing to focus this paper on elephants, out of all the diverse nonhumans, materialities and processes with whom we co-inhabit, I have deliberately picked an accessible and telegenic target. As living, sentient, terrestrial mammals, the ecology, behaviour, subjectivity and plight of elephants is more easily grasped than those of microscopic viruses, inorganic molecules or doorknobs, for example. Nonetheless, I believe that many of the concepts and techniques that I have detailed in this paper could be applied to appraise and create moving images of more obscure forms, processes and interactions across the diverse nonhuman spectrum. The key principle remains the same: to employ moving imagery to open thinking spaces for an affective micropolitics of curiosity in which we remain unsure as to what bodies and images might yet become.

Notes

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[3] See for example Steve Baker, The postmodern animal, (London, Reaktion, 2000); Mark Bekoff, Minding animals: awareness, emotion and heart, (New York, Oxford University Press, 2002); Donna Haraway, When species meet, (Minneapolis, University of Minnesota Press, 2008); Steve Hinchliffe, Geographies of Nature (London, Sage, 2008); Hayden Lorimer, 'Herding memories of people and animals', Environment and Planning D: Society and Space 24 (2006), pp. 497-518; Jamie Lorimer, 'Nonhuman charisma', Environment and Planning D: Society and Space 25 (2007), pp. 911-932; Nigel Thrift, Non-representational theory: space, politics, affect, (London, Routledge, 2007); Sarah Whatmore, Hybrid geographies: natures, cultures, spaces (London, Sage, 2002); Sarah Whatmore, 'Materialist returns: practicing cultural geography in and for a more-than-human world', Cultural Geographies 13 (2006), pp. 600-609; Cary Wolfe (Ed), Zoontologies: the question of the animal, (Minneapolis, University of Minnesota Press, 2003).

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[6] Hinchliffe, Geographies of nature; Whatmore, Hybrid geographies

[7] Haraway, When species meet; Chris Philo and Chris Wilbert, Animal spaces, beastly places: new geographies of human-animal relations (London, Routledge, 2000);Wolfe; Zoontologies.

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[9] Jane Bennett, The enchantment of modern life: attachments, crossing and ethics, (Princeton, Princeton University Press, 2002); Nick Bingham, 'Bees, butterflies, and bacteria: biotechnology and the politics of nonhuman friendship', Environment and Planning A 38 (2006), pp. 483-98; Haraway, When species meet; Steve Hinchliffe, 'Towards a careful political ecology', Geoforum 39 (2008), pp. 88–97; Steve Hinchliffe et al, Urban wild things; Derek McCormack, 'An event of geographical ethics in spaces of affect', Transactions of the Institute of British Geographers 28 (2003), pp. 488-507; Thrift, Nonrepresentational theory

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make them live', Environment and Planning D: Society and Space, 18 (2000), pp. 411-432; Sarah Whatmore, Materialist returns, 607.

[11] For comprehensive reviews see Gail Davies and Clare Dwyer, 'Qualitative methods: are you enchanted or are you alienated?', Progress in Human Geography 31 (2007), pp. 257-266; Gail Davies and Clare Dwyer, 'Qualitative methods II: minding the gap', Progress in Human Geography 32 (2008), pp. 399-406; Hayden Lorimer, 'Cultural geography: the busyness of being 'more-than-representational'', Progress in Human Geography 29 (2005), pp. 83-94; Hayden Lorimer, 'Cultural geography: worldly shapes, differently arranged', Progress in Human Geography 31 (2007), pp. 89-100; Hayden Lorimer, 'Cultural geography: non-representational conditions and concerns', Progress in Human Geography 32 (2008), pp. 551-559.

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[14] See for example the collaboration between the geographers Hayden Lorimer and Merle Patchett and the artist Kate Foster entitled BioGeoGraphies http://www.meansealevel.net/?q=node/5 [Accessed 19/9/2008]

[15] The methodological influence of ANT on political ecology and virtually all fields of human geography has been enormous – none more so than in agro-food studies and the geographies of consumption, science and wildlife. See for example Bruno Latour, Re-assembling the social: an introduction to actor-network theory, (Oxford, Oxford University Press, 2007); Jon Murdoch, Post-structuralist geography: a guide to relational space (London, Sage, 2005); Michael Pryke, Gillian Rose

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[18] JD Dewsbury, 'Witnessing space: 'Knowledge without contemplation'', Environment and Planning A 35 (2003), pp. 1907-1932; Hinchliffe et al, Urban wild things; Derek McCormack, 'The affirmative refrain of moving bodies', in Ben Anderson and Paul Harrison (eds) Taking place: nonrepresentational geographies, (Aldershot, Ashgate, forthcoming), copy available from the author; Frances Morton, 'Performing ethnography: Irish traditional music sessions and new methodological spaces' Social and Cultural Geography 6 (2005), pp. 661-676.

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[28] Amy Herzog, 'Images of thought and acts of creation: Deleuze, Bergson and the question of cinema', Invisible Culture, available online at http://www.rochester.edu/in_visible_culture/issue3/IVC_iss3_Herzog.pdf [accessed 19/8/2008], 2000, pp. 2.

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[42] The anthropologist Piers Locke has also used video in parallel work on the culture and practice of mahoutship in Nepal. See his film Servants of Ganesh, One World Films, 2007 http://www.oneworldfilms.com/

[43] See Hinchliffe et al, Urban wild things; Latour, How to talk about the body; Lorimer, Counting corncrakes.

[44] Marks, Touch.

[45] See Elizabeth Collingham, Imperial bodies: the physical experience of the Raj, c. 1800-1947, (Cambridge, Cambridge University Press, 2001); Lorimer and Whatmore, After the king of beasts.

[46] Shortly before I filmed the elephant polo an overheated and irate elephant threw off its riders and went on the rampage. This was captured on camera and the footage proved infectious and went viral via youtube generating contagious affections (outrage, sympathy, shock, fear, awe) and prompting interventions from animal welfare groups. See http://www.youtube.com/watch?v=iaJ0CXLu1to

[47] This is discussed in Eric Laurier and Chris Philo, 'Natural problems of naturalistic video data', in Hubert Knoblauch, Bernt Schnettler, Jurgen Raab and Hans-Georg Soeffner (eds.), Video-analysis methodology and methods (Oxford, Peter Lang, 2006), pp. 183-192.

[48] Burt, Animals in film. See also Akira Mizuta Lippit, Electric Animal: towards a rhetoric of wildlife (Minneapolis, University of Minnesota Press, 2000).

[49] See William Adams, 'Nature and the colonial mind', in William Adams and Martin Mulligan (eds.) Decolonizing nature: strategies for conservation in a post-colonial era (London, Earthscan, 2003), pp. 16-50; Derek Bouse, Wildlife films (Philadelphia, University of Pennsylvania Press, 2000); Simon Cottle, 'Producing nature(s): on the changing production ecology of natural history TV', Media, Culture, Society 26 (2004), pp. 81-101; Barbara Crowther, 'Viewing what comes naturally: a feminist approach to television natural history', Women's Studies International Forum 20 (1997), pp. 289– 300; Gail Davies 'Science, observation and entertainment: competing visions of postwar British natural history television 1946–1967', Ecumene 7 (2000), pp. 432– 460; Ariel Dorfman, Armand Mattelart, Armand Mattelart, and David Kunzle, how to read Donald Duck: imperialist ideology in the Disney comic (International General, 1975); Mitman, Reel nature; Alexander Wilson, The culture of nature: North American landscape from Disney to the Exxon Valdez (Toronto, Between the Lines, 1992).

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[50] For a discussion of this concept and its relationship with film see Cater and McCormack, Film, geopolitics.

[51] This is not a comprehensive survey of the different ways in which elephants are evoked – indeed there are some notable absences, not least moving images of elephants as a source of horror and fear that could be produced by those on the receiving end of human-elephant conflict. Unfortunately I was unable to source these. Furthermore, it is important to note that most of moving images referenced here employ more than one affective logic.

[52] Deleuze, Cinema I

[53] This relationship between nonhuman anatomy and ethics is discussed in Owain Jones, '(Un)ethical geographies of human-non-human relations: encounters, collectives and spaces' in Chris Philo and Chris Wilbert (eds.) Animal space, beastly places (London, Routledge, 2000), pp. 268-291.

[54] Gilles Deleuze and Felix Guattari, A thousand plateaus: capitalism and schizophrenia (London, Continuum, 1987). See also Jean Baudrillard, Simulacra simulation (Ann Arbor, University of Michigan Press, 1994); Mary Midgeley, Animals and why they matter (Athens, University of Georgia Press, 1998); Roger Scruton, Animal rights and wrongs (London, Demos, 1996).

[55] See for example Thomas Edison's film entitled 'Electrocuting an elephant', produced to demonstrate the potential of both his alternating-current and moving imagery.

[56] Mitman, Reel nature

[57] Gregg Mitman, 'Pachyderm personalities: the media of science, politics and conservation', in Gregg Mitman and Lorraine Daston (eds) Thinking with animals: new perspectives on anthropomorphism (New York, Columbia University Press, 2005), pp. 175-195.

[58] Mammoth journey, Episode 6 of Walking with Beasts (London, BBC, 2001). For a more detailed discussion of this emerging genre of moving image and its relationship to natural history documentary see Andrew Darley, 'Simulating natural history: *Walking with Dinosaurs* as hyper-real edutainment' Science as Culture 12 (2003), pp. 227-256; Karen Scott and Anne White, 'Unnatural history? Deconstructing the *Walking with Dinosaurs* phenomenon' Media, Culture & Society 25 (2003), pp. 315-332.

[59] Baker, Postmodern animal

[60] Martyn Colbert's elephant films include Echo of the elephants (London, BBC, 1993); Echo of the elephants: the next generation (London, BBC, 1996); Echo of the elephants: the final chapter? (London, BBC, 2005); Eye for an elephant (London, BBC, 2006).

[61] Mitman, Pachyderm personalities

[62] http://www.petatv.com/tvpopup/video.asp?video=training_and_tragedy_revamp_3-08&Player=wm

[63] The recent BBC series *Spy in the Jungle* provides another excellent elephant related example of the power of technology to create fingery-eyes that enable transformative media encounters. Here captive elephants carried cameras to film tigers in the 'wild'.

[64] See for example Claude Nurisdany and Marie Perennou, Microcosmos (Paris, Pathe, 1996)

[65] Jim Knox, 'Sounding the depths: Jean Painleve's sunken cinema' Senses of Cinema 3 (2003) available online at http://www.sensesofcinema.com/contents/03/25/painleve.html [accessed 21/9/2008]. See also Andy Masaki Bellows, Marina McDougall and Brigitte Berg, Science is fiction: the films of Jean Painleve (Cambridge, MA, MIT University Press, 2001).

[66] Baker, Postmodern animal

[67] Deleuze, Cinema II. See Bill Viola, I do not know what it is I am like (Huntingdon, Quantum Leap, 1986)

[68] See Duncan Reekie, Subversion: the definitive history of underground cinema (Ann Arbor, University of Michigan Press, 2007); Catherine Russell, Experimental ethnography: the work of film in the age of video (Durham, Duke University Press, 1999)