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The Postnatural Animal in Contemporary Art

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University of Plymouth

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**UNIVERSITY OF
PLYMOUTH**

THE POSTNATURAL ANIMAL IN CONTEMPORARY ART

By

PAUL FINNEGAN

A thesis submitted to the University of Plymouth in partial
fulfilment of the degree of

DOCTOR OF PHILOSOPHY

School of Art, Design & Architecture

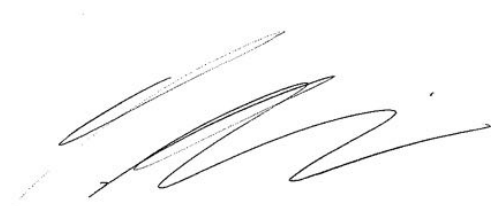
NOVEMBER 2022

AUTHOR’S DECLARATION AND WORD COUNT

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Doctoral College Quality Sub-Committee.

Work submitted for this research degree at the University of Plymouth has not formed part of any other degree either at the University of Plymouth or at another establishment.

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PAUL FINNEGAN

THE POSTNATURAL ANIMAL IN CONTEMPORARY ART

ABSTRACT

The thesis uses art practice as a research method to propose novel characterisations of animal life. These characterisations aim to challenge an organicist image of non-human animals. The thesis considers animal bodies and behaviours as subject to aesthetic judgments that are underpinned by deeper ontological and epistemological commitments as to relations between nature and society, in which to be categorised as the former entails a series of privations in relation to the latter – the absence of freedom, subjectivity and creativity. Scholarly research on the history of the perception and conception of animal life within modernity, and subsequent challenges made to these within the contemporary humanities and contemporary art support and inform the practical enquiry. The thesis draws primarily here upon new materialist and post-humanist-oriented animal studies, and on scholarship surrounding the contemporary French artist, Pierre Huyghe.

Positing the Anthropocene as a condition in which the distinction between human history and natural history has collapsed, the thesis argues for disassociating the concept ‘animal’ and the concept ‘nature’. The thesis attends to entanglements of animal worlds and cultural tropes where this equation fails. It proposes an an-organic and dis-harmonious animal life that attest to the end of nature and witnesses the dissonant and incomplete conditions of modernity. Both the written argument and the artistic outcomes propose novel ways to consider animals in relation to visibility. The thesis takes bio-art (i.e., art practice that incorporates living organisms) as of methodological value in this project where it engages the potentiality of animals themselves to challenge a received historical status. Furthermore, art practice is not just seen as a vehicle for depicting animal futures, but as a condition for liberating animals from nature. The thesis thus equates the postnatural animal with their becoming agents within artworks.

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INTRODUCTION

Aims and arguments

The thesis submitted for the qualification Doctor of Philosophy has two parts – a written text and a portfolio of artworks. The submission is concerned with questions of animal life and its relationship to art. As a combined practical and written submission, the thesis seeks to propose ways of conceiving, experiencing, and living with animals. It seeks to respond to certain conditions and demands of the present to see animals in new ways. It sees such demands as requiring a critique of dominant conceptions of animal nature, and the proposition of alternatives. Whilst the writing engages with such concerns theoretically the artworks do so practically. The very notion of animals as natural is at the heart of the thesis' critique. Questioning this conception, the thesis proposes the idea of the postnatural animal. It argues for and articulates the postnatural animal both conceptually and experientially. This double register does not simply characterise the two parts, however. The writing and the practice both participate in experiential and conceptual registers. They complement one another by building on each other's aims. The practice and the writing together form the 'thesis' or argument.

The writing and the art practice consider nature not as a self-evident reality but as a social, cultural, and historical construction. The written component argues that the concept of the natural animal is constructed through distinctions between biological, technological, and cultural realms. These distinctions are performed institutionally, epistemologically, and politically. The thesis therefore sees any characterisation of animal nature not as a settled and indisputable matter but as innately open-ended. What the thesis refers to as the postnatural animal is a state in which this open-endedness attains. The thesis asserts that to meet the critical and cultural demand of the Anthropocene is to understand animals beyond nature and culture – and thus as postnatural. The writing and the practice argue this in a complimentary manner - one speculatively and the other demonstrably. The submitted

artworks are central to testing the claims in the writing. Certain conditions of contemporary art are identified as affording the construction of the postnatural animal. Art practice is chosen as a methodology because of the affordances it has for realising the postnatural animal. The thesis argues for contemporary art to be a space for postnatural animal futures to thrive. It argues that the postnatural animal is like art, or indeed is art.

The written component questions a particular construction of animal nature. It does so by analysing the animal's relation to modernity, attempting to both reflect on the hostility of modernity to animal life but also to retrieve some of its artistic, social, and cultural ideas as resources for conceptualising the postnatural animal. To develop a framework and characterisation of the postnatural animal it draws on knowledge and insight from a range of disciplines including biology, zoology, ethology, literature, visual art, philosophy of nature, psychoanalysis, social theory, affect theory and art theory. It is structured into three broad parts. It starts by identifying the origins and influence of the historical construction of the natural animal and then proceeds to map the construction of the postnatural animal through specific scholarship. This is followed by a case study of the French artist Pierre Huyghe whose artworks are presented as an exemplar of postnatural considerations of animal life in contemporary art. Finally, it turns to an evaluation of the author's own art practice as testing distinct propositions of the postnatural animal. Thus, the aims of the written component are, firstly, to critique scientific, social, and historical constructions of the natural animal; secondly, to characterise the postnatural animal in generic terms; and thirdly, to identify the possibilities and limitations of art practice to realise the postnatural animal.

The practice component of the thesis aims to find out how and if animals may become postnatural in and through it. It aims to identify visual forms, structures, and syntaxes by which the theorised characteristics of the postnatural animal can be realised as sensory experience. The art practice aims to be a site for re-negotiating human/animal relations. The portfolio of artworks consists of installations, digital collages, and video works. The artworks collide and integrate biological and

cultural forms. They explore how animals can interact with cultural objects. They constitute encounters with animals on very particular terms, treating animals as participants and agents. The various works explore two aspects of animal existence, firstly, the physical and visual dimensions of animal surfaces, which are handled and transformed in a range of ways; and secondly, the alterity and plurality of animal worlds, which are evoked to challenge human-centric meanings. Thus, the aims of the art practice component are, firstly, to test the argument that collaboration with living animals in art is an advantaged mode for realising the postnatural animal, and secondly, to test the argument that the postnatural animal is indistinguishable from art.

Positioning

As an artist-researcher

A key to understanding the thesis is the author's identity as an artist-researcher. Its positioning and methodology emerge from the author's professional art practice. This covers a span of 20 years or so, firstly as an artist operating within the contemporary art world and later also within the academic context of contemporary art research, practice, and pedagogy. The author's contribution to contemporary art through inclusion of works in internationally significant exhibitions, and their attendant reception and impact, establishes criteria and aims which lead to the current thesis project (Finnegan, 1995, 1997, 1998, 2004 and 2006). Over this period initial interests in human experiences of the body, bodily sensuality, mutability, and metamorphosis, have shifted to an interest in more-than-human morphology, behaviour, and dynamics between biology and aesthetics. The mediums employed are photography and sculpture. More recently however the latter aspect has evolved into the use of moving image as an expanded sculptural practice. The PhD submission includes artworks that have been publicly exhibited and found an audience during the period of study. Most significantly here is the piece *Dappled World* 2020, which was commissioned by the contemporary art organisation *More Than Ponies* for the conference and online exhibition *Art and the Rural Imagination* (Finnegan,

2020a). This work subsequently featured, with an accompanying commentary by the artist, in a publication of the same name (Finnegan, 2022). Additionally, a chapter of the written thesis *The 'Idea of Natural History' in the Work of Pierre Huyghe* has found readers, in adapted form, through its publication in *Antennae Journal* (Finnegan, 2020b). Thus, the PhD project builds upon the experience of professional practice, exhibition, and publication.

The art practice component of the thesis stages encounters between animals, spaces, and objects primarily through the form of digital moving image. These works aim to create liminal spaces between human and non-human worlds. They turn negative encounters between animals and made objects into ecologically active ones. Props that reference architecture, machines and cultural artefacts are activated by the movement of animals. These animals are unruly – transgressing the nature/culture boundary. In some pieces the props and constructs reference modernist sculpture - in an attempt that art history itself encounters its non-anthropocentric other. The tools of digital moving image are explored for their ability to register movement, such as when motion tracking is used to translate animal movement onto artificial forms. The works show human places, spaces and meanings taken over by animals in spontaneous acts of more-than-human world-making.

The thesis sits within a Duchampian paradigm for art, according to which artworks are not recognised by some essential or inherent quality or characteristic, but rather by their institutional legitimisation (Carol, 1999, pp.224-239). This ontology of art is exemplified by the readymade - the artwork that foregoes essentialist criteria and for which the status of art is a normative judgement. Most relevant though to the thesis is a later development of the Duchampian gesture, the appearance of *unmade* readymades within the institutions of contemporary art – particularly the incorporation of living systems and organisms as elements within works of art.

New materialism and posthumanism

Scholarship typically takes either a discursive or a realist approach to the question of animal life. The discursive approach challenges the social, cultural, and historical construction of the concept of the animal - exposing its expediencies. The realist approach finds in the range of phenomena or entities to be liberated from the binary human/non-human, qualities, such as for example certain behaviours and visualities, that resist it. New materialism is a field of scholarship that emerges in the 2010s and within which, among other topics, contemporary questions of the status and characteristics of animal life are addressed. It combines a critique of the discursive construction of the concept of non-human animals with a realist attitude in search of material evidence of forms of animal life that counter this construction. It re-evaluates animal life and questions human exceptionalism by recognising more-than-human agencies. Key new materialist readers include *The Non-Human Turn* edited by Richard Grusin), *New Materialisms: Ontology, Agency, and Politics* (eds. Diana Coole and Samantha Frost) and *New Materialism: Interviews and Cartographies* (eds. Rick Dolphijn and Iris van der Tuin). Susan Yi Sencindiver summarises the field thus:

The scholarly body of new materialism pivots on the primacy of matter as an underexplored question, in which a renewed substantial engagement with the dynamics of materialization and its entangled entailment with discursive practices is pursued, whether these pertain to corporeal life or material phenomena, including inorganic objects, technologies, and nonhuman organisms and processes (Sencindiver, 2017).

New materialism considers the human actor as but one agent in a more general network of competing or cooperating agencies, thus decentring the human subject, and questioning what it is to be considered distinctly human. Thus, new materialism has a close association with posthumanism, whereby the latter overarchingly rejects certain ideas about the human, and the former gives a certain ontological and epistemological slant to this endeavour. Posthumanism primarily identifies the origin

of the concept of the human with the European Enlightenment, critiquing its influence across extant disciplines and institutions - scientific, technical, cultural, legal, and political (Braidotti, 2013, p.22).

An aspect of post-humanism focusses on how the conceptualisation of the human co-implicates a conceptualisation of the non-human. It argues that European humanism distinguishes the non-human from the human as belonging to two ontologically distinct realms – nature and society. Thus, the very concepts of nature and society, understood as social constructions rather than as givens, come under critique. Furthermore, the binary nature/society is not seen as a neutral pairing but as one of unequal terms. All that is non-human is made low by its identification with nature. The non-human is identified with a series of privations - unfreedom, unreason, the absence of spirit, mind, or consciousness. In turn, non-human nature, excluded from society and history, comes to serve a mythic function - nature as an eternal, unified and harmonious realm. (Johnston, 2006, p.35., Morton, 2008, p.16.). The chapters *Display and Excess* and *Mimicry and Mimesis* draw upon scholarship associated with new materialism to develop the argument for the postnatural animal and the aim of relating non-human aesthetics to art. These aims and arguments are primarily informed here by the animal studies of Donna Haraway (2016), Elizabeth Grosz (2011), Brian Massumi (2012), Bertrand Prevost (2013) and Alphonso Lingis (1998, 2006).

Why look at animals in this way?

The thesis situates itself in relation to those aspects of posthumanism and new materialism which address the status and agency of non-human animals. The anti-animal credentials of a certain kind of humanistic modernity are seen to be equally evident in a disavowal of non-human subject positions, the denial of animal creativity, and a mechanistic attitude to animal behaviours. New materialism questions human privilege in a range of ways by recognising the richness and multi-dimensionality

of animal life (Wolfe, 2009, Morton, 2012, Prevost, 2013, Grosz, 2014, Despret 2016, Massumi, 2016, Haraway, 2017).

The concept of the Anthropocene is an additional key point of reference for the thesis. The Anthropocene is a name given to the current geological epoch marked by an increase in anthropogenic (human-made) effects on geology, climate, and ecosystems (Crutzen, 2006. P.13). To recognise the present as the Anthropocene, is to be minded of the effect of human activity on animals and of altered relations between humans and other animals. In these terms we might identify a bad and a good Anthropocene - the former as a terminus in the exploitation of animal life based on a concept of nature born of the Enlightenment, and the latter as a collapse of human history and natural history in which a more-than-human art and politics comes into view. New materialist scholarship seeks to redress human-exceptionalism and anthropocentrism in light of the Anthropocene, as a global entanglement of human and non-human agencies, and with the imperative to think human/non-human relations differently in the face of environmental crisis (Dolphijn, R. and van der Tuin, 2012a, p.15).

New materialism enriches the ontology of non-human phenomena by rendering less anthropocentric notions of mind, agency, art, culture, and history. It turns from critiquing the social construction of animal nature to stronger ontological claims of a transformed animal nature. The thesis discusses the histories and counter-histories of constructions of animal nature within this framework, and identifies the potentialities of animal life, and the new animal natures to be liberated and articulated through art.

Additional fields the thesis draws upon

The thesis draws upon a broader range of fields related to this endeavour. The first of these is the social philosophy and aesthetic theory of Theodor Adorno (1984, 1997, 2002, 2007) and Walter

Benjamin (1979, 1996, 1998) that challenge conventional binaries between nature and society, natural history, and human history from a dialectical position, as well as commentaries on these authors by Camilla Flodin (2018a, 2018b), Max Pensky (2001, 2004) and Alison Stone (2013). The second is scholarship that extends psychoanalysis to non-human realms by Lorenzo Chiesa (2009) and Adrian Johnston (2006) and that proposes more-than-human forms of alienation, within which context the animal writings of French surrealist Roger Caillois (2003) are also introduced. The third is the philosophy of animals of F. W. J. von Schelling (1988, 1989) which reveals a precedent in romanticism for perceiving equivalences between artworks and living organisms, and which is further unpacked with the help of commentaries by Nicholas Halmi (2007), Devin Zane Shaw (2010) and Nikolas Kompridis (2006). The fourth is the work of Phillipe Descola (2013), which identifies alternatives to scientific naturalism's view of animal life from an anthropological perspective, and thus serves the aim of the thesis to open a space for considering such alternatives. The fifth is the body of art criticism and interviews that have built up around the oeuvre of French contemporary artist Pierre Huyghe (Godden, 2012, Lutticken, 2015, Hantelmann, 2019, Huyghe, 2021). Huyghe's bio-art and the scholarship that surrounds it is engaged with in the thesis as a certain possibility for transforming the relationship between natural history and human history.

Methodology

A post-constructivist methodology

This section outlines the methodology of the thesis and how it adapts a new materialist methodology in the service of art practice. It provides an explanation of how the submitted art practice fulfils the chosen methodology. An ontological and epistemological rationale is described as underlying the activity. What is to be known about animals in and through the art practice and scholarly approach (i.e., how the thesis comes to know by its methods) is identified.

The written component of the thesis moves in a trans-disciplinary manner between natural scientific accounts and art theoretical accounts of the subject matter. For example, natural historical insights and findings on animal visibility are reframed through art theoretical notions of visibility. This methodology is adopted in recognition of an entanglement of biological reality and cultural-historical forces. It discusses contemporary artworks, including those by the author, that have been co-produced with animals. For the art practice component of the thesis this feature is of methodological importance – inviting animals to invent and renegotiate the meanings within the work.

The alignment with new materialism gives rise to subsequent methodological considerations. Susan Yi Sencindiver defines new materialism as “a field of enquiry that deems the polarized positions of a postmodernist constructivism and positivist scientific materialism as untenable” (2019). Given this untenability, new materialism adopts an inter-disciplinary methodology, engaging with both the natural sciences and discursive knowledges. It seeks to bridge the gap between two realities – one, the world as an interaction and aggregation of material systems and the other, the world as a collection of systems of meaning. Thus, new materialism “seeks to account for the intra-actions of meaning and matter” (Sencindiver, 2019).

Explaining animal life in these terms takes the form within the written thesis of an inter-disciplinary synthesis that draws on both the natural historical record – biological, ecological, and ethological knowledge of animal lives, and concepts from the humanities - such as those of psychoanalysis, affect theory, and art theory. The methodology of new materialism stems from ontological and epistemological commitments that when applied to the subject matter of animals give rise to concrete methods. Commentaries on non-human animals by Elizabeth Grosz and Brian Massumi render the abstract methodology of new materialism to “account for the intra-actions of matter and meaning” (Sencindiver, 2019) concrete by accounting for animals as material biological systems that are generative of more-than-human worlds of meaning (Grosz, 2011, p.185., Massumi, 2012).

Epistemic conditions

The ontological commitment to the intra-action of discursive and physical realities, leads to the question of their relation. Social constructivism argues that knowledge is constructed rather than discovered, its form and content conditioned and shaped by social, historical, and cultural contingencies. The constructivist answer to the question, what do we know about non-human animals, therefore, is whatever can be known within the prevailing social and cultural discourses. What we know about animals is subject to and compatible with the norms and values of a society. New materialism draws upon this legacy. It concurs with a postmodern refusal of the universal knowledge claims of scientific naturalism, but also highlights the limited usefulness of critique faced with the imperative of finding new ways to coexist with non-human others and of thinking ecologically. Thus, we may identify an ontology, epistemology and methodology within new materialism that departs from and is differentiated from postmodernism and social constructivism. Firstly, new materialism ontologises the material/discursive relation. Discursive processes are not seen as exclusively human but as integral to the more-than-human realm. Culture-like effects are seen to be emergent from more-than-human biological processes.

The ontological commitment of the thesis is to a non-human realm enriched by features otherwise reserved for human kinds of being and knowing - an ontological flattening of discursive and biological realms. Conversely, an artwork, as an ontological category, is not exhausted by its human discursive relations (existing only as such for humans), but is a distinctive state of affairs with material, ecological, and more-than-human agency and consequences. The thesis considers art and artworks to belong to a natural history, and thus to be open to a comparison with the products of non-human processes. Artefacts given natural historical explanation and artworks given art historical explanation are not different in kind. What we can know about artworks is not limited to their significance and place within human culture but expanded to more-than-human aesthetic regimes.

One methodological consequence of collapsing the discursive and the material is that speculation and invention take over from critique. The claim that animal bodies and behaviours are pervaded by a naturalised discursivity renders the question of animal nature radically open, in terms of what is given to exist or may come to exist. The demotion of animal bodies to an image of dumb and passive matter by scientific, humanistic, legal, and agrarian knowledges is not only to be critiqued but also eluded through speculation on the potential of animals to speak back to our image of them. New materialism transforms epistemologically positivist understandings of animals (the independence of subject and object, knower and known) through a non-anthropocentric application of interpretative frameworks such as art theory, psychoanalysis, affect theory, and (paradoxically) anthropology itself. Beyond a critique of the image of animals (scientific or otherwise) the methods of the two thesis components are formed - the written component identifying animality's latent potential to surpass its own nature, and the art practice component inventing and visualising animal futures.

What is to be known about animals?

The knowledge sought by the thesis is how a naturalistic description of animal life may at once be a description in culturally discursive terms. Natural historical findings on animal visuality, for example, are reframed by art theoretical notions of visuality. The epistemological position of the thesis is that what is to be known resides somewhere between naturalistic explanations (such as an account of animal visual appearances as the outcome of natural selection) and quasi-cultural explanations applied to the more-than-human context. The methodological rationale of the thesis thus follows this epistemological position, which in turn follows from an ontological basis. The method of the art practice - adopting a direct engagement with plastic, time-based and living materials – explores animal potential to invent, construct and reveal entanglements between animal lives and artworks.

Two primary research methods follow from the thesis' methodological and epistemological rationale. These can be divided along the lines of the two components –a scholarly enquiry and an enquiry by art practice. The scholarly enquiry consists of the analysis of contemporary and historical artworks. Additionally, it depends upon either full literature reviews or targeted readings on the topics of animals and aesthetics, animals and romanticism, animals and posthumanism, animals and new materialism, animals and anthropology, and animals and psychoanalysis. Interpretations of primary sources are made according to a post-constructivist methodology and epistemology, and secondary sources are employed to support the direction of the argument and upon which to draw further original insights.

The art practice is the thesis' method for colliding animal worlds with the discursive spaces of art history and material culture. New materialism's method of collapsing material and discursive registers is adapted to an art practice context and applied to particular subject matter. The practical enquiry employs a range of media to produce a series of artefacts. Outcomes consist of video works, mixed-media installations, and digital images. These artworks are developed and produced using a range of processes including visual research, drawing, photoshop, 3D computer modelling, mould-making, casting, wood construction, metal fabrication, projection mapping, CGI, sound design, lighting design, video production and editing.

Art practice as a post-constructivist method of animal research

New materialism considers the aesthetics of animal bodies, behaviours, and productions as neither reduceable to an explanation of the human perception of animals, nor to the language of Darwinian natural history. The new materialist way of seeing and doing adopted by the thesis, is to search out inherent features of culturality, and more specifically artistry in animal worlds. Recognising artistry

in animal worlds is understood to overcome a “constructivist-essentialist impasse” (Sencindiver, 2017) regarding how we may see the relationship between art and animal lives.

The research method of art practice is recommended by the ontological commitments of the thesis – the conditions of art practice exemplifying a reconciliation of matter and meaning. It is methodologically justified as an equivalent to new materialism’s scholarly collapsing of material and discursive registers. Art practice is advocated as a method, furthermore, given certain epistemological caveats about how the postnatural animal can be known – permitting new knowledges to arise through the imaginary. The method is to approach the corporeal animal on its own terms and explore the potential for animals to exceed their own nature in and through becoming living components within artworks. Art practice is used within the thesis to generate new knowledge about the relationship between art and animals. By coordinating animal bodies, the practice asks what living matter can do given its intra-action with the discursive conditions of art. For example, the practice handles animal markings as indexes of the heterogeneity and irreducibility of animals to the single form of knowledge embodied by the concept *nature*. Or it interrupts the organic unity of animal bodies to disassociate animals from accompanying values of nature. Or, again, to see animals in a less organic way, and thus to question their status as natural. In this third respect the practice presents animals as sensitive to the dissonant conditions of modernity.

Making artworks with animals is chosen as a method for three reasons. Firstly, animals take the role of a biological reality in a project that aims to mediate between cultural/discursive and biological registers. Secondly, living animals introduce spontaneities that serve to transform the meanings of cultural objects, and by their other qualities of evasiveness and uncooperativeness resist the familiar hold of animal symbolism. Thirdly, the capacity of animals to make places and find niches, disrupts the paradigm of regularised space upon which the concept of nature is also argued to depend.

Use of terminology

Animal

The term *animal* seems so familiar and commonplace as to not need a statement on its meaning or usage. However, Jacques Derrida recognises that the term embodies a particular violence – that of generalising a range of distinctly diverse and heterogeneous kinds of existence under one name. From the binary human/animal there not only potentially follow a range of human-exceptionalist claims – i.e., that what is given to be human – mind, language, spirit, reason, creativity – is distinctly and especially human, but also that all the forms of non-human animate life (see *Non-human*) lumped together under the term *animal* life are only to be appreciated for what they have in common. Thus, to continue to speak of an animal condition as a generic way of being in the world, we overlook the differences between species worlds. Derrida thus proposes the term “animot” as a replacement for *animal*. A neologism that draws attention to its own conventionality by the suffix “mot” meaning “word” and as a homonym of “animaux” alludes to a pluralisation of its referent (Derrida, 2008, p.58.).

Thus, the use of the term *animal* in the thesis has certain caveats and conditions. It is often used in this context as a shorthand for the term *non-human animal*. There is no question that we might also equally speak of the *human animal*. The thesis accepts that the use of the term *animal* (or even *non-human animal*) risks reproducing a binary between animal and humans. And in this regard, it might usefully be flagged that though the lives of non-human animals are commonly spoken of in terms of animality, the human animal is more often spoken of in terms that repress the underlying animal condition of the human organism. The specialist discourse of the natural sciences emphasises the shared animal condition of human, dogs, and cats, but everyday natural language tends to tacitly reproduce structures of knowledge based on positing fundamental differences between humans and (other) animals. The thesis uses the term *animal* to challenge certain received assumptions of the category.

Art

In the context of the thesis *art* is sometimes understood as an object, entity or event that has been made. To be made implies a maker, as well as the application of a skill or technique in the execution of an intention, design, or plan. Although, in certain contexts this may limit the definition of art as that which is human made, within a non-anthropocentric notion of technique and design proposed by the thesis it may be extended to name certain products of non-human making (see *Non-human*). Jakob von Uexkull's phenomenon of the "magical path" that guides the action of the leaf cutter insect to make a cocoon out of a leaf may be given as one such example of more-than-human design (Uexkull, 2010, p.122). Uexkull's posited animal imaginary (see *Animal*) is thus useful to the thesis for considering animal making, and, by extension, art as a particular kind of making, in more than human terms.

The thesis also associates the term *art* with artifice and artificiality which bring to art a sense of something contrived, deceptive, simulated, or unnatural. However, the thesis argues that if the binary natural/artificial has become inoperative in the Anthropocene— art, in as much as it is associated with artifice, can no longer be meaningfully identified with one side rather than the other of this binary. An indeterminacy of the categories *natural* and *artificial* is quite a different way of extending the concept of art to non-human worlds, that does not depend on a judgement of made versus unmade. Furthermore, defining art as a practice of deception brings weight to recognising it in kinds of animal mimicry. It is based on this conditioning of knowledge and experience, it is not only the manipulation of materials by animals that can be considered art, but the unmade, unconsciously determined, cognition independent stuff of animal morphology itself.

These two lines of thought are the basis upon which the terms *artefact* and *artifice* are applied to more than human contexts in the thesis. However, it is also understood that not every artefact, of human or non-human origin, is necessarily art – the artwork being an artefact with distinct

characteristics. The term *art* having been expunged of a certain anthropocentrism must recognise a third association, that of the aesthetic. When Charles Darwin reached a perceived limit to explaining animal courtship display by natural selection he resorted to evoking more-than-human aesthetic causes and effects (Darwin, 1871, p.466). Darwin thus initiates a shock to thought for humanistic aesthetic theory that the thesis and its sources elaborate. The thesis considers the conception of aesthetics in more-than-human terms as of equal significance to a critique of human exceptionalism as Darwin's levelling of humans and animals based on a shared biological origin.

Art is understood as that which has aesthetic agency – affecting the senses and being concerned with the appreciation of qualities of sensation - form, colour, line, pattern, movement (to speak only of vision), tone, vibration, sourness/sweetness, roughness/smoothness (to consider sensation more broadly). A recognition of more-than-human sensory reception will extend this list much further. The characterisation of art as sensory appreciation is thus a further justification for identifying art as non-utility, appreciation independent of use value, across species boundaries. The female golden pheasant is attracted to male birds that display the more extravagant plumage. Such excess signifies a potential mate's fitness and thus the optimal chance of survival of the females' genes beyond the next generation. However, this rationalisation of causes is a feature of a Darwinian theory of sexual selection rather than an account of the animal's life world, which is driven by affect and stimulation. Colourful plumage has an effect and affect on the animal not of the order of utility aimed at survival but of the order of a non-utilitarian pleasure, fixation, excitability, and taste for spectacle (Brian Massumi, 2012). The term *art* is approached by the thesis within this framework.

Anthropocene

The term *Anthropocene* names and characterises a state of the total Earth system as a distinct epoch. This designation is made in a relation of succession to geological stages that are familiar to us from

a physical geography class. This is a long list but taking just the last 23 million years of Earth's history as a snapshot we have the geological epochs of Miocene, Pliocene, Pleistocene, and Holocene succeed one another in turn. Each epoch identifies a shift in many conditions and processes on Earth, as evidenced in the geological record. Positing the *Anthropocene* as a successor to the Holocene claims significant changes to the Earth system that are not consistent with a characterisation of the latter. Furthermore, the term chosen for this present period of geological time identifies *Anthropos* (the human animal) as the primary agent of these new conditions.

The term *anthropocenic* is an adjective used by the thesis to identify qualities or characteristics distinctly and specifically consequent to the Anthropocene. The Anthropocene is understood not only in geological terms as a period marked by an increase of Anthropogenic (human-made) effects on climate and ecosystems, but also an ontological shift in human/non-human (see *Non-human*) relations. In the Anthropocene natural cycles are no longer independent from human agency. The scale of the latter has caught up with that of the former. Furthermore, on the one hand, the entanglement of human agency and natural forces in the Anthropocene problematises the standards of realism – the distance between the observer and the observed, the knower and the known. On the other, this condition of the Anthropocene also problematises an idealist notion of discursivity. The concept of *nature* (see *Nature*) socially constructed by Enlightenment thought, given its very own agency by technological development and industrial application, fails to remain in the realm of human discursivity and comes to strongly shape the material, biological, geological, and meteorological Earth system.

The thesis considers how the collapse of material and discursive registers seen to characterise the *Anthropocene* affects the way we can look at animals (see *Animal*). The anthropocenic animal is one for which the distinction between non-discursive Darwinian natural history (see *Natural history*) and a Hegelian dialectical (discursive) conceptualisation of history has collapsed. The animals of the Anthropocene are thus taken to be postnatural (see *Postnatural*) because of the end to the natural

history of animals, in as much as the term *natural* posits the historical condition of animals as being distinct from discursive historicity. The artworks of the Anthropocene might also partake in this postnatural condition. To be an anthropocenic artwork is to be understood not only in the conventional sense of discursivity (i.e., of human cultural significance) but also in terms of relations with non-human worlds. These relations may be extensive or modest. The anthropocenic artwork has something of an antinomy to it. Bearing witness to the Anthropocene the artwork will engage with non-humans as stakeholders, ushering in a multi-species politics for the artworld. However, the alterity of the worlds of other animals presents a barrier to a shared subjective potentiality upon which the status of a given event or artefact as an artwork may rely.

Culture

The term *culture* may be understood to have a range of definitions, usages, meanings, and theorizations. Certain disciplinary contexts may distinguish culture as exclusively a practice and a product of the human animal. Others may view those practices amongst humans that we call cultural on a continuum with certain non-human animal practices (see *Non-Human* and *Animal*). These invite an account of human culture in non-humanistic terms. These also invite an account of human cultural practices from a biological perspective (an ethology of the human animal). Non-human animal culture would thus be subject to the same principles. We may make a distinction here between practices and instincts – as forms of world-building produced by learning and generational transmission, contingent upon local material conditions and know-how, rather than resulting from genetically coded behaviours. A 2011 study of orangutan nest building in Borneo would seem to exemplify the satisfaction of these criteria in a non-human context (Shaik et al, 2011, p.307).

However, the thesis argues for the cultural characterisation of animal worlds according to different criteria than typically apply to a more-than-human ethology of cultural artefact, and of which the

above is an example. The thesis takes the distinction between animal behaviours that may be learnt and animal bodies that are genetically coded as moot within these terms. That is, the distinction between material products of animal behaviour as potentially and sometimes usefully understood as cultural, and certain biological products of ontogenetic processes (i.e., the features of animal bodies—fur, feathers, beaks, wattles) that are otherwise understood as natural. In ethologies of non-human culture, culture (see *Culture*) is distinguished from nature (see *Nature*) along the lines of genetic and non-genetic transmission. However, the thesis takes the realm of the former as so entangled with the realm of the latter as to not make the conception animal culturality upon which it is based useful. We may describe forms of animal making that are not fully genetically determined, as *culture*, but this, granted, non-anthropocentric definition of culture, while extending its recognition to non-human worlds, non-the-less leaves certain characteristics of the nature/culture binary intact.

Mimesis

The thesis uses the term *mimesis* to bridge human representational practices and non-human (see *Non-human*) kinds of image making. It conceptualises mimesis as a process that does not rely on an explanatory language that only either pertain to human or animal representational practices (see *Animal*), but rather identifies it as a more-than-human phenomenon through a common vocabulary. This language both draws on and transforms discourses of mimesis that have been applied to human art (see *Art*) on the one hand— that is, the identification of art with imitation in some sense or another - and non-human, natural historical, phenomena on the other that qualify as imitative. Mimesis in cultural terms is a principle of imitation as central to the role and functioning of art – the production of imagery and representations in art as acts of imitation (Taussig, 2018) - and in natural historical terms is the adoption of strategies of mimicry, illusion and sensory deception by organisms having zoological, botanical, and evolutionary explanations.

We see a nature/culture (see *Nature* and *Culture*) boundary defying use of a concept of mimesis within the legacy of alternative zoology and ethology that the thesis draws upon. These include Uexkull's discussion of web-building spiders as the makers of "likenesses" (2010), and Adolf Portmann's theorisation of animal patterns as having heraldic and expressive content (1967). Or, upon Roger Caillois' interpretation of insect mimicry as "natural photography" (Cha, 2016). Contemporary animal studies scholars make explicit reference to the need for a more-than-human notion of mimesis to explain these phenomena and others, and sometimes as the basis for a more-than-human notion of artistry. Donna Haraway's approach, for example, is to interpret species symbiosis as a giving up of individual identity (2016, p.61), which includes an imitative aspect, and which relates to an anthropological notion of mimesis as becoming other. Alphonso Lingis on the other hand contributes a concept of more-than-human mimesis that equates animal courtship display with art's, or at least artistry's, role in human courtship practices (2006, p.200). Elizabeth Grosz adds further richness to non-anthropocentric conceptualisations of art, representation, and mimesis by recognising that in the elaborate displays of bowerbirds designed to attract a sexual partner, ordinary objects such as leaves, and berries become other when they are transformed into abstract aesthetic elements in a broader visual schema (2011, p.3).

More-than-human politics

The term *more-than-human* is preferred by some commentators over the term *non-human* (see *Non-human*) to characterise animals (see *Animal*), firstly, because it avoids reproducing an ontological divide, where to posit the *non-human* at once implies the category *human* as its other. Secondly, it is useful for establishing a way of speaking about mutualities and commonalities between human and the non-human worlds. Thirdly, the term evokes inclusivity – an acknowledgement that the arts and humanities (the traditional discourses of the human condition) are enriched by the concerns and interests of non-human agencies.

What befits the category *non-human* or *more-than-human* within the posthumanities varies according to the aims and interests of the scholarship. Some new materialist strands, for example, emphasises inanimate matter as having an equivalent agency to humans in a flat ontology - rocks, oceans, machines etc – thus critiquing a natural scientific view of matter as dumb, mute, and passive. The naming of such entities as *more-than-human* avoids the designation *object* or *thing*, that divide the world into to realms - objects and things on one side and subjects and agents on the other (Braidotti, 2019, p.35). Within the thesis the term *more-than-human* is most often evoked to refer to material systems that we call animate - and indeed reflect this characteristic in their naming - *animals*. To refer to dogs, cats, tapeworms, amoeba, and humans with the term *more-than-human* may seem redundant if only a synonym for the natural historical category *animal* – but in avoiding the more familiar term the hegemonic natural scientific concept of animal life, that follows from an underlying concept of the passivity of matter, is circumvented. What is performed by the logical operation ‘more than’ in the term *more-than-human*, is inclusivity with the preservation of difference and heterogeneity. As arbiter of these differences a *more-than-human politics* is thus caused to follow.

The term *politics* has been understood in various ways within diverse fields and contexts. For the purposes of defining the term as it belongs here – politics may be understood, on the one hand, as that aspect of life having to do with group decision making, the recognition of shared or opposing interests, negotiation, agreement, and the resolution of differences. Such processes may be cast in cooperative or adversarial terms. -as involving empathy or altruism, competition, or conflict. On the other hand, *politics* may be understood as how power, status, and resources are distributed. These two ways of understanding politics, when considered together politics (as negotiation and cooperation on the one hand, and the investment of power and status on the other) - raises the central question of the political subject. The granting of the status of political subject is a political matter itself. Political subjects or institutions agree who (or what) counts as a political subject, and thus what entities, agencies or forces belong to a body politic. To gain inclusion in the body politic, is to attain the status of political subject.

Within a humanist framework, the status of political subject, is associated with certain supposed exclusive capacities of the human animal – language, reason, morality (Braidotti, 2019, p.58). A *more-than-human politics* conceptualises a shift away from these criteria. It proposes a political capacity, agency, and cause for representation not reliant on the notion of human subjectivity. The thesis thus sees the politics of animals in these terms.

Nature

The term *nature* has range of referents, senses, and meanings in different contexts. Like the term *animal* (see *Animal*), its usage has an imminent risk of reproducing the very binaries that the thesis takes issue with. *Nature* is a loaded term but let us start with perhaps its most neutral usage, as in such questions as, ‘what is the *nature* of x or y’? In this sense *nature* refers to some characteristic possessed by an entity or phenomenon. But there is a stronger sense present here also in which the nature of x or y is given to be a quality or characteristic essential to it and that could not be otherwise. Furthermore, something’s nature may be taken to be not a characterisation of a particular aspect of it but its overall mode of being. Thus, having a nature accounts for having an identity, and a fundamental differentiation from entities with other natures. We may thus speak of different natures; however, modern thought typically recognises two kinds – human nature and non-human nature (see *Non-human*). This identification of two kinds of nature brings us to recognise a stronger and more loaded sense still – that this bifurcation of nature is fundamental.

Alternately to the sense of an innate or essential characteristic, *nature* is elsewhere encountered in common language as a mass noun – i.e., referring to a range of phenomena that are to be collectively referred to as belonging to that category. Here nature is not something that all things in the world possess but rather that to which only certain things belong. As an ontological category *nature* is that which is not a product of human creation – i.e., plants, animals, landscapes. Here we see a source for

potential confusion in the term *nature*. In the first sense humans are given to participate in a nature to which they belong (although of a different kind to non-humans), and in the second humans and non-humans are divided according to an identification of nature only with the latter. The confusion would be allayed if we simply take the two usages as polysemous (having different and unrelated meanings), however, a deeper consistent ontological structure can be revealed behind the two senses of *nature* as both “inherent quality” and “not of human making”. We can detect in this very inconsistency of usage an ideological content to the concept of nature.

The positing of a “human nature” simultaneous with an exclusion of humans from the category “nature” introduces a cognitive dissonance which only ideology’s mechanisms of disavowal can overcome. Within the literature on the nature of nature are critiques of the ideological content of the concept *nature*. Contemporary anthropologist and sociologist Bruno Latour’s actively excludes the term from his writings, because of its power to reproduce certain divisions, that are seen as unhelpful to thinking about our anthropocenic predicament (Latour, 2004, p.8). Furthermore, contemporary philosopher Adrian Johnston recognises that the term *nature* tends to come (metaphorically) with either a small n or a big N (Johnston, 2006, p.40). Nature with a small n incorporates the two senses already described - as we might refer to things having natures, or as the everyday identification of plants and animals etc. as a category – as relatively innocuous pragmatic usages. However, nature with a capital N, nature as a proper noun, fed by these common usages, seals the meaning of the general concept of *Nature*. The place of nature in Western Enlightenment thought goes further than to only divide human affairs and non-human affairs but assures this division by attributing to it the characteristics of harmony, unity, and timelessness (as something like a modern mythology), against which the post-Enlightenment subject contrastingly characterised by rupture and discontinuity stands. Latour and Johnston agree that *nature* (or *Nature*) is a concept left wanting in the entangled history/nature conditions of the postmodern Anthropocene (see *Anthropocene*). The thesis uses the term with this critical rationale in mind.

Natural history

The thesis understands the term *natural history* in two very different and contrasting ways. The first, the commonly understood way, refers to loosely conceived 18th Century idea that there is a story to be told regarding the origin and emergence of the rich variety of animate and inanimate forms, independent of human-made world, collectively understood in this same context as the natural world. This suspicion that non-human nature (see *Non-human* and *Nature*) has a history rather than being timeless and unchanging, is consolidated and formalised in the 19th Century in Lyellian and Darwinian terms. Within such a framework the geological processes and living processes are understood to partake in a historical unfolding which is mutually evidenced in both fields. Regarding the natural history of inanimate form, the forms of the Earth are understood to be subject to gradual or sudden changes. Regarding the natural history of living form the principle of evolution by “natural selection” accounts for the historical contingency and possibility of change in these forms (Darwin, 1861, p.77). The scale of geologic time is equated with the scale of evolutionary time by the geological record of the history of life – i.e., by the very possibility of palaeontology. Within the structure of Darwinian thought, when the human takes its place (as an animal) in a more-than-human evolutionary lineage, religious distinction between the nature of humans and the nature of animals (see *Animal*) that informed earlier natural histories falls away.

The rarer sense of the term *natural history* used in the thesis originates from the 20th Century sociologist Theodor Adorno. We may trace this sense back further than Adorno, and indeed Adorno finds sources for it in 18th Century German Idealism and Romanticism. *Natural history* in this sense is not a conventional signifier, it does not signify a pre-established signified, but rather a pairing in which the contributing signifiers *nature* and *history* remain distinct, are not resolvable into a final sense, but rather have a dialectical dynamic. Sometimes this meaning (or rather irresolvability of meaning), is translated into English by hyphenating the two terms - precluding the implications of nature as possessive of historicity or history as being natural that are both signified in the common

usage. In Adorno's usage *nature* refers to something's innate characteristics and *history* refers to social and cultural history. With the term *nature* Adorno refers to both human and non-human nature - however it is by no means evident that this *nature* accords simply with a natural scientific account. And with the term *history* Adorno refers to human history in distinctly Hegelian terms - that only humanity is the site historicity proper. However, nature and history couched in this way are subsequently understood in dialectical terms. For Adorno the term *natural-history*, as embodying the dialectic of nature and history, promises the "reconciliation of natural being and historical being" that he considered to be the biggest problem of critical social theory (Adorno, 1984, p.111). The thesis is most interested in the contestation of the concept of natural history that lies between these two usages.

Non-human

The term non-human has been used in posthumanities scholarship to refer to objects of study that are not typically included in the traditional humanities but that merit attention on the grounds of an extension of the methods and tools of the humanities to more-than-human contexts. The attention of the humanities to non-human subject matter includes scholarship on plants, animals (see *Animal*), bacteria, climate, landscape, and machines. The contemporary humanities broadly take one of two approaches to the study of the non-human. One focusses on how the way we see non-human worlds is constructed by human interests and values. It addresses how non-human realms are conceptualised in relation to and in contrast to the human – critically examining how entities and phenomena outside of human culture, society (see *Society*), and history are seen. The other considers non-humans on their own terms, considered not primarily as human social constructions but as ways of being in the world that have a genuine alterity to the human, and deserve to be explored and understood as such. The former approach is unproblematic within the established paradigm of the humanities, but the latter, representing a de-restriction of study to the human world (otherwise evoked by the very name *humanities*) may be identified as a distinguishing feature of the posthumanities.

In practice, within a posthumanities framework, critical (constructivist) and ontologically realist ways of seeing the non-human are typically entwined - and for two reasons. Firstly, because when seeking to engage with non-human others on their own terms the critical approach provides reflective caution to the examination of its findings. Secondly, the two approaches are considered indivisible according to the commitment that the physical emergence of non-human identities and the cultural construction of non-human identities are not ontologically different kinds of processes. Scenarios where there is a high degree of entanglement between non-human and human worlds are witness to an ontological flattening of human and non-human becoming.

The ontology, epistemology, and general attitude towards the non-human of the posthumanities contrasts with that of the natural sciences. The ontology of the natural sciences considers non-human phenomena independently of their social construction, reproducing a strict boundary between naturalistic and humanistic methods. The posthumanities seek an ontology and epistemology that does not. Non-positivistic methods for studying the non-human are thus justified according to this aim and compete with the latter's monopoly on knowledge of the non-human. Before the "non-human turn" within the humanities, the term *non-human* is understood as the sovereign domain of the natural sciences and as synonymous with the term *nature* (see *Nature*)— but upon this transdisciplinary turn the equation collapses. Thus, the use and conceptualisation of the term *non-human* in the thesis recognises three things: That there is no pure outside of the human that may be called the non-human; that the non-human is not synonymous with what the natural sciences understand as 'nature'; and, that art (see *Art*) that adopts this outlook is not limited to considering itself only a human affair but one that can engage with the alterity of non-human others.

Organicism

The term *organicism* is used in the thesis to refer to an aesthetic theory articulated in late 18th Century Romanticism but has both a history prior history and a subsequent legacy. Organicism is a principle for the interpretation and judgement of works of art (see *Art*), but also the aesthetic value of non-art phenomena. In the broadest terms *organicism*, such as we find in F. W. J. Schelling's *Philosophy of Art*, is the principle that the aesthetic merit of both artwork and non-artworks, knowledge of which is given to require aesthetic judgement, is dependent upon a recognition of three related characteristics in the phenomenon. These characteristics are to be seen to inhere in either the object itself or the experience of it. Firstly, aesthetic merit is associated with recognising the quality of wholeness. Though an artwork or aesthetically considered non-artwork may have separate components or elements, to be of aesthetic merit these will cohere into a sense of a whole, a unity, a distinct and indivisible singularity. Secondly, the wholeness and unity of the organicist work of art, or natural object considered within these Romantically favoured terms, is conditional upon the mutual interdependency of its parts. Thirdly, the qualities pertaining to this resultant whole are unity and harmony (Schelling, 1989, p. 86). Such relations between part and whole are considered to prevail in living nature (see *Nature*). Organicism, as a philosophy of art, is the extension of such a principle into art. Romantic works of art aspires to and model themselves upon organisms interpreted thus.

Given this desired equivalence Schelling compares artworks and organisms to identify principles of organicism to be accessed through an aesthetic mode of contemplation of both nature and art. However, Schelling's organicism also differentiates works of human art and works of non-human nature (see *Non-human*) in certain terms. Schelling argues that there is only a homology between artworks and organisms in these terms, stating "the artwork is to the ideal world what the organism is to the real world" (cited in Shaw, 2009, p.64). Organicism is thus seen to operate both on the plane of the "ideal" (i.e., mind, thought, spirit, consciousness) and on the level of the "real" - i.e., the unconscious movements of matter and biological processes. Schelling's equivalence between

artworks and organisms thus also contains a distinction – the former as the experience of harmony between subject and object, and the latter as a materially objective kind of harmony.

The romantic philosophy of art revives and develops European classicism's emphasis on the work of art as the expression of harmony. Furthermore, it leaves a legacy for judging works of art according to how the relation between artworks and organisms is conceptualised. The thesis aims to highlight that any characteristics identified as shared between artworks and organisms, or homologies between them, shapes both our judgements about what an artwork is, can or should be, but also what living organisms are. Any terms of comparison of artworks and organism are seen by the thesis as contingencies influencing both the production and reception of artworks, and an understanding of living systems as forms of production. The thesis challenges organicism as a basis for comparing artworks and organisms but proposes alternatives. The thesis considers the qualities and characteristics of living organisms articulated in and through contemporary art as contrary to organic principles.

Posthuman

The term *post-human* may be understood in two, and in certain respects, contrasting ways. They arise from the application of two distinct contexts by which the concept of humanness, and thus the concept of posthumanness, is determined. The first is to identify the origin of the human as a non-human (see *Non-human*) historical event. From this perspective humanness is equated either with a 'natural' species condition, or a supernatural origin story. Either way humanness is treated as a given, and human nature (see *Nature*) as the outcome of evolutionary processes or divine making. The second way of locating humanness contrasts with and constitutes a critique of the first. It takes humanness neither as a natural historical fact nor as a divine creation, but rather as a social, cultural, and institutional construct. To be human in this second context is to be only nominally human in the

natural historical sense, but properly so in the socio-historical sense. The latter may be dependent upon the former, and have an imminent relation to it, but the two are not merely identical. Although the natural historical characterisation of human species being is determinate (i.e., of bipedal habit, having a large brain to body ratio, being anatomically equipped for a certain richness of vocalisation, etc.), what it is to be human according to a constructivist ontology and epistemology is highly contingent and multiply realisable - dependent upon localised conventions, beliefs, and value systems. The human animal constructs its own image of itself for itself.

The social construction of the human is the lacunae of humanness taken to be an a-historical given. Contemporary posthumanities scholarship is located within the former framework. Its primary interest is the construction of the human that it identifies with the legacy of Western thought. Rosi Braidotti for example traces certain stages of emergence and transformation of this construction in Renaissance and Enlightenment thought. Leonardo da Vinci's *Vitruvian Man* 1490 is seen as emblematic of an exceptionality of the human animal - the human body, rather an ideally proportioned exemplar, serving as the "measure of all things" (Braidotti, 2018). The Enlightenment enhances this construction by identifying humanness with reason, free will and political subjecthood. This legacy of what it is to be human persists in modernity - shaping institutions, the law, social norms, politics, art (see *Art*), and academia. The posthumanities feeling the need to mark this worldview or paradigm with the name of what is constructed most often uses the term *humanism*.

Defining the human as a product of either nature or God, which are both to take humanness as a given, leads to an investigation of the *posthuman* condition as a departure from this given state. Defining the human as a social construction however, with no such givenness, leads to a deconstruction of the concept of the human itself, the practices that reproduce it, and a speculation on how the human animal might construct itself differently. Thus, two kinds of posthumanism emerge, a teleological one that leads the human animal away from its naturally (divinely or prosaically) given condition, and a critical one in which the human is "always-already" (i.e., imminently) posthuman. For the first

the posthuman is the entity formally known as human, that has given up its givenness, its naturally or divinely ordained form. We may identify this first kind with the role of technology that within industrialised society (see *Society*) increasingly augments human natural being – prosthetising biological or God given bodies with unnatural and ungodly powers and sensations. The second kind of posthuman is not of flesh and blood, or metal, but rather an internal construction, a mythology even, for which to be posthuman is to step out of a normative framework, an imaginary and an etiquette. Given that to be human is at once both ephemeral and performative and constructed according to historical vagaries and accidents - i.e., non-totalising - the thesis considers the posthuman to be perpetually nascent within the human.

Postnatural

The meaning and usage of the term *postnatural* in the thesis should be distinguished from a definition it has received elsewhere in animal studies. In some contexts, the term has been used to refer to forms of animal (see *Animal*) and vegetal life that have been manipulated in various ways by humans. In these contexts, the term *postnatural* refers to organisms and environments that have been shaped by humans. Thus, the term *postnatural history* may refer to stories of the domestication, breeding, and genetic modification of plants and animals, as well as anthropogenic effects upon whole landscapes and ecosystems. However, the thesis uses the terms *postnatural* and *postnatural history* in somewhat different senses, in senses aligned with a critical post-humanist understanding of the term *nature*. The thesis employs the term *postnatural* as a compliment and to the term *post-human* to identify a speculative territory beyond the binary of nature/culture (see *Nature* and *Culture*) that is instantiated by an epistemological rift between the natural sciences and the arts & humanities.

The thesis chooses the term *postnatural* to refer to a transformation in the perception of non-human nature (see *Non-human*). The non-human agencies that the thesis is particularly concerned with are

those configurations of matter that we call biological living systems, and even more particularly that we call animals. Thus, the term *postnatural animal* in the thesis refers to a transformation of the perception of animal nature. Whereas the purpose of this term in other contexts has been to distinguish domestic animals from wild animals, the thesis sees all animals as always already postnatural and takes such nomenclature as reproductive of the very division of the world into nature and culture to be resisted.

Psychoanalysis of nature

The *psychoanalysis of nature* takes psychoanalytic tools, theories, and motifs to generate insights about nature (see *Nature*). This project can be seen in either constructivist or realist terms. Nature is psychoanalysable dependent on whether the analysis claims to explain human psychic life vis-à-vis the object of *nature*, or to identify an inherent psychic, or psyche-like, characteristics within more-than-human worlds. On the one hand, for example, a *psychoanalysis of nature* might consider how images of *nature* in visual culture reveal dimensions of the psyche, but on the other might consider *nature* (with realist leanings) as an underlying condition of which more-than-human entities partake, toward which psychic life is de-anthropocentrised, and psychoanalysis legitimately extended.

Having said this a further distinction is needed between psychoanalysis and psychology in relation to the more-than-human sphere whereby the former is not to be taken merely as a sub-field of the latter. Freud, Lacan, and their legacy formulate strong anti-psychological aspects to psychoanalytic theory. Within the scope of the thesis, regarding an evaluation of animal life (see *Animal*) through a psychoanalytic framework - a difference is identified in the aim of a realist psychoanalysis of animals and that of animal psychology. Conventional psychoanalysis, directed at human subjects but anti-humanistic in intent, seeks to overcome the humanistic bias of some psychology. Likewise, animal psychoanalysis can be distinguished from animal psychology within the same terms - the former

seeking to avoid anthropomorphising the animal, and furthermore regarding humanism's particular image of the human.

The term *psychoanalysis of nature* makes an appearance either directly in primary psychoanalytic literature, or in secondary commentaries. It appears as a central but unelaborated concept in Maurice Merleau-Ponty's late work, within a collection of notes assembled under the title *The Visible and the Invisible*, a plan for a major work interrupted by Merleau-Ponty's untimely death (Merleau-Ponty, 1968), and hinted at as a future programme for psychoanalysis in Jacques Lacan's late seminar's in which move away from focussing on the origin of human subjectivity in psychic life, instead invoking a biological cause that must precede and give rise to this moment (Johnston, 2007). Engaging with interpretations of an ontological turn in Jacques Lacan and Maurice Merleau-Ponty, Lorenzo Chiesa (2009), Adrian Johnston (2006) and Elizabeth Grosz (2011) elaborate a contemporary *psychoanalysis of nature*.

The thesis draws on this scholarship that finds psychoanalytic principles within non-human nature (see *Non-human*). But the thesis, taking the constructivist and realist enquiries into non-human worlds as inseparable on a practical level, if not indeed as epistemologically co-dependent and co-productive, or even, on a deeper level, as evidence of a shared ontological origin, understands the psychoanalysis of animals as not an independent pursuit from understanding relations between humans and other animals.

Society

Critiques of a humanistic worldview often evoke a key binary, the first term of this binary is regularly given as to be the concept of *nature*, and as either *culture* or *society*. The binaries nature/culture (see *Nature and Culture*) and nature/society may be used quite interchangeably. As interchangeable terms

of the proposed binary to be questioned reciprocity is evident in which society is considered a necessary precondition for culture, and culture in turn is seen as a material index of social conditions and relations. However, critiques of anthropocentrism favour a critique of either the schema nature versus culture, or nature versus society depending on disciplinary emphasis. It is primarily the humanist concept of society, for example, that is challenged by Bruno Latour, society arising from a contract between the individual and the state, both of which are concepts that emerge in the Enlightenment, and which determines the rights and responsibilities of belonging to society in strictly human terms and contrast to which the natural world is excluded and set apart. The binary nature/culture on the other hand receives non-anthropocentric critique, on the other hand, through the argument that certain kinds of non-human production (see *Non-human*) share qualities with human cultural regimes. Along these lines and specifically regarding animals (see *Animal*) Alfonso Lingis compares animal courtship display with culturally established human forms of courtship. Lingis identifies human 'cultural' and non-human 'natural' forms of courtship display as sharing a ritualistic quality, thus positing ritual as a more-than-human phenomenon (1998, p.200).

Thus, nature may be defined as that which is to be differentiated from society on the one hand or culture on the other. Consequently, critiques of the concept of nature and animals as nature, may take the form of de-purifying the concept of nature as that which is outside of and independent from culture or society, by identifying proto-cultural or proto-societal aspects to non-human animal worlds. Lingus argues for the former from a phenomenological framework in which suspends categorical judgement in the sensory experience of visual cultures of humans and animals, and Latour for the latter according to the inclusion of non-human others within a revised concept of society, put forward as a *realpolitik* for the Anthropocene (see *Anthropocene*).

Theory may attempt to include non-human animals within society, based on some concept of society that is dependent upon stakeholders and beneficiaries having the characteristic of sociality. Indeed, we observe animal ways of life and collective behaviours that are strikingly analogous to what in

human terms we call sociality – i.e., communication between members of a group, cooperation to achieve some shared goal, shared terms for constructing a meaningful existence, and with more disciplinary rigour than such casual observations ethology studies systems of signification in which sociality plays a key role in shaping the animal's world. However, to identify animal sociality as a pre-condition for participating in society, re-imagined non-anthropocentrically – and therefore, given that society is a precondition for culture, as the basis of a productive capacity within a more-than-human cultural sphere, excludes non-social animals from both domains.

Chapter summary

Chapter 1 Contested Animal Bodies opens a consideration of the postnatural animal by identifying a range of challenges to a dominant conceptions of animal nature. The dominant conception of animal nature within modernity is identified with the dualism of Rene Descartes which performs a division between human and animal nature, as a division between that which participates in the realm of the spirit and that is solely identified with a mechanistically conceived materiality. The natural sciences are a legacy of this division, and the life sciences in particular the elaboration of its mechanistic image of animal life. The challenges presented within this chapter are unified in contesting this mechanistic conception of animal life. They do not come from outside modernity but are born of modernity itself.

The chapter begins by giving a historical account of the conditions for the emergence of the mechanistic view of animal life in 17th Century Europe, and how this becomes hegemonic in the 18th Century. Its establishment is attendant to the worldview of Enlightenment as seen to originate from Descartes' philosophy. Having associated an image of mechanistically determined animal life with Enlightenment thought the chapter proceeds to identify a reaction to it that comes at the end of the 18th Century and belongs to what historians of the humanities have come to term the Counter-Enlightenment. The Counter-Enlightenment challenges presented are those of German idealism

influenced by romanticism. F. W. J. Schelling provides the focus for such philosophical articulations of romantic contestations of animal nature. Against Cartesian dualism Schelling sees in animal life forces that exceed mechanistic description. Rather than being seen as automata, Schelling indeed sees animal as participating in spirit - as embodying generative, creative and vital forces.

Continuing a historical journey, the chapter proceeds to trace a legacy of this original battle between the Enlightenment and Counter-Enlightenment through the 19th and 20th Century. Indeed, it sees this battle as contributing to defining what is at stake in contestations of animal life that are to follow. Here the Hegelian-Marxist critique of Enlightenment by Theodor Adorno is seen to inherit the romantic resistance to the mechanistic view of nature for the 20th Century and to bring it into the frame of social theory. Through Adorno the idea of nature that began in the Enlightenment was felt powerfully in the present and served the continuing “domination of nature” in modernity. The contemporary commentator Oxana Timofeeva is shown to particularly consider Hegelian-Marxist notions of revolution as a liberation from such domination, particularly in relation to animals.

Moving into the 19th and 20th Century the chapter considers the emergence of the modern life sciences as a development and consequence of the Cartesian split and as transforming but also perpetuating the mechanistic image of animal life. The animal not now a simple automaton but rather a self-organising machine. The 1859 publication of Charles Darwin's *On the Origin of Species* becomes foundational to defining the terms and criteria of the emerging life sciences and central to establishing clear epistemological limits through which animal bodies and behaviours can be seen. Here two figures are introduced who engage with but find wanting the view of animal life of the Darwinian life sciences. These figures are Adolf Portmann and Roger Caillois. In different ways Portmann and Caillois are shown to challenge the Darwinian account of animal life. Portmann to be seen to inherit a romantic critique does so by appealing to a vital principle, but in the terms of his background in zoology. The denial of animal interiority reserved only for humans in a mechanistic account Portmann challenges with his argument that the outward appearance of animals (particularly “higher animals”)

is expressive of interiority and has some degree of freedom from organic function, that is all that the Darwinian mechanism of natural selection would recognise in animal form. Caillois is shown also to challenge the reduction of animal bodies and behaviours to the functional account of natural selection but through very different means. In an anti-Cartesian spirit Caillois is shown to extend the new human science of psychoanalysis to the animal realm. The chapter recounts Caillois' recognition of a more-than-human neurosis in certain animals that for him attests to the presence of an anti-Darwinian anti-survival instinct in nature.

The chapter ends with a reminder of the terms of the overall thesis that nature as a whole and animal nature in particular is to be seen as a social, cultural and historical construction - that particular constructions may dominate but that others certainly exist. This reminder is given by introducing and proposing an anthropological framework by which we might grasp and map the territory of the contested animal body and contested animal life. And indeed, within which the contestations between mechanistic and anti-mechanistic views of animal life may be framed. Phillipe Descola anthropology of animals is key here. Descola is shown to map out four worldviews by which animals are perceived and indeed treated in very different ways. The mechanistic worldview is only one of these. Thus, Descola assists to contest the animal body by reinforcing the relativity and constructedness of animal nature in modernity. In this initial chapter thus the prospects for thinking the postnatural animal is introduced as a contestation of the natural animal of Enlightenment modernity.

Chapter 2 *Art as Animal, Animal as Art* returns to figures within German idealism to show that where it was strongly associated with romanticism a broad theme of resistance to the mechanistic view of nature was seen to relate to the project of re-enchanting nature. A certain kind of modernity was considered to empty nature of any innate meaningfulness. The Cartesian dualism of modernity ejects the world of non-human nature from the world of meaning, by conceiving of it as a blindly operating machine. The romantic disposition wanted to reverse this situation, and for them the natural world was to be reconceived as innately symbolic. Indeed, for them everything in both nature and culture

participated in symbolic meaning and symbolic life. By the romantic emphasis upon aesthetics as a form of knowledge and as a means of access to the symbolic realm, art had a central importance. Indeed, an artistic sensibility was so central to re-enchanting the world, nature is re-encharnted by seeing it as art.

Thus, the chapter comes to a central strategy of romantically inclined German idealism which is to justify seeing nature as art by the active comparison of the characteristics of artworks and works of nature. Furthermore, certain phenomena within nature are particularly conducive to this comparison, and to indeed define the very terms of it. One such case in point is the comparison between artworks and living organisms. The chapter takes as an example of such comparison the writings of F. W. J. Schelling and Immanuel Kant. What permits such comparisons in these examples is given to be a certain emphasis of these thinkers on the desired organicity of art - romantic art as aiming to be an equivalent of natural organicity. Artworks and organisms are compared by their shared organic unity, harmony, autonomy and purposiveness, and by these qualities are considered equivalents in the realms of nature and culture.

The chapter proceeds by considering that within contemporary art, in the phenomenon of bio-art, artwork and organism become literally and materially equivalent. The chapter considers the meaning of the literal identity of organism and artwork in bio-art in the context of the philosophical equivalence of artworks and organisms in romantic German idealism. It analyses how in some senses the romantic aim of re-enchanting organisms by comparing them to art is realised in bio-art, but also how these aims are problematised when taken literally.

The conclusion of the chapter explores how the proposition of living organisms as art, or as components of artworks, accords or does not accord with romanticism by inverting the reading of contemporary bio-art as romantic, and rather to read a romantic work of art as if it were bio-art. For this exercise Samuel Taylor Coleridge's poem, *The Rime of the Ancient Mariner* is imagined as if it

were a bio-artwork. It is given a treatment that transcribes it into a proposed bio-artwork. Of consideration is what becomes of the famed albatross if it is imagined to be a living animal participating in a bio-art transcription of the poem. The result is to highlight certain limits to both the claims of the equivalence of artworks and organisms of romanticism and the limitations of bio-art to embody these claims. The chapter thus arrives at an identification of the how bio-art by its very form might deconstruct certain romantic conceptions of animals. It contributes to developing a characterisation of the postnatural animal by seeing the romantic equivalence of artwork and animal as a means of rescuing the animal from the fate of being seen as natural, where to be natural is to conform to the image of the natural sciences. Analysing the means of bio-art in relationship to the aims of romanticism certain possibilities and problems of the postnatural animal in contemporary art can be seen to emerge.

Chapter 3 *Display and Excess* returns to the contestation of the mechanistic view of animal as a contestation of Darwinism introduced in Chapter 1, and subsequently relates this to the endeavour introduced in Chapter 2 of liberating animals from a naturalistic explanation by considering the animal and aspects of animal life as art. It particularly focusses on animal display behaviours (particularly visual display) as phenomena that defy a Darwinian account. The chapter identifies there to be certain qualities of excessiveness in animal visual display that attest to principle shaping animal bodies and behaviours and that indeed exceeds a Darwinian account.

The chapter starts this story of animal display as excess with Charles Darwin's own doubts that the variety and extravagance of forms of animal display that he sees in the natural world seem to contradict a survival principle and the law of "adaptation by natural selection". He particularly identifies animal courtship display as seeming to be in excess of the strict economy of natural selection. Darwin speculates that the presence of sex in animal worlds results in a "tug of war" between natural selection and sexual selection, where the latter cannot be simply considered an aspect of the former, but indeed works against certain central tenets of Darwinism.

Contemporary scholar Elizabeth Grosz, who has been associated with new materialism (Coole and Frost, 2010), takes Darwin's identification of sexual selection with an excess in nature to develop further claims. The chapter articulates Grosz's proposition that the sensorially rich and exuberant forms of animal sexual display, as attesting to a certain excess above and beyond a mechanistic account, permit us to identify the presence of creativity and spontaneity in non-human nature. Identifying courtship display as a phenomenon to be seen as the diversion of excess sexual energy into aesthetic production Grosz sees it to be comparable to human art upon a Freudian conception of art as a "sublimation" of sexual energy.

The chapter then turns to a second framework (related to the first) through which we may see animal display as embodying an excessiveness by which it becomes a genuinely aesthetic phenomenon. Here we turn to the interpretation of biologist Nikolaas Tinbergen's finding on animal behaviour by the contemporary Deleuzian Brian Massumi. A mechanical account of animal behaviour may rely on a notion of animal instinct as fixed, indeed the notion may be synonymous with the concept of animal nature. But what Tinbergen found was that animal instincts have a universal tendency to exceed the strict needs of survival. Tinbergen identifies a principle of excess pertaining to animal behaviour in his discovery of the "super-normal stimulus". Animals are shown to respond to certain artificially created stimuli more powerfully than the natural stimuli they normally encounter. Brian Massumi sees in Tinbergen's identification of excessiveness in animal behaviour further grounds for considering the presence of art and the presence of aesthetic experience in animal worlds. The super-normal stimulus reveals the presence of spontaneity and autonomy in animal worlds. And the animal's response attests to an affective principle of intensification that qualifies it as an art experience within Massumi Deleuzian framework.

The chapter concludes by returning to Adolf Portmann's theory of self-presentation, that was previously introduced in chapter one, to expand on its consequences for an understanding of animal visual display as excess. It relies on art theorist Bertrand Prevost's reading of and development of

Portmann. Prevost focusses on Portmann's radicalisation of his theory of animal self-presentation his later work in which he proposes animal appearances to have an expressiveness that goes beyond even their function as display. Portmann identifies certain animal patterns and colour as expressions of self-possession that are not aimed at any receiver. Here there is a pure expressivity in animal bodies that Prevost subsequently relates to the expressivity of art.

The chapter thus introduces the uses of the life sciences by Grosz, Massumi and Prevost, as ways of accessing, discussing and identifying animal display a phenomenon in animal worlds that eludes a Darwinian image of animal nature. It does so by identifying animal display with three kinds of excess - sex as excess, behavioural excess, and expression as excess. Animal display furthermore is proposed as having a relation to the excess that is art. Proposing that animal display may no longer be seen as natural because embodying principles of excess by which animals have cultures of art making and reception is presented as one way of conceiving the postnatural animal.

Chapter 4 *Mimicry and Mimesis* troubles the distinction between cultures of human image making and non-human visual regimes in a second way. And like the previous chapter with the aim not of superimposing given theories of human image making and art unchanged on the world of animals but to transform these theories through an encounter with more-than-human worlds. The chapter makes a challenge to the division of nature and culture, and thus to the concept of the natural animal, in ways that evoke forces in animal life quite opposite to those of the preceding chapter. With reference particularly to the work of 20th Century surrealist writer Roger Caillois and ethologist Jakob von Uexküll it identifies a certain qualified negativity in animal worlds. It presents a proposed negativity of relation between organisms and environments to be another way of understanding anti-utilitarian agencies in animal worlds. Through Caillois and von Uexküll the chapter challenges a distinction between animal and human representational practices, that might otherwise take the form of a distinction between mechanical mimicry and affective mimesis.

The chapter reviews Roger Caillois' 1934 essay *Mimicry and Legendary Psychasthenia* as a proposition of a proto-psychic dimension in animal life. In it Caillois identifies insect mimicry as evidence of such a non-human psychic dimension, and furthermore as expressing a negative dimension to that psychic life. For Caillois the phenomenon of mimicry (taking a most extreme and dramatic form in insects) is a psychosomatic effect of a non-human form of psychasthenia (in modern language – schizophrenia). For Caillois, the perfect disguises of insects represent a quasi-psychic drive of dissociation and loss of self. Contemporary commentators Rosa Eidelpes explicitly identifies insect mimicry in Caillois to be open to aesthetic description by this feature of negativity.

The chapter then proceeds to consider a less direct kind of mimicry to be found in a much broader range of animal worlds. Here it draws on the writing of 20th Century ethologist Jakob von Uexküll. Uexküll asserts that in animal predator/prey relations there is to be recognised a relation of similarity without resemblance. In his example of the spider and the fly the spiders web, and indeed the spider itself is “fly-like”, not because it resembles the fly but because it must follow the abstract schema of the fly in order to catch it. The chapter sees a resonance between this claimed similarity without resemblance of the spider to the fly and ideas from anthropology that considers certain human ritual mimetic practice to involve an internal transformation rather than a transformation of external appearance. Uexküll's spider's behaviour is thus taken to be an example of acting, and as such the presence of art and artifice in the non-human sphere.

The chapter concludes by proposing that this notion of non-human mimesis may be related to the ecological concept of symbiosis. It seeks to build on another scholar associated with new materialism, Donna Haraway's argument that the symbiotic way of thinking, being and acting is central to multi-species responsibility in the Anthropocene. It does so by proposing that symbiotic relations are mimetic relations, and that these symbiotic-mimetic relations can be seen to pertain to a very wide range of ecological connections between species. It proposes symbiotic relations as a space for the emergence of non-anthropocentric art *as* mimetic relations.

Proposing a strong definition of mimetic practice to animal worlds, a sense that is associated with art, the chapter thus invites mimicry and mimesis in animal worlds to be seen within the terms of art. As such the recognition of mimesis as the presence of artifice in animal worlds provides further term for challenging the designation of animal life as natural. Whether as Caillois' neurotic mimicry or as an interpretation of Uexküll's spider as engaging in a transformative mimesis, the symbiotic, mimetic more-than-human animal is proposed to be postnatural (inversely characterised to chapter 3 but equally resistant to a mechanistic image) by entering into a condition of negation of self-possession.

Chapter 5 *The 'Idea of Natural History' in the Work of Pierre Huyghe* approaches the characterisation of the postnatural animal and the argument that animals are to become postnatural as art through a case study of this influential contemporary French artist. The chapter takes and evaluates Huyghe's output of the last nine years as an exemplar of the postnatural animal in contemporary art. The chapter makes this claim by making a particular interpretation of Huyghe's work and framing it by a specific concept that facilitates a postnatural reading.

Huyghe is known for creating sprawling installations, that establish interactions between natural systems and artificial constructs. Living animals often feature as elements within the work. The chapter submits Huyghe's works to an interpretation through the ideas of Frankfurt School sociologist, philosopher and art theorist Theodor Adorno. It particularly considers them through Adorno's "idea of natural history" outlined in his essay of the same name from 1932. Adorno's use of the term natural history however is not the usual one (i.e., the history of the natural world) but rather expresses a conflation of human history and non-human history – a conflation that refuses the difference between the "the symbolic and the biological" (Adorno, 1984, p.113). Adorno's idea of natural history thus aims at reconciling, in form and in content, the opposing forces of nature and history with the aim of overcoming the division of natural being and historical being.

The chapter argues that Huyghe's installations can be understood as exploring such an idea, and to explore it through two related themes that indeed Adorno took to be central to the reconciliation of nature and history. The first is the theme of the ruin. Huyghe's works often allows animal agencies to take over and transform human-made spaces and objects. As such it speaks the language of ruins but also re-invents and transform the meaning of ruins. Adorno (and here Walter Benjamin's contribution is also posited) proposes a way of looking at things as if they were ruins to be central to an understanding of history as nature and nature as history. The quality that reveals itself in ruins, that nature and history share, and that thereby may promise their synthesis is "transience" (Adorno, 1984, p.116). Within the chapter Huyghe's works are shown to draw attention to the transience of states of matter and states of experience and thus equate to Adorno's project.

The chapter goes on to argue that Huyghe's practice furthermore meets Adorno's related and additional call for how the relationship between history and nature should be seen specifically in modernity. For Adorno what is special about modernity that it is an unfinished project. The very state of modernity is seen as one of discontinuity, rupture and incompleteness, but also the promise of something yet to come. Adorno argues that nature is to be liberated from a conception of it as timeless and fixed (a conception he considers to be complicit in the domination of nature) by being seen, like modernity, as incomplete. The chapter argues that Huyghe's installation, by setting up feedback loops between biological and technological systems, create the possibilities for nature to produce novelties.

By a reading of Huyghe's installations as ruins the conflation of nature and history is seen to be brought about. The concepts of nature and history dissolved in this conflation, the animal inhabitants of these installations may be read as postnatural (and indeed post-historical). By reading Huyghe's work as an experiment following Adorno's call for the liberation of nature as a call for living systems and organisms to be seen as unfixed in their nature and as "promising a nature to come" (Adorno, 1984, p.120) the chapter ushers in another reading and characterisation of the postnatural animal.

Chapters 6, 7, and 8 together constitute an extended evaluation of the contribution of the author's own art practice to knowledge of the postnatural animal and to the aims of the thesis. These chapters describe, analyse and situate the author's practice in relation to some of the characterisations made of the postnatural animal in the preceding chapters. The description, analysis, contextualisation and evaluation of the body of work is made under three overarching themes - animal surfaces, animal encounters, and animals and modernism. The aim here is one of focus and to examine the practice under key concerns. The identification of these concerns has emerged from the practice - from the work speaking back to the aims. Divided into these three themes, the pieces in the body of work are occasionally discussed more than once. This particularly applies to the piece *Dappled World* which is thus presented as having multiple concerns. There is intended to be a development in the order with which the works are introduced, and in the chosen thematic structure.

Chapter 6 *Animal Surfaces* evaluates pieces within the body of work specifically according to the presence of animals in the work, and particularly how both the physical and visual dimensions of animal surfaces are handled, transformed and explored. Animal surfaces in the work are discussed in relation to a double aspect –as both visual surfaces and physical surfaces. The physicality and visuality of animal surfaces are in turn considered according to four themes - *interrupted animal surfaces*, *dislocated animal surfaces*, *slippery animal surfaces* and *animal surfaces as dappled worlds*. Through these subthemes the work is permitted to be discussed in ways that relate to the theoretical conceptualisation of postnatural animal bodies in the thesis.

The chapter considers the works *Continuity and Discontinuity*, *Cat in a Lecture Theatre*, *Untitled (Horse)*, *Heraldic Restraint*, *Untitled (Dog) (Installation)*, *Untitled (Dog) (digital photograph)*, and *Dappled World*. How these works embody (or fail to embody) aspects or characteristics of the postnatural animal as identified in the thesis is considered. Under the section *interrupted animal surfaces* the mixed media work *Continuity and Discontinuity* is described and evaluated as an attempt to visualise the animal body against the conception of the animal as a unified, harmonious whole. It

is seen to be able to construct this image through technological means – the piece having an object-based element and a projected light element. The fragmented nature of the objects and the smooth and continuous nature of the projection are judged as having a contradictory aspect, conveying wholeness and brokenness at the same time, an effect that is evaluated as a challenge to aesthetic organicism. *Cat in a Lecture Theatre* (Figure 2) is described as an experiment relating to the first, that again uses projection to create a different kind of interruption of animal organic unity. This video piece captures the incidental collision of a living animal body with projected images. The animal's markings and the projected images contrast in quality and interact to produce a further visual effect. This effect is evaluated again in terms of how the organicity of the animal's surface is interrupted.

A shift from a focus on the visibility of animal surfaces to their physicality takes place with an analysis of the works *Untitled (Horse)* and *Heraldic Restraint*. These works are considered in terms of how they are intended to articulate the resistance of animals to playing the role of symbols in anthropocentric forms of meaning-making. The works are described as articulating the slipperiness of animal surfaces to forms of physical control. They are evaluated for their success (or otherwise) in articulating the oppression of turning animals into symbols and in enlightening an understanding of relations between animals and meaning. Subsequent to this theme but continuing with it the unresolved work *Untitled (Dog) (Installation)* which is evaluated as highlighting a contradiction between the aims of the work to liberate animal nature through bio-technological entanglement and the practical reality of the attempt. The piece is evaluated as a failure, but an interesting one because in it the slipperiness and imperative of physical autonomy of the living animal indeed proves to be the very undoing of the artwork. The last piece to be discussed in the chapter is the more developed video work *Dappled World*. It is evaluated in terms of how it takes the variegated patterns of animal surfaces as something like a map for a proposition that rich environments are dappled by virtue of their being inhabited by multiple species. The evaluation of this final piece in the chapter is made according to the argument that animal patterns convey not just a visual richness but an ontological one, and that animal surfaces express the animal's irreducibility to homogenous, mechanical matter.

Chapter 7 *Animal Encounters* considers the work *Dappled World* for how it attempts to articulate the alterity of animal worlds such as may be recognised in the writings of Jacob von Uexkull explored in *Chapter 4*. Quotes from the contemporary eco-critic Timothy Morton serve to speak in the spirit of von Uexkull particularly upon the theme of what becomes of space if conceived in multi-species terms. Following an outline of the rationale for this work's (and others') use of intertextual references *Dappled World* is evaluated under two themes – *spatial flexing* and *spatial dislocation*.

The chapter starts by considering the role of intertextuality in the body of work. The works reference to existing cultural artefacts, as is also the case in Huyghe's practice, is described as a strategy for blurring the boundary between reality and fiction. The works cited here are *Dappled World* and *Come on Kes*. A rationale is given by which the medium of video serves as a speculative space in which animals enter novel relationships with the quoted cultural artefacts, and the space of video becomes a multi-species intertextual space of production. The attention then moves specifically to an evaluation of *Dappled World* in terms of how it aims to communicate a particular postnatural conception of space. The presence and articulation of the theme of dappledness is considered as a way of conceiving of multi-species spaces - particularly here the shared space of animals and human. The piece is evaluated in terms of how it communicates the heterogeneity of multi-species space as a resistance to the homogenous image of animal space that comes with the objectification of the life sciences. The extended evaluation of *Dappled World* continuous, whilst referencing another developmental work *Untitled (Elk)*, in relation to the subthemes of *spatial flexing* and *spatial dislocation* - themes which identify characteristics of non-anthropocentric space. *Dappled World* is evaluated in terms of how it embodies these characteristics. The chapter concludes by considering *Dappled World* as a work that presents and interprets an entanglement of human space and the diversity of non-human spaces. The success of the work in articulating a spatial competition that dislocates and bends space and in which animals have power and agency is evaluated.

Chapter 8 *Animals and Modernism* considers the intertextual referencing within the body of work to modernist artworks. Upon a particular and literal interpretation of Theodor Adorno's call to liberate nature from the Enlightenment concept of nature as fixed and timeless by relating it to the unfinished project of modernity, and which furthermore Adorno saw embodied in the avant-garde experiments of early 20th Century modernism, the works discussed in this chapter put animals and modernist art into a direct relationship. (that the thesis understands as a way of conceiving the animal postnaturally). The video works *Come On Kes*, *Ioganson Bird Table* and *Rodchenko Bone* collide animal worlds with emblems of modernism. The subsequent effect is evaluated. As well as being inspired by Adorno the approach is informed also by works of Huyghe that choreograph interactions between animals and significant historical artworks. The strategy here is interpreted to meet the distinct intentions of the author's practice described in the chapter and discussed in relation to these aims.

The chapter considers the three works according to the three themes *multi-species modernism*, *multi-species ruins* and *re-animating modernism*. It begins under first themes by evaluating the video work *Come On Kes* as an interpretation the author makes of landmark animal experiment from the 1960s into the visual perception of cats by the Harvard neurobiologist David Hubel and Torsten Wiesel. What is of interest to the author in these experiments is the resemblance of the visual stimuli used in them to elements in modernist art, most obviously perhaps in the 1920s paintings of Kazimir Malevich. A speculative interpretation is made of Hubel and Wiesel's work that does not respect the disciplinary limits of neuroscience and that points to a curious affiliation between an icon of modernist painting and animals. *Come on Kes* speculatively transforms the relationship of the bird of prey and the boy in Ken Loach's film 1969 film *Kes* into another encounter between an animal and the language of modernist abstraction. The work is evaluated as to what this transformation reveals about animal worlds. The chapter then turns to an evaluation of a second video piece *Ioganson Bird Table*. The discussion particularly focusses on how it might fit within the theme of the ruin and how, according to a particular logic within the thesis, the postnatural animal may be identified with the language of ruins. The work is evaluated furthermore in terms of how it attempts to visualise Modern

Art in ruin as a state in which there is an emergent relationship between modern art and animal life. The chapter concludes by examining the final video work *Rodchenko Bones* according to the quality that is intended to emerge in it from the relationship between a sculptural form, the movement of animals and additional CGI elements. The outcome is judged in terms of how it questions the nature of animal agency and human agency. It is evaluated for its effect of re-animating and re-enlivening an artefact of modernism through the presence of animals. The three works in the chapter are thus examined as speculations on the postnatural animal's refusal to be part of nature but to invent its own cultures and futures upon the relics of modernism.

1 CONTESTED ANIMAL BODIES

When Mr. Fichte lets six horses be put before his wagon and rides ‘as if he had had 24 legs’, has he really animated these 24 legs through his rational purpose or has he not rather restricted their natural vitality? (Schelling cited in Flodin, p.178).

Introduction

This chapter tells a story about the status of animals in modern thought. It is concerned with identifying points of contestation in the perception and understanding of animal life. The contest that it describes is between a mechanistic understanding of animal life, on the one hand, and an anti-mechanistic one on the other. The arguments here are between a deterministic understanding of animal life as dominated by efficient causes and one that grants animals certain forms of autonomy, creativity and spontaneity. The philosophical grounding for the mechanistic view may be seen to originate in the Enlightenment thought of the mid-17th Century. This view of non-human life articulated most prominently perhaps in the philosophical system of René Descartes (Hatfield, 2008).

In this chapter we engage with a series of contestations to this Cartesian view on a historical timeline. The first of these counters may be seen to be present in the late 18th Century and early 19th Century philosophical movement of German idealism and a movement within the arts that is closely connected and related to it - romanticism. As advancing certain challenges to the Enlightenment thought of the 17th and 18th Centuries historians of the humanities have come to identify these movements as part of a Counter-Enlightenment (Berlin, 1998). As representative of Counter-Enlightenment views of animal life here we particularly discuss F. W. J. Schelling. Schelling assails the mechanistic philosophy by positing a vital force in animal bodies.

Subsequently, both Enlightenment and Counter-Enlightenment thought may be seen to be inherited in 19th and 20th Century thought. The former as the rise of increasingly hegemonic scientific naturalism (as well as an attendant philosophical support for the natural sciences), and the latter as a critique of aspects of the former. Formulating a systematic critique of Enlightenment thought in the mid-20th Century and influenced by both romanticism and German idealism are Max Horkheimer and Theodor Adorno. For Horkheimer and Adorno the Enlightenment loses its way by straying from its virtuous principles of reason into a corrupted form of “instrumental reason”. This instrumental turn, as a turn to the “domination of nature” is seen as catastrophic for the living world, including animals (Horkheimer and Adorno, 2002).

The new mechanistic evolutionary account of animal life by the life sciences attracts fresh counter arguments in a range of material in late 19th and 20th Century thought and practice. Among these are movements in art, literature, and philosophy, but also challenges to the life sciences from within the disciplines themselves. The two counter-Darwinian stories told here (from among those that could be told) are those of Roger Caillois and Adolph Portmann. They present two very different strategies and disciplinary frameworks through which the Darwinian account of animal forms and behaviours is put to a challenge. Caillois by reinventing natural history in a hybrid of science and literature, and Portmann by evoking romantic ideas of animal organicity and expression from a background in zoology.

The contested status of animals, and the competing characterisations of animal life to emerge in the discussion are thus framed as a contest between mechanistic and non-mechanistic views of animal life. To go further along this path, we now take on an anthropological framework. We consider the various thoughts we might have about what characterises animals from an anthropological analysis. Within this framework both literary and scientific statements about animals may be equally understood as statements of *belief* about animals. Such an anthropology is an “anthropology of nature” – the analysis of beliefs that different groups of people have about the world of non-human

forces, agencies, and entities. To see that such beliefs typically say more than just what non-human animals are, but also provide the means for understanding relations between humans and animals is subsequently explored.

A key figure in recent anthropology concerned with the perception of animals is Phillippe Descola. Descola's theory of "modes of identification" (Descola, 2013) here helps us to place the contested animal body within debates about the status of the concept and experiential judgement of what is nature and what is culture, the distinction between the made and the un-made, and the non-necessity and relativism (in anthropological terms) of these judgements. Descola frames scientific naturalism thus as a culturally relative phenomenon, contrary to the universalist and realist claims of science. The animal body in modernity is contested according to what counts as nature and what counts as culture, or even as the very fundamental claim of this dichotomy.

1.1 Enlightenment and Counter-Enlightenment animals

An early contest over the status and characteristics of animal life in modern thought arises within the context of the increased instrumentalization of life in a system of industrial production in the Europe of the late 18th Century. Within this context, the Industrial Revolution is identified as the event of the systematized harnessing of natural forces, including those embodied by animal life, on a previously unprecedented scale. The philosophical justification for this state of relations between humans and animals may be identified with a certain version of Enlightenment thought, of which René Descartes paves the way. Certain reactions to these conditions are what historians of the humanities have come to term the Counter-Enlightenment. Among these are romanticism, and romantically oriented aspects of German idealism.

As the arguable origin of a certain mechanistic vision of animal life René Descartes' dualism, a particular division of the world into matter and spirit along strict human/non-human lines becomes an implicit or explicit target for the romantics and thinkers romantically inclined. Permitting a strict division between the realms of matter and spirit Descartes' brand of dualism becomes the rationale for the modern division of the sciences of the spirit and the sciences of matter (Hatfield, 2008). Indeed, we may see this division as the very condition for the emergence of the natural sciences. Spirit being the exclusive domain of the human, all that is non-human receives its description under the sciences of matter. Descartes' dualism makes both the image of a mechanical nature and human exceptionalism add up to a coherent and consistent worldview. This worldview is typically understood as that which subsequently becomes hegemonic as the European Enlightenment of the 18th Century.

However, it would be misleading to say that such a worldview is born only of metaphysical argument. Serving to aid the imagination in seeing nature as mechanical in Descartes' time is also the technological context of the mid 17th Century. The mechanical worldview emerges from a context in which the concept of a machine presents itself as intelligible and furthermore as having certain characteristics. The reconceptualization of nature as machine may be seen to be a product of changing technological conditions of the mid 17th Century. Indeed, animal nature may be seen to serve as the most conducive vessel for this reconceptualization. Von Guericke's air pump, Huygens' pendulum clock and Pascal's adding machine (to name but a few of the inventions of Descartes' time) served both as exemplars of what machines are and cyphers for understanding animal life as machine-like. In an argument by analogy, the breathing, ticking and turning of machines of brass and steel are compared to the actions of animal. Animal habits are subsequently seen as so many machine-like processes, and animals become exemplars of natural machines (Harrison, 1992)). The animal machine is born. The concept of animal as machine, and more broadly nature as machine, thus arises from historical conditions but subsequently comes to be a necessary concept for the possibility of the mechanistic worldview of the Enlightenment.

Central to the Enlightenment project was the task of giving an account of physical nature according to the “laws of nature” (Bristow, 2017). These laws included Newton’s laws of gravity and motion. As Catherine James notes, Newton’s discoveries “were seismic for both science and society. For the first time artisans could predict mechanical forces accurately, and as a result terrestrial mechanics was institutionalised, laying the foundations for the Industrial Revolution” (James, p.24). Such laws and principles, by their predictive and abstractive powers, led the way for advanced technologies for the extraction of value from natural resources - from the labour of farm animals to the energy of rivers. The conceptualisation of animals as machines was conducive to the integration of animals and technology in the 18th Century, where this integration served agricultural and industrial productivity and efficiency, by bestowing on animals and mechanics a shared language. The term “horse engine” for example is given to a contraption of the late 18th Century that translates the work of draft horses into the turning action of a metal shaft, implying that the animal is a component in the machine. A mid-18th Century drawing of a steam driven mill reads like a Newtonian system of forces diagram with a horse at one end bringing the coal and a man at the other taking away the product. Both animal and human serve the Newtonian mechanism.

The first waves of the industrialisation of society of the 18th Century, as representing both a certain practical instrumentalization of nature, including living nature, and a conceptual reduction of non-human nature to mechanical determinism, finds itself under attack from many sides. Prominent here is romanticism and philosophical positions associated with it. Striking anti-mechanistic articulations of animal life are made by the thinkers of German idealism of the late 18th Century. These thinkers, seeing the material consequences of the mechanistic philosophy manifested and realised as the Industrial Revolution typically look backwards to before Descartes for inspiration, drawing on concepts of nature and animal life present in European thought and culture prior to this turn. Both resuscitating and reinventing these concepts according to particular interests and prerogatives. In the more romantically inclined forms of German idealism nature (including animal nature) is to be re-enchanted. Regretting the loss of what they saw as the inherent meaningfulness of nature in pre-

modern societies, the impoverishment and damaged experience of non-human nature in the context of the Industrial Revolution is seen as such a disenchantment (Berlin, 1998).

We may also understand, as the German idealists did, the claim of a mechanical nature as a claim for the absence of freedom and free will in the non-human realm. Understood through the binary of freedom and necessity both Hegel and Schelling speak against such causal determinism in nature, and particularly in relation to the status of organisms. Against a purely mechanical view of nature as solely subject to efficient causation and determinism Hegel and Schelling, according to Alison Stone “maintain that nature contains an element that already transcends the material efficient causal domain”. Schelling and Hegel thus challenge the strict Cartesian identification of the realm of the non-human with determinism and therefore unfreedom. For both, furthermore, it is in the realm of living nature (organisms) that freedom (in this metaphysical meaning of the term) emerges. Thus, the view of human freedom that Stone attributes to Hegel, as having the character of “acting from a law of one’s own” is a “further elaboration of the self-organisation that characterises organisms generally”. Despite transcending the realm of efficient causation, the freedom that is indeed nascent in more-than-human life “doesn’t [however] require powers that transcend nature” (Stone, 2013). This is a relative freedom.

As an exemplar of German idealist contentions to mechanistic and deterministic thinking about animal life we turn to Schelling. However, allegiances in this project and commonalities of approach may also be found in the animal thinking of Goethe, Schiller, and Schlegel. In the quote that opens this chapter Schelling expresses his objection to the rationalist strain of enlightenment thinking about the relationship between humans and nature, in an image of bridled horses. The “Mr. Fichte” of which he speaks is Johann Gottlieb Fichte, Schelling’s former philosophical mentor and later target for some criticism. In these words, Schelling testifies to his romantic anti-rationalist leanings by satirising rationality as the supposed faculty that ordains the power of man over nature. In the *Philosophy of Nature* of 1797 Schelling tells us more about the counter-rational vitality that life holds. Here he

argues that living systems contain within themselves forces that runs counter to the physical laws of the rationalists and the empiricists. Newton's law of universal gravity is given as an exemplar of the Enlightenment view of nature, and foil for the elaboration of the counter-deterministic character of living nature:

The law of gravity cannot be cancelled (e.g. the Moon cannot fall to the Earth); but now if there were in nature a force which acted counter to it (something like a negative gravity) then it would not be gravity itself but only its effect that is cancelled—here no law of nature would be infringed, for the natural law of gravity only holds where no opposed force offers resistance to it.—Such is the case with the phenomenon of life. Nature cannot cancel the chemical and physical laws, to be sure, other than by the counteraction of another force, and just this force we call vital force, because it was completely unknown to us until now (Schelling, p.96).

Thus, something in the properties of living nature counters the conception of nature by Enlightenment Newtonian thought. Schelling resists the reduction of the description of living organism to a collection of physico-chemical entities (atoms and molecules) and attendant natural laws (such as the law of gravity) by evoking an additional “vital force” within organism.

Schelling's view of biological life as having some degree of autonomy from “chemical and physical laws” may, upon other considerations, be seen to challenge the very basis of the objectivity of the natural sciences. For vital force is associated with the emergence of subjectivity. Schelling, taking inner life as a principle of biological life, and thus a principle of transcendence within organisms, thus challenges the Cartesian boundary of subject and object along human/animal lines.

1.2 Nature and instrumental reason

Theodor Adorno provides a good point of access to a discussion of what becomes of nature in modernity and the contest between the Enlightenment and Counter-Enlightenment from a 20th

Century perspective. Adorno discusses the interrelation between the “laws of nature” and the fate of the animal within modernity. Many of his writings from the early *Idea of Natural History*, to the *Dialectic of Enlightenment* and finally his late *Aesthetic Theory* claim that certain conceptions of nature born of the Enlightenment place the natural world in a position of subservience to the project of modernity. These conceptions are responsible for what he repeatedly terms the “domination of nature” (Adorno, p.47). Within such a worldview nature is seen to be predictable, measurable and accountable according to principles that acquire their authority in their naming as the *laws* of nature.

In *Dialectic of Enlightenment* Horkheimer & Adorno regret the domination of nature established both in theory, through for example, Descartes’ reduction of organisms (including human organisms in certain terms) to mechanism, and in practice, to natural resources, through the technological application of Newton’s laws. Such theories and practices are, according to Horkheimer & Adorno, part of a broader “instrumentalization of reason” (Horkheimer and Adorno, p.47) which starts in Western culture well before the 18th Century but accelerates at this time. This (as they consider it) corrupted version of the project of reason, marks the point that the Enlightenment fails to deliver its promise. According to Adorno in his subsequent work, what is required in the context of the domination of nature (both human and non-human nature) as the legacy of the Enlightenment is a refusal to affirm “the miserable course of the world as the iron law of nature” (Adorno, 2002, p.186). Adorno’s target is the idea of nature as a law governed whole, a status that accounts for the possibility of the domination of nature— be it geological, vegetal, animal, or indeed human.

Oxana Timofeeva, very much considering the resources within such critiques to contemporary debates about the instrumentalization of nature, reminds us that “nature in the Hegelian-Marxist spirit, is defined in terms of unfreedom, suffering and exploitation” (Timofeeva, 2014). We may consider Adorno to inherit, revise and develop this realisation. We may see Adorno’s identification of the domination and unfreedom of nature with Enlightenment’s “iron laws” as either a statement of the unfreedom of nature itself that it would thus be the task to somehow overcome, or indeed as a critique

of Enlightenment thought, that by seeing nature as iron law, is the self-fulfilling condition of the realisation of nature as unfreedom in modernity. Timofeeva comments that Hegelian-Marxist politics have sometimes meant the idea of a “revolution of nature and even a struggle against nature”. After the October Revolution of 1917, she contends, “nature was supposed to have changed”. Within post-revolutionary conditions, nature itself would be “liberated from its reliance on necessity but also preserved from the precariousness of contingency” (Timofeeva, 2014).

For the mainstream revolutionary Bolsheviks, according to Timofeeva, this meant the liberation of human nature above all else, but for a “diffuse avant-garde” it meant “the total transformation of both social and natural orders towards emancipation and equality’ for the benefit of both humans and non-humans” (Timofeeva, 2014). Thus, Timofeeva emphasises the non-anthropocentric aspect of the Hegelian-Marxist critique of unfreedom. We might likewise read a non-anthropocentric definition of freedom in Adorno’s texts. It is however, that the liberation of animals from the laws of nature within the context of socialist ideals might not necessarily equate to the freedom of animals from human exploitation. In Charles Fourier’s “Utopian Socialism”, for example, as a place free from the laws of nature there would evolve pacifistic “anti-lions”. But liberated from the principles of nature there would also be “chickens [that] would fly into the mouths of the people already feathered and roasted”.

We discuss the status of animals here in the context of utopian thinking in fanciful terms, but the Hegelian-Marxist critique of the Enlightenment concept of nature, and thus implicitly of the concept of animal nature, is indeed a critical contestation of the status of animal bodies. Adorno’s writings on nature as representative of this critique, relate the Counter-Enlightenment resistance to the in principle exhaustive description of animal life by the mechanistic laws of nature to a post-Marxist sociology of freedom. We may choose to view this critique as contesting the description of animal life and animal bodies. We may thus follow Timofeeva in considering the value of such a legacy to the consideration of social and political theory in more-than-human terms that seems to be a prerogative in the present.

1.3 Challenges to Darwinism

We may see Descartes' dualist prescription of the mechanistic nature of the non-human world, as a pre-condition for the founding of the modern life sciences in the 19th Century. The new sciences of life begin to find disciplinary definition in the mid 19th Century - emerging at this time as coherent methods of enquiry with defined epistemological limits. A landmark text for the life sciences finding their rationale is Charles Darwin's *On the Origin of Species* of 1859. Here Darwin seeks to describe animal life in terms of mechanisms that guide the evolution of organisms. The mechanism he describes and identifies as central to the evolution of life and determining of the present state of life is that of "adaptation by natural selection".

We have seen that the positing of vital principles to counter mechanistic descriptions of animal life originate in romanticism. Certain principles are evoked once again in response to the emergence of the life sciences. These critiques sometimes take, like Schelling, the attempted application of the laws of nature coming from physics and chemistry to be inherently unsuited to a description of animate nature. Indeed, Darwin's *On the Origin of Species* presents a theory of life consistent with the mechanistic philosophy – "natural selection" described as a system of efficient causes governing the origin and evolution of life. The Cartesian image of the animal as something comparable to a clock may be too simple an appreciation of animal bodies for Darwin, but the mechanical philosophy none-the-less persists in the life sciences' seeking the laws of efficient causality in animal life.

Thus, a new territory presents itself for potential critics of a mechanistic view of animal life. Such critics are seen to both engage with the new understandings of biology and evolutionary theory but be unsatisfied with their principles. A number of these figures are wont to recall Schelling's vital force to be transformed and given a new language in the context of the life sciences. Two 20th Century figures here are Roger Caillois and Adolf Portmann. Portmann, we will see develop a theory of a vital force in animal bodies that escapes Darwinian explanation particularly as a force shaping animal

visual appearances. Caillois will also acknowledge this vital force but ostensibly resist a Darwinian explanation of animal life by proposing an equally anti-mechanistic counter force in the shaping of the organism.

What is at stake in these alternatives to seeing animals through Darwin's eyes (or rather through "Darwinism", for the man himself did not always consistently adhere to the mechanistic framework of natural selection in all of his writings) are not only the knowledge claims of the life sciences but the claims that lie behind the possibility for the intelligibility of these claims in the first place – that is, the Enlightenment's legacy of the division between nature and culture, matter and spirit. What is of concern to this discussion is how critiques of animal life such as those of Caillois and Portmann interfere with these very divisions.

1.4 The animal body as expression

Adolf Portmann spent much of his career as professor of zoology at the University of Basel making contributions to the field of zoology. Later in his career Portmann turned his attention to theoretical biology, making in the 1950s and 60s a unique and idiosyncratic contribution to the field. Among these is Portmann's theory of animal "self-presentation" articulated primarily in his 1967 book *Animal Forms and Patterns: A Study of the Appearance of Animals*. Portmann's theorisation of animal appearances seeks to complicate a strictly Darwinian schematisation of animal form by proposing causes to animal form that are not accounted for in a Darwinian model. Whilst Darwin understood the means and ends of animal visual appearance to be strictly bound by the forces of natural selection Portmann considered the external form of animal bodies as evidencing an extra-selective principle of "self-presentation". Where for the Darwin of *On the Origin of Species* animal bodies come to have certain morphological and visual characteristics by either the necessity of organic and metabolic function or the survival value of the animal's visibility within an environment

(such as its adaptive value for communication or camouflage), for Portmann the visual appearance of many animals is subject to an additional principle. This is the principle of the individual animal's "self-possession" of its own appearance. To quote Portmann, "if 'survival of the fittest' were the only force at work in the development of animals, most of the morphological structures we encounter would be entirely unintelligible" (Portmann cited in Prevost, 2013).

For Portmann the principle of "self-presentation" is expressed in degrees based on a hierarchy of animals. As Bertrand Prevost summarises, "the higher the animal, Portmann suggests, the more it has possession of itself, or its own interior world, which is expressed through its morphology, whereas lower creatures do not possess such interiority and therefore have no need for their outside to be all that different from their inside" (Portmann cited in Prevost, 2013). Thus, as identifying the greater realisation of self-presentation with the higher mammals, the non-Darwinian principle holds something of an evolutionary progressivism of humanistic flavour, in the attribution of higher principles to mammals (the human club), as something to be revised in the context of a critique of human-centrism.

Thus, a more complex interior life, characterised by sapience, intelligence, and social complexity, requires in turn the ability to deceive, attract, threaten, warn etc. Such abilities depend furthermore on an opacity of external appearance in relation to internal states, and a functional efficiency in their contrast. The distinctive markings of the zebra (for example), in Portmann's argument count as an "expression" of the singularity of the species being of the zebra, and in their subtle variation between individuals express the very individuality of the animal. Portmann identifies this form of self-presentation as "heraldic" - a term he repurposes for zoological description. In the context of feudal Europe, the heraldic animal, as a projection of animal identity onto the identity of human groups, served as a sign of belonging. Portmann's use of the term likewise confers the animal's belonging to a group but proposes a more-than-human level of heraldic appearances. Like the bearing of a heraldic emblem, animal forms and markings are an expression of, as well as a sign to others of, its belonging

to its species as well as of its self-possession. Portmann's theory of self-presentation in recalling the pre-Enlightenment figure of the heraldic animal is a re-enchantment of animal appearances in some sense. Animal bodies read as externalised symptoms of inner life, in which inner life is conceived as a more-than-human dimension of organic existence.

Romantic ideas of human freedom from mechanistic causality take the form of characterising inner life as the guarantor of this autonomy. Portmann's seeing animal bodies as a powerful expression of non-human inner life, may be seen to echo this in non-anthropocentric terms. Indeed, the romantic human subject flourishes in taking possession of and expressing his or her individuality and inner life. Indeed, the claimed contrast between the unified, harmonious exterior form of animal bodies and the disharmony of their internal organs is taken as evidence of a harmonious and unifying subjectivity. Romantic aesthetics also typically emphasise such qualities as those of self-realisation. The identification of animal self-presentation with the aesthetics of unity and harmony therefore may place Portmann's theory within a romantic organicist aesthetic rationale. Portmann extends and transforms this rationale however by de-anthropocentrising such modes of expression and reception to include the non-human. We might therefore understand Portmann's theory as a non-anthropocentric articulation of romantic subjectivity.

1.5 The animal body as symptom

Roger Caillois develops an alternative to the proposition of a vital force in an anti-Darwinism of animal appearances. Approaching the matter from quite the opposite premise to Portmann for Caillois some animals' appearances are evidence not of the positive force of self-expression and vitality but rather of self-negation and enervation. Equally unaccountable from within a Darwinian framework, this force in Caillois' version of natural history is something like a non-human Freudian "death drive". The double register of Caillois' writing on animals in the 1930s as ambiguously both literary/poetic

and as having the markers of natural history commentary is quite intended to open up natural history to fabulation – to tell the “natural history of the imagination”.

Caillois’ 1935 essay *Mimicry & Legendary Psychasthenia* is an account (told in characteristically semi-literary and semi-scientific terms) of mimetic insects. Caillois attributes to such forms of life a propensity for disguise and camouflage what can only be understood as a capacity for imagination, neurosis, and desire. “Psychasthenia” - a term now out of favour in clinical psychology in Caillois’ usage identifies a dissociative disorder that today might be synonymous with some aspects of schizophrenia. The neurotic compulsion evident in the mimetic insect’s disguise or camouflage is, according to Caillois, a desire to disappear and to cease to exist. By attributing such a desire to a non-human organism Caillois thus advances the case for an originary, pre-human, (in his terminology) “legendary” death drive or desire to lose a sense of self.

Jacques Lacan tells us that certain of his psychoanalytic concepts formulated in the 1950s were greatly inspired by Caillois’ essay. From Caillois’ case of legendary psychasthenia Lacan is given to formulate his theory of the imaginary dimension of human psychic life and attendant concept of the mirror stage in psychological development. It is not clear if Lacan reads Caillois’ animals in a poetic and anthropomorphic mode (I.e., as metaphors for the human psyche) or in a literal mode (as cases as originary psychic dimensions within non-human animality itself). In either case, the human relationship to the imaginary is Lacan’s focus in subsequent writings. Lacan may part ways with Caillois regarding seeing self-image and death drive in more-than-human terms. It is not clear if Caillois intends the former or the latter, or both. His tale of mimetic insects makes this intentionally ambiguous, blending natural history and evolutionary theory with psychological language. What is perhaps clear is that the approach adds up to a distinctly anti-humanist conception of the psyche.

Lacan’s mirror stage of psychic development claims the subject’s neurotic relationship to its self-image. Lacan sees this neurosis as consequent to a biological contingency of human evolution – the

helplessness of the human infant at birth. He writes “one can say that the human being is born with foetalised traits, that is to say deriving from premature birth” (Lacan, Book I, p.210). It is from this “premature” birth that the rift between the subject and the environment develops, a “primordial biological discord between man and his environment” (Chiesa, 2009). It is this biological contingency that is seen to be both cause and effect of the transition of human life from nature to culture. For Lacan the human animal’s wrench from nature is the human malady, compared to the organic unity supposedly experienced by other animals. For Caillois the neurosis that alienates the organism from its organic species being is not necessarily exclusively human.

The motif of the mask marks the point of distinction for Lacan between animal and human appearances. Lacan asserts that what distinguishes human and non-human uses of mimicry and disguise are that human disguises are freely interchangeable whereas the mimetic animal is merely “captured” by its disguise (Lacan, Book.1, p.305). Lacan’s terms for distinguishing between human and animal relationships with self-appearance may directly recall Martin Heidegger’s statement that animals are captives of their nature and captivated by their instinctive relationship to the world. The animal’s absence of choice is seen by Portmann as the authenticity of animal appearances. To have a choice, according to Lacan, is the remit of the human, and something that we may identify as the possibility and condition of visual culture. This difference has implication for both the animal and the human’s relationship to the image. For Lacan, whilst partaking of the life of images, images no doubt having a powerful effect on animals such as those of their own kind, animals are captured and captivated by them.

In the recognition that the animal is captured by its disguise Lacan would seem to implicitly align with Portmann’s claim that animal appearances, unlike the possibilities of human appearances, are authentic expressions of a particular species identity. For Portmann this modality of appearance is an animal prerogative and for Lacan it is a limitation that marks its distinction from the human. For Portmann the patterns of animals – even if serving as disguises are none the less expressive if they

could not be otherwise. The distinction between human and animal uses of disguise marks a boundary which defines certain limits of psychoanalytic concepts of the image.

Caillois' mimetic insect are not expressive animals like those of Portmann. By focussing on insects in his text Caillois presents forms of life that are harder to anthropomorphise than Portmann's "higher animals". Thus, Caillois' insects may be seen to embody a less humanistic discussion of the more-than-human psyche. For Caillois animal appearances are the desire of the animal to un-express itself. Caillois' special case of mimetic animal appearances do not attest to the unified and self-serving identity of the animal (if we understand this in both individual and species terms) but rather to the animal's disunity with itself. The animal that makes itself disappear is not of the disposition of psychic harmony, according to Caillois. Its body is not an expression of authenticity. It is an animal whose body is a symptom of a deeply divided selfhood threatened by its own imminent negation. The animal body as psychasthenic symptom contests the naturalistic animal body by contesting its organic relationship to its environment.

1.6 Multi-naturalism and the animal body

Caillois' *Legendary Psychasthenia* may be read as an invitation to apply psychological and anthropological accounts of mask wearing to more-than-human phenomena. Both Lacan and Caillois will be aware of the centrality of the concept of the mask in certain animistic worldviews. We enter here a framework for contesting animal bodies that reaches beyond the history of human/animal relationships in modernity. We examine such relationships within the broader perspective of a geo-historical context. We treat the way the life sciences see animal bodies as culturally relative. We apply an anthropological framework in which the worldview of the natural sciences comes up against non-western worldviews. In this task we examine particularly the contrast between scientific and animistic ways of seeing animal bodies. To contest the animal body of the natural sciences by a confrontation

with otherness we rely primarily on the work of the contemporary anthropologist Phillipe Descola. In a survey of world cultures, Descola's 2005 book *Beyond Nature & Culture* identifies four worldviews that he names totemism, analogism, animism, and naturalism.

"Naturalism", is Descola's chosen term for describing how animal life is seen within modernity. Naturalism, furthermore, is a worldview that possesses certain ontological commitments and epistemological conditions. Naturalism, as Descola employs the term, is the worldview of the natural sciences, but also (and we position Descartes' dualism as formative here) the condition of possibility of the natural sciences, as the worldview that embodies the division of the human sciences and the natural sciences. "Naturalism" then is used somewhat more broadly than its typical meaning - to name a worldview that would divide knowledges concerning spirit and knowledges concerning matter. Descola, furthermore, argues that the very concepts of nature and culture, that we might intuitively consider to be universal human categories (and indeed have often been taken to be within the anthropological tradition to which Descola belongs), are rather, exclusive to the worldview of naturalism.

Descola contends that naturalism embodies two ontological premises. Premises that concern the supposed relationships, similarities and differences between humans and animals. The first is that human and animal bodies ("exteriorities" in Descola's language) exist in a material continuum. The second, that inner worlds of animals and humans (their "interiorities") are discontinuous. Indeed, within naturalism, humans are privileged with an interiority that non-human animals simply lack. Descola is at pains to point out that although such judgements and distinctions may be referred to as a "worldview" out of ease of language, they so deeply determine human and non-human identities and relations, as to construct a world. Naturalism, animism, totemism and analogism are "worlds". As such they are not so freely traversable by thought - for a world is always seen as universal from the inside. We are not free to choose from Descola's worldviews as ways of seeing or indeed acting, being as they are strongly determined by the material conditions and contingencies of a particular

culture. A caveat is thus necessary in the attempt to see animals differently - the hegemonic character of these worlds meaning the task is not an easy one - conceptually or experientially.

Descola calls these four worldviews “modes of identification”. He calls them this because they are each considered to rely on a different structure of identification between animals and humans. For the purpose of this discussion, we will focus on describing animism in relationship to naturalism, as two worldviews that most directly contrast. In Descola’s system the animistic worldview is described in a way that enables it to be compared and contrasted with naturalism. Animism treats human and animal exteriority as discontinuous. Animal and human bodies are made of different kinds of stuff. However, animals and human are given have a shared interiority. Interiority is continuous between humans and animals. Animals are considered to have an interior life like, or even identical to humans. Thus, animism is contrasted to naturalism in two ways – human and animal bodies exist on a continuum in naturalism but are heterogeneous in animism, interiority is continuous and shared between humans and animals in animism but exclusively human in naturalism. In naturalism humans identify with animals on the level of being made of the same kind of stuff, in animism humans identify with animals on the level of participating in a shared interiority.

It is thus that by Descola’s theorisation of the underlying ontological commitments of naturalism and animism that the two worldviews may be seen as dichotomous. They make opposite and polarised judgments as to the continuity or discontinuity of human and animal interiorities and exteriorities.

As naturalism’s opposite we ask here how the animistic worldview (not-with-standing the earlier caveat) might serve to contest the image of animal life in modernity. What may seem to be of most immediate and obvious interest to this endeavour is animism’s counter-naturalistic concept of personhood as not limited to the human. This would be a worthy and promising focus. But what is more relevant to this discussion is the strikingly different perception of animal bodies to naturalism’s biological understanding represented by animism. In Descola’s animism animal bodies are not

natural. We could say ‘not *perceived* to be natural’ but it is not a question of there being a *view* of animal bodies that the term perception inevitably implies, not from inside animism that is, the position that we want to adopt. Within the world of animism, animal bodies are not natural biological entities but rather masks. Animal bodies are not flesh and blood but rather forms of apparel. Animal bodies are not organic but rather are analogous to many human means of constructing appearances. Animal faces are like masks. Animal patterns are like cloths and jewellery. Animal claws are like tools. Animal bodies differ in appearance as like a range of disguises to hide their believed “human” interiorities. Thus, animism not only counters the human exceptionalism of interiority but also the conceptualisation of animal bodies as biological. Animal bodies of this world are not determined according to a distinction between natural appearances and those constructed by artifice. Animal bodies are like we understand human visual culture to be.

An animistic way of seeing thus chimes with other approaches in this chapter that seek to read animal bodies in ways that challenge the hegemony of the natural sciences. The specific value of allowing us to see from the position of animism is a critical one - as contributing to a critique of distinctions between nature and culture. Indeed, Descola’s major work *Beyond Nature and Culture* (as is evident in the title) critiques a claimed universality of the binary nature and culture, and calls for a form of thought beyond this binary. Challenging this binary contests that whatever is identified as nature is subject to the laws of nature. Furthermore, questioning the givenness of the categories nature and culture questions human culture as the privileged space of autonomy from such laws.

Conclusion

The animal bodies that feature in this contestation of naturalistic and humanistic views of animal life exceed solely naturalistic explanation in one way or another. The animal bodies of this counter-history are both in excess of the laws of nature (as in Schelling’s attribution of an additional “vital

force” to living animals), or the determinations of natural selection (as in the case of Portmann’s theory of animal self-presentation), or indeed the behaviours that such laws predict (as in the case of Caillois’ insect anti-survival instinct). On the one hand, a challenge to natural science’s image of animals takes the form of Schelling and Portmann’s organicist appeals to a vital principle - the former contrasting animal vitality with Enlightenment mechanical thinking and the latter proposing a quasi-zoological organic principle of animal bodies as expression . Both, it might be argued, depend on the aesthetic appreciation of animal bodies as a methodology. Or, on the other hand, it is taken that the animal body is not more than the sum of its parts (as is inferred by a vital principle) but less - subject to the self-alienating effects of an internal in-organic heterogeneity. Caillois’ animal bodies are evidence not of a vitality but of a desire for death. Caillois’ in-authentic, mask-like animal bodies, escape naturalistic description by embodying a principle and equally subversive counter-vital principle of lack and negation.

Animistic animal bodies challenge naturalism, not like the romantic organicism of Schelling and Portmann, nor like the animal pathology of Caillois - although perhaps they share more with the latter. Animal appearances in animism do not express an inner organic unity and harmony nor a condition of alienation and dissonance. As apparatuses of disguise animistic animals elude the naturalistic principle that animal bodies are all made of the same kind of stuff, by preserving a heterogeneity and alterity. The animals of animism may be seen, in the context of a challenge to Darwin, to advocate disguise as a total principle of animal life.

Organicist and an-organicist challenges (let us call them) to the view of animals in modernity contest the status of animal bodies in different ways. However, they share the aim of contesting the hegemonic explanation of animal life by the Enlightenment laws of nature. They liberate animals, as Theodor Adorno would seek to liberate all of nature, from the “miserable course of the world as the iron law of nature” (Adorno, 2002, p.186). Indeed, the miserable course of the world is, for Adorno, that which the Enlightenment takes under the influence of instrumental reason. Oxana Timofeeva

explores such challenges to animal nature within the politicised frame of Hegelian-Marxist modernity. Here, animal nature and animal bodies become contested for “nature itself is to have changed” (Timofeeva, 2014) in a revolutionary project of emancipation of more-than-human proportions. Indeed, the animal theories of Schelling, Caillois, Portmann, Adorno and Timofeeva, themselves belonging to established lineages of modern thought, remind us that modernity as a condition of contradictory forces and unsettled projects is itself the site for contesting what animal nature is, or is to be. Furthermore, we are reminded by Descola to not consider the “mode of identification” of naturalism (Descola, 2013) as the totalising worldview of modernity.

Much contemporary animal studies seeks to question human exceptionalism by evoking interiority as a contested attribute. Acknowledging the interior life of non-human animals has been a central strategy in attempts to de-anthropocentrise the humanities. The focus here however has been primarily to consider animal exteriorities as topic for critiquing aspects of Enlightenment modernity’s concept of animal nature. The contested history of animal interiority and subjectivity is significant of course , (as for example with Adolf Portmann’s emphasis on animal appearance as expressive of interior life, or Roger Caillois’ reading of animal bodies as psychosomatic symptoms, or indeed, Descola’s description of the animism as a belief that both animals and humans participate in a shared subjectivity), but alongside this animal exteriorities and appearances are understood to have a language and intelligibility of their own. As such animal bodies are the site of contested accounts of animal life.

2 ART AS ANIMAL, ANIMAL AS ART

Introduction

Artworks and animals may sometimes be seen as possessing some of the same characteristics, as having a relation of equivalence, or as subject to the same underlying principles. Anti-mechanistic views of animal life have often taken the form of a search for aesthetic principles in animal life. Romanticism, contesting mechanistic thinking, commonly resorts to evoking a similarity between artworks and organisms - the self-sufficiency and self-determination that characterises works of art also given to characterise organisms. This chapter looks particularly at how F. W. J. Schelling and Immanuel Kant make comparisons between artworks and organisms.

The chapter asks, what is to be critiqued or challenged in the romantic conception of art/organisms relations with the advent of “bio-art” as a genre within contemporary art (i.e., the incorporation of living organisms and living systems within artworks)? It makes this critique by imagining a work of art from the romantic period subjected to the conditions and possibilities of bio-art. It identifies how the relation between art and animal life can be reconsidered through this collision.

2.1 The comparison of artworks and organisms in romanticism

To save nature from the mechanistic worldview the romantics invited us to see nature as like art. Art was considered to represent a certain freedom of the spirit from forms of oppression. Romantic art was considered to articulate underlying values such as beauty, harmony and unity, and a coexistence of the material and the ideal. Romanticism wishing to see art as nature, and nature as art would thus typically attribute the same characteristics to art and nature. Seeing creations of nature as like art,

involved conferring the values of one upon the other, sometimes this value transferred from nature to art and sometimes from art to nature.

A prerequisite to this philosophy of art (that was also a philosophy of nature) was the universalisation of symbolic existence. Key figures associated with romanticism claimed that both art and nature are symbolic. The romantic re-enchantment of nature was aimed at overturning the Enlightenment image of a nature as mute, mechanical and devoid of inherent meaning. Re-enchantment for the romantics meant, according to Nicholas Halmi, considering all of nature to be symbolic (Halmi, 2007). This universalisation of the symbol, as the specific and historical concept of the “romantic symbol” arises from the movement’s impulse to restore the lost meaning of nature in the face of industrialisation and scientific rationalism. Re-enchantment was a form of resistance to the rise of the natural sciences and the application of those sciences to the extraction of natural resources. This for Halmi is the distinctly romantic concept of the symbol. For example, J. W. von Goethe declares in 1798 “everything that happens is a symbol” (Goethe cited in Halmi, 2007, p.32). For romanticist metaphysics both natural and cultural events were to be considered symbolic. The divide between art works and animals is already overcome with this universalism of the romantic symbol.

For Schelling and other late 18th Century German idealists under the influence of romanticism Egyptian Hieroglyphics served as a lesson from antiquity for seeing the whole of nature as symbolic. Hieroglyphs held this place for the romantic imagination as much for what was not known about them as what was not. At the height of the romantic movement in Europe the hieroglyphic picture language of ancient Egypt remained undeciphered. It was only with the discovery of the “Rosetta Stone”, which served as a key to translation, that much of the hieroglyphic imagery of Egypt was finally deciphered by Champollion in 1794. But before this moment it was exactly the longstanding inscrutability of hieroglyphs that favoured them as a model for the conceptualisation of the symbol in romantic terms, terms dependent on a certain mystification. Hieroglyphs became the exemplar for

the romantic concept of a universal symbolism that was not of human origin, but a symbolism embodied by non-human nature itself.

Nicolas Halmi notes ‘naturalizing the symbol as a mode of representation in which being and meaning were one and the same was the prerequisite to making nature symbolic’ (Halmi, 2007, pp.18-19). The romantic symbol thus has a particular structure. Entities may be understood as symbolic, as partaking of a symbolic life, according to an argument that the universal is embodied in the particular. Everything, whether human or non-human is considered to have meaning according to an ontology in which material being and symbolic meaning are not separate but have an identity. To use an anthropocentric example from Halmi for one moment, for the romantics “Mary Magdalen was a living symbol, because in her very flesh and blood she embodies repentance” (Halmi, 2007, p.3)

Notwithstanding the *carte blanche* recognition of the symbol in romantic thinking, permitting on these grounds alone a comparison of artworks and the works of nature as both participating in the symbolic, romantics (either hard rebels against rationalist thinking or more moderate voices) formulate more specific theories of what characteristics of art works and natural phenomena allow for them to be spoken of in the same terms. For both Schelling and Immanuel Kant, it is organisms in particular that should be considered to have a parallel existence with artworks. Seen as an exemplar of how natural forces and principles are manifested many romantics were particularly interested in organisms. Organisms were considered natural phenomena with certain characteristics that were conducive to a comparison of art and nature, to seeing art as nature and nature as art.

2.2 Organisms and artworks for Schelling and Kant

We encounter an analysis of the similarities between organisms and artworks in Schelling’s *Philosophy of Art* of 1802. There he compares art works and organisms by proposing a structural

homology between the two. This homology at once allows for the integration of a discussion of art works and organisms and at the same time differentiates them according to the spaces they inhabit. He formulates that, “art is to the ideal world what the organism is to the real world” (Schelling cited in Shaw, 2009, p.64). Notwithstanding the evidence of Schelling’s idealism in this drawing up of parallel worlds between the real and the ideal, through this parallel his organicist aims for art are made clear. For Schelling, the romantic work of art should aspire to a unity and harmony that is equivalent to the biological unity and systemic harmony of the individual organism. Art that draws upon nature as always already imminently symbolic constituted the romantic symbolic mode par excellence. For Schelling organic principles of nature are to be embodied in the romantic work of art – because “both the natural organism and the artwork embody the same identity of real and ideal, of necessity and freedom” (Schelling cited in Shaw, 2009, p.64).

Artworks should model themselves on the organism, seeking the characteristics of unity and internal harmony of the biological organism. In Camilla Flodin’s reading of Schelling, “the peculiar unity and self-sufficiency of the artwork, its inner purposiveness, make it structurally similar to the organism”. Furthermore, this view is the articulation and legacy of an “idealist-classicist comparison of the artwork to a self-sufficient organic unity” (Flodin, 2010, p.74). Thus, what is at stake in the comparison of artworks and organisms in romanticism is both an organicist aesthetic theory, that places unity, harmony, and self-sufficiency as the highest values to be sought in art, but also a theory of living systems that puts these same characteristics at the core of what is of value in natural phenomena.

Hannah Ginsborg’s reading of Kant’s *Critique of Judgment* identifies other terms for which art works are, or should be like organisms, within a late 18th Century context. She draws out implicit associations Kant makes between art works and organisms in the *Critique of Judgement*. She detects a subtle pairing of the discussion on art works in one part of the critique and organisms in another. The connection is through, according to Ginsborg, Kant’s referring to both artworks and organisms

as possessing a “purposiveness without purpose” (Ginsborg, 2005, p.330). Ginsborg is taken by the curious parallel Kant makes between works of art and organisms by virtue of their side-by-side treatment in the *Critique of Judgment*. She acknowledges that across his oeuvre “Kant applies various forms of purposiveness to organisms, to artifacts, to beautiful objects, to nature as a whole”, but goes on to ask if Kant is applying one and the same concept of purposiveness to organisms and art works. The kind of purposiveness that is ascribed to organisms and art works alike is “purposiveness without purpose”. This qualification, according to Ginsborg, distinguishes art works from other kinds of human artefacts that we might consider to be made with purpose or to have a purpose. Ginsborg notices is also used to refer to kind of purposiveness that organisms are given to possess. Ginsborg settles on the reading that Kant’s term is indeed used univocally to describe art works and organisms. Thus, art works are compared to organisms as jointly exclusive possessors of the condition of “purposiveness without purpose” (Ginsborg, 2007, p.330).

Kant’s question of distinct kind of purposiveness operating in art works and organism is, according to Ginsborg, a question of the kind of causality they follow. As we have seen, romanticism challenges the Enlightenment view of nature as the domain of strictly efficient causes. Kant’s is also a question of the implications of purposiveness on the notion of autonomy as it applies to art works and organisms. Purposiveness without purpose is considered a characteristic of autonomous self-determining entities. This characteristic can be read in relation to art, on the one hand, as an autonomy from utilitarian ends, and to organisms, on the other, as an autonomy from efficient causality.

For Kant, purposiveness without purpose is a necessary condition of art, and of the appreciation of art as the experience of the beautiful. Ginsborg quotes Kant directly in preparing an explanation - “beauty is the form of the purposiveness of an object, in so far as it is perceived in the object without the representation of a purpose” (Kant cited in Ginsborg, p.337). Furthermore, this perception and recognition of beauty is based on the viewer’s judgement. But Kant as idealist considers this judgement to have a necessity according to an ideal to which it attests. The judgement of beauty

made from necessity, therefore, is a judgement that the work of art *ought* to be the way it is. Furthermore, this ought “contains a necessity which is sharply distinguished from the physic-mechanical necessity according to which a thing is the way it is” (Kant cited in Ginsborg, 1997, p.349). Ginsborg continues onto the theme of organisms in relation to these same kinds of judgement, and by which she sees that it is also by aesthetic judging that organisms too have an “ought” that is sharply distinguished from physic-chemical cause and effect. Furthermore, Ginsborg distinguishes between a normative judgement that we might make of organisms, saying, “I can specify that a horseshoe crab ought to have eight legs, five pairs of gills, six sets of pincers, and so on”, but that the standard exemplified by an act of aesthetic judging “cannot be stated” (Ginsborg, 1997, p.349). So, the core of Kant’s univocity of application of “purposiveness without purpose”, is a univocal “ought”, that is not an ontological claim of the autonomy of organisms from the laws of nature but rather a correlationist claim – in which the organism plus an attendant aesthetic judgement co-produces this state of affairs.

2.3 Romantic aesthetics critiqued through animal presences in contemporary art

We thus see as a recurring motif in German idealist and romantic aesthetics the theme of artwork as organism, and a blurring of boundaries between nature and culture through comparisons between them. Such conceptions of the relationship between art and nature can be seen to prefigure in some respects, be transformed in others, and be problematised in others still attempts in contemporary art and contemporary socio-cultural theory to overcome nature/culture boundaries. We might identify that both romanticism and many contemporary debates see the presence of this boundary as a legitimization of exploitative human/non-human relations that are a legacy of the Enlightenment. Thus, the romantic equivalence of artwork and organism forms a useful point of departure in tracing the theme of artwork as organism and organism as artwork in a contemporary context.

Let us now turn to Schelling's claim that what artworks and organisms have in common is that they "embody the identity of the real and the ideal". Let us ask, how can this theory be applied to an analysis of contemporary artworks that incorporate living organisms and living systems? Through this question let us explore the potential to think the relationship between art and organisms in contemporary art through romanticism but also against romanticism. Let us consider the moderate romanticism of Kant's correlationist comparison of artworks and organisms in relation to the condition of possibility of the living readymade. Let us consider Schelling's more extreme romantic ontological identification of animal autonomy and the autonomy in art.

2.4 Imagining *The Rime of the Ancient Mariner* as bio-art.

In recent decades the appearance of living organisms in art has sometimes earned the title "bio-art". Although the application of this term is contested, with some contemporary artists and critics avoiding it, let it suffice here as a handy name. Antecedents to bio-art may be identified from the late 1960s. We might start with Yannis Kounellis' *Twelve Live Horses (Untitled)* of 1969. The gesture of incorporating living organism within an artwork we may then see reappear in subsequent landmark works such as Joseph Beuys' *I Like America and America Likes Me* 1974, Agnes Denes' *Wheatfield* 1982, Damien Hirst's *A Thousand Years* 1990, and Edwardo Kac's *GFP Bunny* 2000. Instead of delving into this history let us carry conduct a speculative exercise to unpack the question of how the romantic conception of art's relationship with organisms (and particularly animals) chimes or does not chime with the artistic modality of bio-art. Let us ask, what is the fate of the animal as the subject matter of art within romantic aesthetic theory if living animals themselves are admitted as a medium in works of art? Let us also ask, how does the romantic concept of animal as art (as nature's art) speak to the possibility of an artwork incorporating living animals? What, let us therefore speculatively ask, would become of animals and their significance in romantic works of art if we were to reconceive these works as bio-art?

For this exercise let us take that high point of English romantic literature *The Rime of the Ancient Mariner* as a vehicle to pose these questions. Samuel Taylor Coleridge's epic poem features several non-human organisms to consider, and one particularly charismatic organism. It presents itself as particularly convenient to this discussion because Coleridge gives us the confidence to apply the thesis of the romantic symbol to his oeuvre, by elsewhere theorising a concept of the romantic symbol himself. Coleridge's self-conceived version of the Romantic symbol he terms "tautegory" (Coleridge cited in Halmi, 2010). Tautegory denotes the way in which meaning is intended to relate to being in his manifesto of romantic poetry. Coleridge uses the term to distinguish a trope of signification which is distinctly different from the conventional concepts of both symbol and allegory.

Coleridge's poem describes, and transforms, many non-human forces, agencies, and entities. Among these is an albatross. The bird in the story has agency first as a living bird and then as a dead bird. The various meanings of the bird, in as much as they might be mistaken to be allegorical meanings, are not important to us. Let us list them to get them out of the way: God, Christ, sin, hubris, nature. But as "tautegory" Coleridge's albatross is not intended to stand for a series of signifieds given by convention. This would be the simple trope of allegory. Coleridge's tautegory is a version of the romantic symbol. Tautegory is not based on human convention, but rather is not of human origin. Poetic tautegory is not a series of signifiers independent of a signified, but a construction in which being and meaning have an identity. Coleridge's tautegory is not a kind of sign that fits within the theoretical framework of contemporary semiotics. The romantic symbol as the "identity of being and meaning" (Halmi, 2007, p.8) is unintelligible in relation to the bi-partite character of the symbol in modern semiotics. Coleridge's literary albatross, as tautegorical symbol, embodies an identity of being and meaning.

Let us say this literary bird (and only as a literary construct for the moment) is a Wandering Albatross. The natural history clues in the text support such an identification. The material living albatross of this name, to which the text perhaps refers, travels the Southern Ocean clocking up a million miles a

year, continuously on the wing, and finding land only to breed. Signifying both itself and something more than itself, as the identity of the particular and the universal, the relationship between the bird and the further meaning that it is that between part and whole. Within semiotic theory symbols signify by convention but Coleridge's tautegorical albatross signifies by necessity. In this sense it is more akin to what modern semiotics would term a natural sign or index - a sign that signifies by causal necessity (such as when smoke signifies fire). But as connecting a material signifier to an immaterial signified the romantic symbol also deserves the name symbol, a material signifier connected with an immaterial mental signified. For Coleridge, the albatross, its story and its fate, are an index of something beyond the material. Thus, the romantic symbol may be considered a conflation of the modern senses of index and symbol. We may say that the romantic symbol (exemplified by Coleridge's albatross) is the paradoxical or impossible *indexical symbol*. Such impossibility makes the romantic symbol structurally and perhaps purposefully inscrutable.

The challenge for considering living animals to embody art seems to arise from the problematic that when the animal is no longer evoked in imagery or language but is present as an unmediated living, breathing entity it always has the potential to be unruly in relation to the artist's aims. If Coleridge was not a poet but an installation artist, and *The Rime of the Ancient Mariner* was an installation (however this might be realised - existing outside or inside the white cube, of defined or undefined dimensions, of mediated or unmediated elements, presences and representations) let us ask the following question. Would a living albatross within this composition be able to function as tautegory as Coleridge intends? Or even as allegory indeed if we think this is the trope that is really at work in the poem?

Perhaps once deceased the potential unruliness of the albatross in relation to what it is intended to symbolise becomes unproblematic, as it can function much more like a prop. But before this moment of destruction the albatross remains unpredictable. It has the possibility to escape the narrative bounds of the work. Indeed, we may ask, how can we even guarantee to get to this point of the story of the

animal's death? Unlike an animal on the page whose fate is sealed, arrows often to miss living animals because of their determination to stay alive. Furthermore, we may recognise that Coleridge picks an albatross as a symbol of nature, god, the inscrutable, quite because of its wildness. A trained albatross would not do in this bio-artwork. Roaming over vast areas of ocean, rarely seen, of unknown habits – the albatross is a romantic symbol precisely because it resists theatricalised. However, there is no animal probably less suitable for a bio-art installation, which must inevitably define certain practical limits on audience experience, institutional possibility, architectural or site-specific space etc. Perhaps, to be more controllable for the purposes of an artwork the albatross could be a culture of albatross cells sustained in an incubator or a solution of DNA in a vial. Edwardo Kac might do something like this.

Let us now imagine the human protagonists in this transcription of Coleridge's poem in the medium of installation. They can play their parts. They can take direction. But imagining them as cut-outs would do equally as well. The body of the albatross can be tied around one of these props. Perhaps this is when the bird become a symbol in the conventional sense. The sea and the weather can be simulated – perhaps with some lighting and foley effects. This is now becoming theatrical. Let us preserve the difference between art and theatre by imagining the incorporation of references to the artifice of the work within the work. Whilst it is necessary for the albatross to be an agent rather than just a prop it will not be corralled into a given spatial or temporal composition. This is an impossible artwork, perhaps in the very same sense and for the same reason that the romantic symbol is an impossible sign. Perhaps this impossibility is one of the meanings of the albatross that Coleridge had in mind, and revealed as a paradox through this exercise - the paradox of an unruly and unpredictable animal, exemplary of animal autonomy, functioning as a domesticated form of meaning. Furthermore, in its nomadic and non-territorial lifestyle the albatross is an exemplar of the expression of "smooth space" (Deleuze and Guattari, 1988, p.410). We might here ask, can there be a bio-art of smooth space, and can non-human smooth space be art? Are animals without territories (like albatrosses) therefore the kind of animals through which we might talk about animals as art?

Now let us turn to what bears consideration in a bio-art version of Coleridge's poem according to Schelling's statement that "art is to the ideal world what the organism is to the real world" (Schelling, 1989, p.30). Here it is not artworks and organisms that are the same but rather the relations that they enter. They have the same status but within the different "worlds" of the "ideal" and the "real". We see that this homology communicates Schelling's organicism, for the relation that the artwork has to the ideal, is as that which the organism has to the real. Thus are two realms in which organicism pertains – the real and the ideal. The artwork, we may interpret, operates in the world of thought, and the subjective states that the artwork provokes have organic characteristics. It is argued therefore, that the presence of living animals in bio-art short-circuits the romantic appeal to the organicism of thought (of the ideal), by the presence of organic matter itself. A living, breathing version of Coleridge's albatross, is a transference of the albatross from the "ideal world" of language to the world of biological reality. The value of organicism in art is hence confronted by a non-human organic alterity, as the presence in the work of the living animal's non-human subjectivity.

And what of Schelling's distinction between organisms and artworks based on only the latter embodying an "identity of the conscious and the unconscious"? This would certainly problematise for Schelling the unmediated presentation of animal life as art. Schelling's use of the term unconscious predates its meaning in psychoanalysis. What is unconscious here is matter. The material body of the albatross we might consider within this language as the product of evolution understood as an unconscious morphogenetic process. What is referred to with the term "conscious" on the other hand is more commonly understood - used here to identify the phenomenon by which the artwork exists in thought. The artwork is thus the, mystical we might finally decide, identity of the artwork in consciousness and the material artwork in extended space and time. The romantic work of art, in accordance with this ontology, is the experience of an absence of a division between subject and object. Furthermore, this experience can be understood quite differently depending on an understanding of the role of consciousness in the romantic artwork. On the one hand, whatever is given in the artwork by its conscious making is denied in the presentation of the albatross as art - the

living albatross as unmade readymade. On the other, consciousness itself considered to be unmade (i.e., as a naturally evolved phenomenon) is of the same order as the unmade albatross.

To conclude this speculative detour let us turn to a consideration of a bio-art version of *The Rime of the Ancient Mariner* through Kant's theorisation of purposiveness in artworks and organism, to see what we may learn of bio-art within these terms. To include a living organism in an artwork, in which both the former and the latter are given to possess autonomy by having a "purposiveness without purpose" (as Kant's *Critique of Judgment* maintains according to Ginsborg), the "purposiveness without purpose" of the organism may not necessarily align with that of the artwork. Both the artwork and the organism possess forms of autonomy, but these will not necessarily add up to a unified autonomous entity. The autonomy of the organism posited by Kant may indeed be the kind that the Albatross in *The Rime of the Ancient Mariner* signifies. But, with the inclusion of a living organism within its imagined transcription, the artwork would have a plurality of autonomies that threaten its singular emancipatory autonomy.

Conclusion

The role and meaning of animals in romantic aesthetics is both negated and revealed by considering bio-art strategies through the lens of romantic ideas about the differences and similarities between artworks and organisms. In bio-art we note that there is typically some staging or framing of living organisms - even if that is only the framing of the institutional space of art itself. When organisms are art works the unmediated animal presence interferes with certain terms upon which romanticism defines the relationship between art and nature, but it also develops certain other terms for seeing art and animal life on a continuum. Romantic idealism is re-imagined as a less human-centric affair. The romantic project of overcoming the dualism of subject and object is destabilised, but also given new possibilities by the attenuation of subjectivity that is implicated in bio-art. Animal alterity challenges

the very terms of the romantic artist's being at one with nature. The animal cannot be a human symbol, even in the more interesting romantic sense of this term, but it can have a meaning beyond its muteness as mechanical nature.

3 DISPLAY AND EXCESS

The ceremonies and etiquette with which courtship was elaborated among the courtesans in the court of the Sun King were not more ritualized than the rituals of Emperor penguins in Antarctica; the codes of chivalry in medieval Provence not more idealized than the spring rituals of impalas in the East African savannah; the rites of seduction of Geishas in old Kyoto not more refined than those of black-neck cranes in moonlit marshes (Lingis, 1998, p.200).

Introduction

Darwinian naturalism is an image of the living world as a giant self-organizing and self-regulating machine. Animal bodies and behaviours are the result of evolution by natural selection, understood as a blind process of chance and selection for fitness without any need of recourse to agency. But against this backdrop and sometimes even emerging from it doubts to the Darwinian picture emerge. These doubts may become challenges – and when they do, they may cause us to see animal lives in ways Darwinians would find hard to accommodate. In some cases, the characterisation of animal life may challenge fundamental aspects of the concept of nature itself. This chapter considers such challenges to Darwinism in relation to the theme of animal display and does so to identify some characteristics of the postnatural animal.

It may come to us as some surprise that the first doubter of Darwinism was indeed Charles Darwin himself. Darwin considers that certain forms and behaviours within the animal world are hard to account for entirely by the mechanism of natural selection. Darwin, indeed, identifies the presence of a force within animal life that he considers to be antagonistic to natural selection – the presence of sexual selection. Darwin sees within the sexual displays of animals an ostentatiousness that seems to exceed the requirement to be well adapted to an environment.

Elizabeth Grosz and Alphonso Lingis, recognise the excessiveness and exuberance of sexual display in more-than-human contexts and turn this into a challenge to Darwinism. They resist the Darwinian image of animal sex as only a matter of reproduction. Their particular concern is to challenge how mechanistic readings of animal bodies and behaviours divide the human and non-human realms. Lingis invites us to see sex as a particular area of life where there is a continuum between human and animal practices. For Grosz, the exuberance of animal sexual display liberates animals from strict utilitarian concerns, and this freedom permits us to recognise it as a form of non-human art. Indeed, for Grosz, the recognition of sexual practices in animal worlds as art, and as therefore cultural, invite us to recognise sexuality (as a transformative of mere sex) in more-than-human terms.

The Darwinian picture is a conception of animal life bound and limited by instinct. But Nikolaas Tinbergen shows that there is something excessive, or even a very principle of excess, in animal instincts. He finds that animal instincts sometimes exceed a fittingness to an environment - animals responding to artificially produced sensory stimuli more strongly than the natural stimuli to which they are supposedly well adapted. Evidence of this tendency of instinct to exceed fitness is what Tinbergen terms the “super-normal stimulus”. Tinbergen thus finds a feature of animal behaviour that goes beyond a strict Darwinian account of fittingness to the needs of survival.

Brian Massumi takes Tinbergen’s results as confirmation that the animal has a certain agency, autonomy and unboundedness in relation to a strict Darwinism - not despite certain characteristics of instinct but because of them. Through the figure of the super-normal stimulus, he thus separates instinct from determinism. Massumi approaches Tinbergen’s famous example of the tendency of excessive behavioural responses to visual stimuli in herring gull chicks. He approaches the topic from within the framework of affect theory. He considers the phenomena in a language that allows him to talk about animal and human sensory experiences in the same terms. What Massumi discovers through a non-anthropocentric affective toolbox is a certain more-than-human sensibility for visual abstraction.

The 20th Century zoologist Adolf Portmann identifies a principle of excess in animal life elsewhere. Contemporary art historian and philosopher Bertrand Prevost sees in Portmann's later work a radicalisation of his earlier theory of animal "self-presentation". Notwithstanding the propositions of the supernormal stimulus as a force behind the excesses of sexual display or the tendency for animal behaviour to overreach itself in relation to the visual field, Prevost sees in Portmann the identification of a more fundamental principle of animal visual excessiveness. While behaviours towards supernormal stimuli and the morphologies of animal sexual display may be evidence of excess at work in animal communication, the later Portmann is seen to identify examples such as the vivid colours of deep-sea invertebrates that are "never been seen by any eye" with an originary "cosmic" animal expressivity that is in pure excess of any communicative function.

3.1 A tug of war

We have learnt that the mechanism of "adaptation by natural selection" set out by Charles Darwin in *On the Origin of Species* is foundational to the understanding of animal life by the modern life sciences (Darwin, 2009, p.34). As such the evolution of species by the mechanism of natural selection and an explanation of animal life according to these terms known as Darwinism. However, here we must recognise the doubts that Darwin himself had and expressed in other writings as to the mechanism's power to account for all aspects of the morphology and behaviour of animals. To tell this story therefore we must distinguish between Darwin himself and the Darwinism to which his name is given. Let us outline Darwin's doubts. We do so as a starting point for a discussion that will bring together insights from the life sciences with insights from psychoanalysis, affect theory and art theory.

Evolution by natural selection is the mechanism by which certain traits of organisms emerge, persist and evolve within a species population, dependent upon the principle of fitness to the environment

and the value of the evolved traits for survival. Such an account seeks to interpret animal morphology and behaviour in strictly utilitarian terms – that is, as adaptations contributing directly to surviving the challenges of life. This is Darwinism, but Darwin himself struggled to make a full account of certain natural phenomena by these principles. Among these unruly phenomena is the case of animal sexual selection.

Despite sexual selection typically being accounted for within dominant strands of Darwinian evolutionary theory as a sub-system of the mechanism of natural selection, Darwin himself was reluctant to posit the latter as reductive of the former. In sexual selection the animal's imperative for survival is deferred. Precious energy and resources are co-opted in a competition between animals. Darwin considered there to be a principle supplementary to natural selection at work in such settings. He takes the elaborate forms of animal display and flamboyant body forms that arise because of sexual selection as evidence of this supplementary principle.

The 20th Century biologist Nikolaas Tinbergen shares Darwin's perplexity and expresses it on his reflections on the courtship of the golden pheasant. Seeking to explain the extravagant display of the species Tinbergen states that "when [the] cock displays his brilliant plumage before the hen [such] courtship postures of animals are altogether puzzling, because it is difficult to see not only what circumstances cause them but what functions they serve" (Tinbergen, 1954, p.42). The puzzle for Tinbergen in the case of the golden pheasant is that such displays are detrimental to the survival of the animal and represent a cost in resources and energy that is hard to account for within the strict economy of natural selection. Natural selection favours traits for immediate survival but sexual selection seems to favour features that indeed jeopardise survival. Darwin describes the relationship between natural selection and sexual selection as a "tug of war". Tinbergen identifies that where the latter dominates the former, we see a certain "runaway evolution" - the development of more and more extravagant forms of display. It is this runaway effect that is present in the visual excess of the plumage of the golden pheasant (Tinbergen, 1954, p.42).

3.2 More-than-human sexual exuberance

Contemporary animal studies writers Elizabeth Grosz & Alphonso Lingis take the example of sexual display as disobedient to Darwinism further. They recognise it particularly as a disobedience to a strict division between forms of animal display and forms of human display. It is a more-than-human principle of exuberance that prompts Lingis to compare animal display and human display in the passage that opens this chapter. With rhetorical flair he makes a compelling comparison between human and animal forms of display – and particularly focuses on visual and behavioural forms associated with sex and sexuality. Furthermore, Lingis seeks to emphasise the shared rituality of these forms.

Like Lingis, Grosz also identifies the forces that exceed a Darwinian explanation with sex. She takes the relationship between sexual selection and natural selection as one in which “the former cannot merely be accounted for as part of the latter”. Grosz proceeds to provide a new materialist integration of biological and cultural understandings of sex. Grosz to move away from a mechanistic language to account for animal sexual display and propose alternative terms. The spectacular forms of animal bodies oriented towards sexual reproduction are rescued from a strictly utilitarian and functional account. Indeed, she draws on Darwin’s own reluctance to reduce the morphology and behaviour associated with sexual selection to an explanation by the mechanism of natural selection. For Grosz this reluctance opens a territory whereby animal sexual practices may be described in terms that reach beyond the natural sciences into art theory and theories of sexuality.

In her text *Art and the Animal* Grosz proposes that the presence of sex in animal worlds gives rise to a degree of freedom and autonomy. She argues that in as much as sex determines organic forms of life, a freedom to create is conferred upon them. Grosz offers the courtship displays of bowerbirds as an example. The male of many species of bowerbird, construct an elaborate structure to attract a mate - the “bower” after which they are named. These structures are often embellished with a great variety

of found materials, that seem to be chosen for shape, colour and texture. Grosz recognises a certain transformative characteristic of the bowerbird's constructions as the presence of creativity. The "making of a leaf into a sexual adornment rather than just part of a tree", as a transformation of mundane materials merits a comparison of the activity of the bowerbird with human creativity (Grosz, 2011, p.174).

Citing the bowerbird's bower Grosz focusses on animal making as exemplary of non-human art. Indeed, such making practices may lend themselves most willingly to the comparison. However, by the particular interests of the thesis we may permit ourselves to read animal bodies as well as animal constructions in these terms. We may say that the very biological material of animal bodies, where shaped by sexual selection, can be seen in terms of creativity and artistry. We may thus see an equivalent between the made and the unmade in courtship display. Animal physical sexual characteristics such as the plumage of the golden pheasant though not the result of making, may, as an example of the creativity of evolution, be understood in these terms. In Tinbergen's example of runaway evolution in the golden pheasant for example we may identify the translation of more-than-human sexuality into art as evident not in the act of making but the act of reception. Indeed, by the favouring of increasingly flamboyant plumage the hen bird drives the emergence of this art. If the cock bird is the creator of the art the hen bird is the connoisseur. The refinement in her judgement of a suitable mate the cause of the refinement of the art of the male bird's body, considered as art.

For Grosz, informed by an anthropological understanding, production in excess of usefulness in the human realm characterises the phenomenon of art. She recognises courtship displays such as those of bowerbirds an excess of usefulness which therefore qualify as non-human making as art. She goes on to further support this claim by implicating, in this more-than-human context, an aspect of Sigmund Freud's understanding of the relationship between sexuality and art. Freud considered human artistic production to be a deferral of sexual energy - a place to put sexual desire in the absence of its direct fulfilment. He termed this deferral "sublimation". Grosz recognises a more-than-human

dynamic of sublimation in the extravagance and ornamentality of animal courtship displays identifies a more-than-human principle of deferral of sexual energy in non-utilitarian forms, and indeed, like Freud, gives this the name of art (Grosz, 2011, p.185).

Grosz' theorisation of art in non-anthropocentric terms makes powerful connections between art, sexuality, nature and excess. *Art and the Animal* states that, "art is the sexualisation of survival, or equally, sexuality is the rendering artistic of nature" (Grosz, 2011, p.178). Excess is seen as a principle of more-than-human nature from which human forms of non-utilitarian practices only secondarily emerge. Upon a close reading of Grosz's text, the recognition of a principle of excess in animal sexual display may be read as a realist statement (non-utility as emergent in more-than-human contexts) or a discursive one (non-utility exceeds the terms of a description according to the concept of nature held by the natural sciences). Indeed, the proposition that more-than-human sexual creativity is "the making of nature into more than it is" may be read in both these senses (Grosz, 2011, p.184). As such sexual creativity in animal worlds is offered as a phenomenon that both exceeds the concept of animal nature and is proposed as a principle by which nature is set against itself.

3.3 Super-normal stimuli

We may account for the excessiveness of animal display, or indeed display as excessive, in other terms than those of Lingis and Grosz. Grosz describes sexual display as an area of animal creativity, autonomy, art. What might be posited to challenge such an idea of animal freedom and creativity is the concept of animal instinct. We may understand the term instinct to refer to certain behaviours that are fixed, determined and programmed. Consider thus the common idiom "like a moth to a flame". As is typically the purpose of animal analogies, we may take the phrase to express a certain human unfreedom – a boundedness to certain desires or an inescapable fate. The animal is thus a figurative one in this case. But as figures of speech, we may see animals also to be fated to be perceived a certain

way. Indeed, we would do well to be wary of the anthropomorphism in such images of animals - the animal as a cypher for human qualities. No doubts moths do fall into flames, but we have also chosen a way to see moths in our own image.

Whatever the state of human unfreedom that we may wish to find figurative language for, research into the characteristics of real animal instincts sometimes resist such images. Animal instincts from an ethological perspective are shown not to be so fateful. The nature of instinct is not so straightforwardly a fatalistic state of unfreedom. The Darwinian image of a mechanistically determined animal nature is not so easily extended to the field of animal instinct. To consider why we return to Tinbergen and his answer to the puzzle of the evolution of increasing excessiveness in animal display. To find his answer he particularly focusses on the reception side of animal behaviour and how this guides evolution.

Let us therefore return to Tinbergen's example of the golden pheasant in these terms. Tinbergen develops the means for explaining the extravagant display of the cock through an innovative conception of the nature of instinct. In this and other examples of animal courtship he identifies a cause for the observed "runaway evolution". He finds that within a population of visually flamboyant individuals, some have a certain edge. Morphology and behaviour oriented toward courtship subtly vary, and these differences correlate to mating success. Furthermore, Tinbergen observes that sometimes more pronounced and striking characteristics equate to success. Greater mating interest is aroused in intended receivers with the exaggeration of certain visual qualities and characteristics. Thus, such a principle selects for greater and greater flamboyancy of display in future generations which inherit the traits of the reproductively successful organisms. The runaway evolution of sexual characteristics arises when these factors of selection dominate.

Perhaps this is no more than a popular natural history documentary would emphasise in examples of animal courtship, and probably accompanied by the inevitable anthropomorphism by which these

phenomena are seen to be like normative body languages of human sexual messaging. But what Tinbergen finds out next is more surprising. That the receiver's sensory preference exceeds any sensory effect that their natural animal interlocutors might be capable of producing. He finds that an artificially produced stimulus of more exaggerated characteristics than the natural one, is often preferred over real suitors. Such a stimulus, not present in nature, and eliciting a more amplified behavioural response, Tinbergen terms a "super-normal stimulus". Indeed, the existence of supernormal stimuli is Tinbergen's explanation of the tendency towards ever greater excessiveness in animal courtship display. Such is Tinbergen's account of the extravagance of animal display, and for which the extravagant plumage and posturing of the golden pheasant is an exemplar.

But the lure of super-normal stimuli is not only limited to courtship display. Indeed, the principle is revealed to apply across a broad range of scenarios of animal perception and communication. It is in the behavioural relationship between parent and offspring that Tinbergen's finds his most demonstrative example. In his fieldwork of the 1940s Tinbergen observed and experimented on the chick rearing habits of herring gulls. Amongst these was a study of the begging response of the chicks. In his observations he identifies that the beak of the parent bird served as the primary visual stimulus for the chicks' feeding response. Furthermore, Tinbergen finds that certain artificially fabricated abstracted versions of the beak of the parent solicit an amplified response in the chick. Changes to the shape and colour of the visual stimulus alter the intensity of the response - the chick seen to respond to, sometimes surprising kinds of exaggeration of the natural stimulus.

Tinbergen's super-normal stimulus is seen by another contemporary animal studies scholar associated with new materialism, Brian Massumi, as evidence for an alternative principle of excessiveness in animal behaviours and bodies to oppose Darwinian mechanism. Massumi sees in it a characterisation of animal instinct, against what instinct might tacitly be taken to be. He writes, "instinct has the empirical tendency to snub good form and overshoot the limits of the normal". The paradox of the "super-normal stimulus", its overreaching of anything to be found in nature, puts into question the

idea of instinct as programming. According to Massumi, there principle of “supernormal invention” evident here (Massumi, 2012). Upon such a reformed instinctive ground Massumi takes a fresh look at the production and reception of art. He relates instinct to art by translating the ethological concept of the super-normal stimulus into the language of affect theory. Massumi considers the value of affect theory in the context of animal perception as a way of talking about affective responses to sensory encounters that avoids the psychologism and therefore anthropocentrism of the typical language of emotion.

The super-normal affects of Tinbergen’s experiments (more intense behavioural responses than were elicited by the natural stimulus) were caused by abstracted, formalised designs bearing little direct visual similarity to the natural stimulus. In the paper *Animality and Abstraction* Massumi develops an account of a more-than-human sensibility to abstraction on this basis. Indeed, super-normal stimulus holds for him a more-than-human principle of abstraction. The increased intensity of animal response to the super-normal stimulus is an affective intensity associated with a sensibility for abstraction, and thus for art as a principle of abstraction. Massumi, identifies a tuning to visual abstraction and the connection between abstraction and intensification of response with the experience of art. Massumi thus both extends affect theory to birds and brings the visual sensibility of birds into the realm of art theory.

The super-normal stimulus presents us with a case of excessiveness connected with experiential intensification in animal life. Indeed, the super-normal stimulus is indicative of a force by which animal nature exceeds its given state - reaching beyond its given forms of life. Art is an instinct, and art as instinct is that which reaches beyond any present state of nature. The super-normal stimulus is a sensory image of the beyond of animal nature, and this beyond is perhaps the territory of non-anthropocentric art. An intensification that exceeds both nature and culture is what is at stake in a more-than-human art of super-normal stimuli.

3.4 Animal “cosmic cosmetics”

Let us recall zoologist Adolf Portmann’s challenge to Darwinism from the chapter that opens the thesis. There Portmann’s *theory* of animal expression is introduced as contesting a Darwinian functional account of animal appearance. Portmann’s claim that animal surfaces, patterns and markings serve an expressive role leads him to see animal patterns as heraldic. Such striking patterns are an announcement of the species and of the individual organism’s belonging to that species. Thus, animal colours and patterns are analogous to the heraldic emblems of the middle-ages that signified family lines and affiliations. An exemplar for Portmann is the dramatic markings of zebras, which elsewhere he describes as like flags announcing the animal’s self-possession of its individual and collective identity. He names this natural regime of heraldic appearances (and here he predominantly focusses on visual appearances) “self-presentation” (Portmann cited in Prevost, 2013).

For Portmann the animal’s external appearance counts as something akin to a self-image. He relies on certain anomalies between the internal and external organisation of animal bodies to support such assertions, and to challenge a functionalist account of animal external form. For example, the widespread feature of bilateral symmetry in animals, in as much as it is functionally independent from the commonly asymmetrical arrangement of internal organs “draws an expressive plan that is completely different from the organic plan” (Prevost, 2013). Such characteristics of animal appearance confer a principle of self-possession that eludes a strict functional explanation.

Portmann’s philosophy of biology has received renewed interest within a recent non-anthropocentric turn in art theory, namely by Bertrand Prevost. Prevost identifies a development in Portmann philosophy of biology that is of particular interest to this project. In his later work Portman is seen to draw out the further consequences of his concept of animal “self-presentation”. Here Portmann (according to Prevost) goes further than his original and significant claim that animal appearances communicate “self-possession” and proposes that the principle of self-presentation is one that indeed

exceeds even a communicative imperative. In the later work Portmann presents certain examples of animal visibility as independent from the function of communication. Here, a further meaning of expression is attributed to animal appearances, expression for its own sake. Animal appearances are the expression of animal interiority but are not driven by the need to communicate. There is a more primary expressive imperative at work.

Portmann identifies phenomena in the zoological record as exemplary of visual expression without communication. These are appearances “which for our eyes have the structural characteristics of the optical sphere but that in normal life certainly never appear in any witness’ eye for the necessary role for life” (Portmann cited in Prevost, 2013). The animal patterns and colours that are of most interest to this theory are those that are claimed to have no necessary function for the survival of the organism. Portmann’s identification of such cases represents a shock to thought for a Darwinian explanation of animal appearances.

His most striking example perhaps is the bold colouration of deep sea invertebrates - colours that in the pitch-black environment in which these animals dwell are never seen by any eye. The markings of bird feathers serve as another. Portmann argues that on a functional account the parts of individual feathers that overlap and therefore remain hidden to the eye should have no distinctive patterning but observes on the contrary that the vibrant colours and patterns on many birds’ wings extend to those hidden parts. He takes these two examples as evidence of a principle of visual expression that exceeds his earlier account of animal expression as communication. These are cases of visual expression without a receiver, that follow an expressive mode (paradoxically) addressed to no one.

By this conception of animal expression, against Darwinian functionalism, Portmann asserts that “we should therefore look for a wider horizon that could integrate these expressive forms” (Portmann cited in Prevost, 2013). Prevost takes up this call. In his paper for the conference *A Matter of Contradiction* 2013 he draws on Portmann to develop a framework for reconceptualizing art in non-

anthropocentric terms. Prevost recognises Portmann's theory of animal expression as a "deep concept of expressiveness ... that puts expression before visibility or at least prior to the subjective reception of visibility" (Prevost, 2013). To name this form of expressivity to be found in animal bodies he introduces his own term "cosmic cosmetics". This alliterative term serves Prevost's aim of relating the cosmic (i.e., non-human, pre-human, or more-than-human frame) to the cosmetic (i.e. aesthetic, decorative, ornamental) by drawing attention to the common root of the terms *cosmic* and *cosmetic*. Cosmic cosmetics embodies the idea of human art and animal bodies united and transformed as practices of cosmetics on a cosmic (non-human) stage. For Prevost it is expressive intensity that both animal bodies and art works participate in from a de-subjectivised cosmic perspective. The mode of address of these bodies, both natural and cultural, is both depersonalised and de-psychologised.

Portmann's concept of animal "self-presentation" and Prevost's notion of "cosmic" image-making are of interest to the thesis argument in as much as they allow us to see animal bodies differently. They allow us to see animal bodies aesthetically, but to define aesthetic interest not in terms of a projection of human aesthetic taste onto animal appearances, but to consider the surfaces of animals as expressing and embodying an aesthetic principle beyond the human. To understand the aesthetic as a fundamental principle of animal life. They allow us to see animal colours and patterns as in excess of function and utility by way of a theory of expression. There is a non-anthropocentric theory of animal aesthetics.

Conclusion

In this chapter, and following a new materialist methodology, the humanities have been permitted to invade the traditional objects of nature. With the help of thinkers from the life sciences and their contemporary interpreters in the humanities, a challenge is presented to the language of natural selection to account for aspects of animal display. These counter-Darwinian theories of animal

display help us to map out the territory of the postnatural animal in contemporary art. We see the exuberant, over-the-top, non-utilitarian aspects of animal display as a principle of excess in nature.

With the help of Nikolaas Tinbergen we see animal behaviour as complicit in establishing and fostering lavish sensory phenomena in more-than-human realms. We have found within naturalism itself resources for challenging dominant concepts of nature, as is shown through Massumi's reading of Tinbergen. Massumi takes Tinbergen's findings on the excessive character of animal instinct as a recognition of a degree of freedom in animality, whilst appealing to affect theory to avoid anthropomorphising the qualities of this freedom. Tinbergen may indeed see his role as ethologist to "observe how animals behave within their *natural* environments" (1963, p.420), but as counterfactuals to natural stimuli, super-normal stimuli may alternatively invite a consideration of animal behaviour and animal display in and as they exceed nature. Thus, we may recognise the natural and the unnatural not as a binary or dichotomy but as having a relation whereby the latter is imminent to the former.

Alphonso Lingis gives us a series of poetic analogies between animal courtship and human courtship that challenge a typical division between nature and culture. Elizabeth Grosz, with reference to psychoanalytic concepts, contributes the claim that the relationship of sublimation between art and sexuality is not an exclusively human one. She equates the non-utility and creativity of animal sexual display with human art as a practice of surplus energy. Through this equation Grosz proposes a more-than-human sexuality and de-anthropocentrises a definition of art as intimately linked to it.

Likewise, Bertrand Prevost takes Adolf Portmann's concept of animal "self-presentation" as the starting point for de-anthropocentrizing a concept of expression. Animal display as "self-presentation" eludes a functional description, and as "expression without a receiver" attest to a "cosmic" aspect of animal patterns (Prevost, 2013). Beyond an economy of survival animal display as expression attest to an excess, in other terms than those of both Grosz and Massumi.

We therefore see animal display as an excessive phenomenon, but also as exceeding certain frameworks of knowledge and inviting new ones to be constructed to account for the sensory, and particularly visual aspects, of animal life. What is seen in these accounts of animal display are natural processes that paradoxically exceed a state of nature. Animal display as excessive of both the concept and the reality of nature expresses and embodies the idea of the postnatural animal. It is in these terms that we can begin to see, live with and learn from animals, which become postnatural within a way of seeing after nature.

4 MIMICRY AND MIMESIS

We are dealing with a luxury and even a dangerous luxury, for there are cases in which mimicry causes the creature to go from bad to worse: Geometer-moth caterpillars simulate shoots of shrubbery so well that gardeners cut them with their pruning shears. The case of the Phylliidae [true leaf insects] is even sadder: they browse among themselves, taking each other for real leaves, in such a way that one might accept the idea of a sort of collective masochism (Caillois, 2003, p.96).

An original program exists both for the fly and the spider. And I would maintain that the fly's original program (or 'archetype') influences the original program of the spider in such a way that the spider's web can be called 'fly-like' [...] The spider's web is certainly formed in a 'fly-like' manner, because the spider itself is 'fly-like'. (von Uexküll, 2010, p.119).

Introduction

The previous chapter considers the vitality, responsiveness and expressivity of animals and question a Darwinian mechanistic account of these phenomena, in order contribute to a mapping of the postnatural animal. This chapter recognises what may be seen to be entirely opposite characteristics of animals that also contribute to this aim. It considers the presence of mimicry and mimesis in animal worlds as having these opposite characteristics. It argues that mimicry and mimesis are forms of life in which animal vitality is attenuated, responsiveness tempered, and expressivity negated.

This chapter, like the last, maps the postnatural animal as an endeavour that goes hand-in-hand with questioning certain distinctions between human and animal practices. Also, like the last chapter also it aims to avoid anthropomorphism in such an approach. It takes cases of animal mimicry, and commentaries on them, as challenging such distinctions as well as questioning the concept of animal life as natural. It sees a distinction to be overcome as that between mimicry and mimesis. Although interchangeable in some contexts, a strict distinction of these terms when used in certain contexts differentiates mechanistic, instinctive and blind forms of imitation on the one hand, and creative,

imaginative and autonomous forms on the other. As such, upon a humanistic view of organic life the former is identified with animals and the latter with humans. The chapter asks how to bridge the gap between instinctive animal mimicry and psychological human mimesis. Mimicry and mimesis are identified to be more-than-human representational practices and states of being. Mimicry may be direct external imitation whereas mimesis may be a more abstracted or internalised transformation. If we see mimicry as but part of a broader category of mimesis (which the reader is invited to do) then the range of natural phenomena that may belong to this category, and which thus may be seen in a novel way, increases.

The writings of Roger Caillois and Jacob von Uexküll are the primary texts by which the line between mimicry and mimesis, between human and animal practices of mimetic transformation, are evoked. In the 1930 essay *Mimicry and Legendary Psychasthenia* Caillois breaks with a Darwinian understanding of animal life by explaining insect mimicry as having a proto-psychic dimension. As a member of the Surrealist circle who was famously to disagree with Andre Breton's mystification of the marvellous, in the essay Caillois seeks to combine scientific natural history with a history of the psyche regarding the marvel of insect mimicry. Contemporary commentaries on Caillois' theory of animal mimicry are brought in to ascertain the text's influence on contemporary animal studies.

Ethologist Jacob von Uexküll's reflection on the web building practices of spiders in the near contemporaneous 1934 essay *A Theory of Meaning* is used animal mimicry as a more diffuse phenomena. In von Uexküll's description of spiders' webs as "fly-like" mimetic principles in nature are seen to run deep, and to hold significant lessons. His semi-literary style makes the gap between his and Caillois description of animals, between a literary and scientific spirit, less unbridgeable. Indeed, both their texts represent a contestedness and lack of strict disciplinary definition in the life sciences in the early 20th Century.

We may see animal mimicry through Caillois and von Uexküll as strategies pertaining to predator/prey relations - both predator and prey using mimicry to get the better of each other. Predator animals are indeed seen to be transformed or to transform materials around them, as the effectuation of a certain kind of deadly empathy, by which the hunting practices of animals and humans may be compared as mimesis. Likewise certain prey animals are seen to have their own inverse relation to mimesis, whereby it goes in the direction of a mimetic diffusion, a becoming environment.

Thus, the chapter reads animal mimicry as mimesis and therefore in terms broader than a mechanistic description. It reads such forms of animal representation as enriched by frameworks from the humanities which explain the meanings of image making, empathy, and identification. Practices of animal mimicry and mimesis are seen as having an inverse agency to that of expression – an agency of negation by which animals participate in a negative condition, and that as much resists the mechanistic picture by identifying animals with creativity as a negative relation.

4.1 A clarification of terms

The interchangeability of the terms *mimicry* and *mimesis*, in both the natural sciences and the humanities, makes it hard to connect certain distinctly different kinds of mimetic phenomena to a clear terminology. However, we may identify two broad meanings covered by the territory of their interchangeable usage. On the one hand, mimicry or mimesis may be used to refer to the act of something coming to *resemble* something else – to reproduce the look, sound, smell or feel of a sensory experience. This is the sense in which we may consider the insects receiving Roger Caillois attention at the start of the chapter - as a deceptive semblances within a natural historical setting. Geometer moths and Phylliidae insects resemble other objects such as leaves and twigs. However, we may also describe human products such as figurative painting as resemblances. In in second context it is the term *mimesis* that is typically used. By this grouping, it would then be up for debate

what the similarities and differences are between the creation of resemblances in a human context and in an animal one.

However, there is a second meaning somewhat different to the first, that particularly applies to the term *mimesis* within an anthropological context. Mimesis in this sense is a “similarity without resemblance”, to use Walter Benjamin’s characterisation (Benjamin, 1979, p.66). This is a similarity something has to something else on a more abstract level, or according to a condition by which we might speak not of an objective transformation of external appearance but of subjective, internal transformation. Thus, there is a certain requirement to characterise an aspect of subjectivity (and let us limit this to the human subject for now) as a relation of similarity without resemblance. Like the case of mimicry or mimesis as resemblance, it is argued that this second more abstract kind of transformation, may also be identified in the animal sphere. And furthermore, as either a making practice that operates by the similarity of abstracted qualities, or indeed an internalised and thus more existential becoming other of the animal.

4.2 Animal mimicry

We may see the concepts of similarity as resemblance and similarity without resemblance traversing the human and non-human spheres. Roger Caillois makes it his task to speak of the phenomena of mimicry and mimesis in more-than-human terms- and to identify some underlying principles to these phenomena in both nature and culture. In the essay *Mimicry and Legendary Psychasthenia* he sees the phenomenon of insect mimicry as a place to identify forces that precede but are also embodied by human forms of mimicry. He identifies these as more-than-human psychic forces. Unhappy with the absence of a psychic dimension in the standard Darwinian account Caillois presents an image of animal life (specifically insect life) that aims to synthesise a natural historical account with a proposed more-than-human history of the psyche. Caillois is informed by an anthropological association of

mimicry with art. Accounting for animal mimicry in terms of psychic life permits Caillois to intimate a connection between nature and culture through his concept of an originary, more-than-human psychic drive.

Furthermore, Caillois identifies in insect mimicry a psychic force of a pathological kind. Such insects are given to display a psychic disturbance that he calls “psychasthenia”. Psychasthenia is a now largely out of date clinical term to describe a sense of a loss of self in the patient and an absence of identification with a self-image. It has been broadly replaced by the term *schizophrenia* in a contemporary context. The psychasthenic may feel that they are an inanimate object, dispersed in space, or even inexistent. Psychasthenia is a “heteromorphic” identification as opposed to a healthy “homoeomorphic” identification (Caillois, 2003, p.94). Psychasthenia is a force of depersonalisation – a desire to cease to exist. Caillois’ mimetic insects are seen by him to manifest a compulsion to disappear, and disavowal of identity. In insect mimicry a psychic dimension is discovered that precedes its appearance in humans on an evolutionary timeline. Preceding human history psychasthenia thus merits the designation *legendary*. Legendary psychasthenia is of an archaic, non-human origin that thus names a de-humanised psyche. Caillois claims that mimetic insects (and we may take this as either a poetic claim or a realist one) are evidence of a more-than-human neurosis.

The contemporary commentator Kyung-Ho Cha applies theories of psychosomatics, and the accompanying concepts hypnosis and auto-suggestion, to Caillois’ description. Exterior mimicry is seen to be a psychosomatic effect of the animal’s psychic metamorphosis, its dissociation from its self-image (Cha, 2016). The resemblances of true leaf insects, for example, to use the language of psychoanalysis, are something like symptoms of more-than-human neurosis. Caillois extends aspects of psychoanalysis thus to the non-human realm. In these terms the insect takes on the appearance of a leaf because it *believes* it is a leaf. It ceases to believe it is an insect. A psychosomatic physical transformation of the flesh and rewiring of nerves are suggested to be responsible for animal mimicry no less than they may be for certain symptoms in humans.

Rosa Eidelpes explicitly summarises what is to be found in Caillois' text that resists a Darwinian account of nature. She frames Caillois' insect mimicry as a "dangerous luxury", as a natural phenomenon "of no use for the conservation of species". Caillois' has a "non-determinist view on evolution that does not confine aesthetic freedom to the realm of art but assumes that nature itself is driven by anti-utilitarian mechanisms" (Eidelpes, 2014). Thus, Caillois' notion is translated into language that resonates with the interests of this discussion of the characterisation of the postnatural animal as escaping utilitarian description and resisting forms of utilitarian exploitation by becoming art.

Legendary psychasthenia, as a condition of negativity, is a transposition of the Freudian death drive (Meyers, 2014) to a more-than-human context. Furthermore, like Freud's death drive, its non-human variant is both a destructive and creative force. Indeed, this proposed originary negativity in nature, evident as a dangerous luxury, has (like those forces discussed in the previous chapter) a relationship of excess to organic nature. Thus, Caillois' challenge to Darwinism is made on quite opposite grounds to Portmann's theory of animal self-presentation and expression. The psychasthenic insect does not express itself but rather un-expresses itself either by pretending to be something else (mimicry) or by disappearing completely (camouflage). The insect mimic does not assert its selfhood but rather loses it. If Portmann's is a vital principle Caillois's is a principle of the attenuation of vitality. Animals are too lively to be reduced to Darwinian mechanistic explanation in the former case and not lively enough in the latter.

4.3 Animal mimesis

In his discussion of Caillois Cha cites Robert Broadbent's 2012 book a *History of Pantomime* which identifies insect mimicry as the origin of acting (Cha, 2016). In an anthropological context acting may name human practices institutionalised as theatre but may also be identified with various forms

of ritual practice. Acting and certain rituals of imitation we may take to be human practices of mimesis. These practices may include the production of resemblances through movement, posture, and sound, but they may also rely for their underlying meaning on a principle of subjective, felt, internal transformation into the other. We may see an identification of animal mimicry as the origin of human mimicry as an invite to talk about insect mimicry and human mimesis in shared terms.

Regarding this sense of mimesis as acting Caillois' insects are examples of mimesis as psychic transformation. The behaviour of the true leaf insect, according to Cha's interpretation of Caillois, is its belief that it is a leaf. A case of autosuggestion. The enervation of the insect's body, its imitation of a leaf by staying quite still or gently swaying, is considered a kind of acting that is not merely superficial mimicry but one of psychic transformation (Cha, 2016). By changing the frame of reference we may thus see certain animal practices as kinds of interiorised mimesis.

Let us now consider a particular entanglement of human/animal relations - the entanglement of nature and culture pertaining to hunting practices, and in particular the conditions of visibility that accompany these practices. The human hunter may be too easily compared to the animal predator. Many such comparisons, taking the form of allegorical stories, turn culture into nature to confer the mythic timelessness of the latter upon a particular historical contingency of the former. Notwithstanding this danger, hunting and predation, as forms of life that both humans and animals participated in, may be an opportunity to consider the non-anthropocentric significance of mimicry and mimesis. Crypsis and camouflage feature as a strategy of both the human hunter and the animal predator. If Caillois' exemplar animals, the Phylliidae (true leaf insect) and the Kamilla (Oak Leaf Butterfly) disappear into their environments for the purpose of defence, but predators use disguise to attack. The human hunter uses camouflage to dominate the prey. Hunting and military camouflage instantiate a deadly phenomenology of surprise. The hidden hunter and the animal predator, watch carefully from a distance until the moment comes for contact, which is kept as cursory as possible.

In the predator prey relationship there is little interaction or communication. Indeed, predatory strategies are the active negation of signs.

Perhaps predators and hunters that use strategies of “offensive mimicry” may be subject to the same dangers of psychic dissociation as Caillois’ “defensive mimics”. The success of the animal predator is dependent on a certain kind of empathy and a certain kind of qualified intimacy. Jakob von Uexküll presents such a characterisation of the predator/prey relationship through the example of the spider and the fly. The use of the definitive article here may well suggest we are about to hear an allegorical tale, but von Uexküll reinvents any possible allegories that might spontaneously come to mind. Von Uexküll’s account of the predator/prey relationship is both scientific and philosophical. He is known for his theory of animal life worlds which he gives the technical term “*umwelt*”. The animal’s *umwelt* is the sum of significant objects and affordances in its environment. It is the environment as it is perceived by the animal and filled with the range of meaningful ways it can act upon it. There are as many *umwelts* as there are species.

Uexküll asserts that the *umwelts* of the spider and the fly are absolutely separate and uncommunicating. Their worlds of significances (of both perception and action) do not overlap. What concerns the fly fails to concern the spider, and visa-versa. Their very different ways of life determine this. Indeed, for von Uexküll species worlds are “soap bubbles” which never intersect or interact. However, the spider and the fly *are* nevertheless bound together intimately within an ecological niche. In characteristic poetic language, von Uexküll applies a musical metaphor to this paradoxical relation/non-relation of the spider and the fly. He states, “the fly and the spider play their own tunes without knowing anything of the other’s, and contribute towards a larger melody” (von Uexküll, 2010, p.119).

What comes to bear in the relationship between spider and fly, may be understood as a certain kind of mimesis. In the quote that opens this chapter von Uexküll speaks of the web building behaviour of

the spider as a program, but we may equally speak of it as a ritual. he continues by describing the spider's making of the web as a tuning exercise:

[The spider] spins the size of the mesh to accord with the size of the fly's body. It measures the strength of the web's threads to resist the force of the insect in flight. The radial threads of the web are spun tighter than its circular threads, which yield slightly, enclosing the fly and entangling it in their sticky droplets. The radial threads are not sticky; they serve the spider as the shortest route to the captured prey. [...]. A special miracle is that the threads of the web are so finely spun that the construction of the fly's eye is too crude to perceive them, and the fly plunges without warning to its own destruction (Von Uexküll, 2010, p.117).

As a result of such tuning both the spider and the spider's web become "fly-like". However, the spider does not act like the fly, and the web does not resemble the fly. Uexküll is evoking the other sense of mimesis, a similarity without resemblance. We might thus speak of the spider becoming fly-like in the same sense as the anthropologist Michael Tausig characterises human mimesis – a "becoming animal without resemblance" (Tausig, 2018). We may see in the animal observations of von Uexküll a principle of mimesis in nature that is broader than a natural historical account of animal mimicry. Upon this approach we might start to suspect many ecological relations to be characterized by mimesis.

Von Uexküll continues – the spider "weaves its web before it is ever confronted with an actual fly. The web, therefore, cannot represent the physical image of a fly, but rather it is a representation of the archetype of a fly, which does not exist in the physical world" (von Uexküll, 2010, p.118). The likeness of the spider's web to the fly is one that exceeds the sensory domain. Such non-sensuous likeness we may consider an abstracted likeness. The web follows the fly's abstract schema. It is an interpretation and transformation of the fly. It is fly-like by virtue of, evoking Walter Benjamin once more, "non-sensuous similarity".

Such an attribution does not psychologise spiders. Indeed, an absence of a psychological relation may be seen to be a condition Uexküll's non-relational account of species worlds. The spider, has no mental image of or knowledge of the fly. To the spider the fly is no intentional object. This type of mimesis, such as fly-like web building, prevails in the absence of psychological causes. Such a proposition invites and creates possibilities for understanding image-making, and even art, in de-psychologised and thus de-anthropocentrised terms. Such an outlook frames animal life as richly poetic, even in the absence of animal psychology.

The spider's making a "portrait of the fly" without ever seeing it may be seen as a poetic act, not despite the organism's identification with instinct and compulsion, but because of it. The irreducibility of nature to a homogenous substance, of "umwelt" to "environment", assures the irreducibility of both human and animal life to biological terms. Jacob von Uexküll is useful in proposing the structure of non-knowledge in interspecies worlds. The spider knows nothing of the fly in constructing its web. It knows not what the fly looks like, what it perceives or conceives about its environment, or what it is like to be a fly. However, despite the spider and the fly being unknowing of each other and completely trapped within their species-centric worlds, the spider and the fly have an intimate ecological bond.

4.4 Mimesis and symbiosis

Symbiosis is a term used in the life sciences to describe a relationship of mutual benefit between species. Such symbiotic pairings emerge on evolutionary time scales and once established place organisms not only in states of mutual benefit but also mutual dependency. As an example of a symbiotic system, we may cite the relationship between certain species of bee and flowering plants - the bees dependent on the plants for food and the plants dependent on bees to distribute pollen. Mutual benefit is indeed the particular emphasis that Donna Haraway's gives to symbiosis in her

2016 book *Staying With the Trouble: Making Kin in the Cthulucene*. Here Haraway considers this type of symbiosis to be an ethically sound way to think about human/non-human relations (Haraway, 2016).

But symbiosis characterises a much broader range of inter-species relationships than this. In the case of the bee orchid for example the flowers of this plant “mimic the shape and scent of a particular species of bee [the bee orchid] in order to lure them into pseudocopulation. While the orchid transfers some of its pollen to the bee, the bee gets nothing but a wasted effort” (Natural History Museum, 2021). A very broad range of relationships, not just mutually beneficial ones, may be considered symbiotic. Indeed, both Caillois’ insect mimicry and Uexküll’s predator/prey relation can be, and in the present context are, usefully thought of as symbiotic.

We may see that Haraway’s interest in symbiosis reflects that which Caillois has in insect mimicry. For Haraway what presents symbiosis as a model for ways of thinking about human responsibility to the more-than-human realm is the organism’s giving up of its individual identity. In some evolutionary sense entering symbiotic dependency implicates this foregoing. Symbiosis as a model for creatively conceiving novel interspecies relations becomes for Haraway the neologism “sympoiesis” (Haraway, 2016). Furthermore, states of sympoiesis are constituted on both the material and affective level. Caillois’ insects might be seen to participate in Haraway’s demand for a loss of self in the Anthropocene. Indeed, Haraway identifies an antagonism between a philosophy of organic self-possession and a philosophy of sympoiesis, which may be seen to map onto Adolf Portmann’s concepts of animal self-presentation and Roger Caillois’ more-than-human psychasthenia.

It is valid in a naturalistic description to identify the relationship between spiders and flies as symbiotic, though not of mutual dependence or benefit. Indeed, in some categorisations symbiosis becomes a near universal for all interspecies relations (National Geographic, 2019). This would indeed be commensurate with the ecological thought that at some level all elements of an ecosphere

are dependent on each other. It is such that the mimesis of the spider is a symbiotic phenomenon. That the spider may lose itself in becoming fly-like, the dissolution of self that Haraway identifies with sympoiesis, can be seen to be present in predator/prey relationships. A human or animal foregoing of selfhood as, characteristic of mimesis as becoming, thus connects the concept of mimesis with the concept of sympoiesis

The mimetic relation is not a cosy one for Uexküll. It is not the symbiosis of companion species. It is a symbiosis of uncommunicating alterities. Animal binaries, either spider/fly or human/non-human, are not brought closer by symbiosis. But there is a dark empathy in such relations, whereby empathy is a mimetic becoming prey of the predator. The apparent communicative function of the bee orchid's visual lure, is absent of anything that we could call knowledge of the addressee. Symbiosis as mimesis, or mimesis as symbiosis do not challenge the concept of nature by ascribing mind to nature but by ascribing to it practices of non-knowledge. Dependent interspecies relations (i.e., ecological relations) *as* mimetic relations constitute the postnatural animal as an entity that both undermines and exceeds its own nature in mimetic transformations.

Conclusion

In this chapter animals have been observed from zoological, ethological, psychoanalytic and literary perspectives. Roger Caillois and his commentators have assisted in the extension of the concepts of psychasthenia to the realm of the non-human. This force of negation counters a demand to live that natural selection makes upon animals. Caillois' animal mimicry is to be seen as artistry not because it is expressive but rather because it embodies the creative energy of the death drive. The boundary between a realm of organic immediacy and a realm of alienated being, considered to delineate human and animal life in conventional psychoanalysis, is challenged by the identification of alienating forces in the more-than-human sphere.

We have interpreted von Uexküll's spider's web as a form of knowing without knowing. The thesis understands his description of the incommunicability of species worlds as a relation of mimesis – the practice of becoming without imitating. Mimesis is nominated as a structure present in more-than-human worlds by which we may speak of animal behaviours non-mechanistically and without psychologising them. Mimesis is given to be a mode of relationality between animals, that though not resembling each other are ecologically connected and bound together by a similarity without resemblance.

A broad range of relations between animals are captured under a liberal definition of symbiosis. Indeed, symbiosis may be given to characterise any interspecies pairing or bond. The characteristics of symbiosis are determined by a paradoxical “harmony without communication” of animal *umwelts* (Uexküll, 2010, p.157). Mimesis is characterised as a playing out, an acting out, a fiction-making practice – and therefore an artifice. Equating animal mimesis with artifice therefore challenges the naturalness of symbiosis. Whether animal mimesis is direct resemblance or similarity without resemblance the phenomenon counters the unified, homogenous image of animal life of the life sciences by the principle of mimesis as artifice. The symbiotic animal is the postnatural animal because its body and behaviour are invested with the artifice of mimesis.

5 THE “IDEA OF NATURAL HISTORY” IN THE WORK OF PIERRE HUYGHE

Introduction

Finding new forms of thought, knowledge and experience that are suited to the conditions of the Anthropocene is the context for this chapter. A characterisation of the postnatural animal and the argument that animals are to become postnatural as art is approached here through a case study of the influential contemporary French artist Pierre Huyghe. The chapter takes Huyghe’s output of the last nine years as an exemplar of the postnatural animal in contemporary art. Furthermore, it makes a claim for the postnatural animal as art through a particular interpretation of Huyghe’s work and by framing it by a specific concept that facilitates a postnatural reading. Huyghe’s installations and projects are examined and interpreted through the lens of Theodor Adorno’s writings on the themes of nature and history.

Adorno typically brings the terms nature and history intimately together in his writings, and for particular purposes. An early essay synthesises them in its title - *The Idea of Natural History*. The notion of natural history Adorno expresses here will be central to the task of interpreting Huyghe. Huyghe’s experimental enquiry into alternative experiences of nature and history suggest Adorno’s writing around these themes as a relevant interpretative framework. The effect of the suspension of any simple definitions of such categories within Huyghe’s complex and sprawling installations open the work up to Adorno’s writings on the relationship between nature, history and art.

To proceed, it is important to understand that with the term natural history Adorno is not referring to its usage or meaning within the context of the natural sciences. By contrast Adorno’s idea of natural history finds its points of reference within the humanities - visual art, literature and philosophy. Its ambitions however are greater than any strict division of the human and natural sciences. The aim of

Adorno's natural history is to reconcile an understanding of the human as natural being with an understanding of the human as the subject or protagonist of a historical condition in which freedom and emancipation are at stake. Such a project inevitably entails a critique of the scientific conception of nature, or at least the worldview that separates out nature as the object of science. The idea of natural history must be understood as eluding conceptualisation. Strict definitions of the terms that compose it are actively avoided, for the aim is not to rely on given definitions to see how they fit together but to consider how the terms are defined in and through each other. This is the dialectical method that Adorno inherits from a philosophical tradition stretching from Hegel to Marx. The advantage of approaching nature and history dialectically is the possibility of transcending these concepts which seems such a necessary task in the context of the Anthropocene. We see under the geological label of the Anthropocene the unprecedented entanglement of natural systems with the creations of human history. This entanglement calls for new ways of seeing nature and history and to see how definitions of nature and history are related through their opposition. Dialectical thinking is well placed to serve this task if we agree with Thomas H. Ford's that "the Anthropocene is an essentially dialectical concept" (Ford, 2013, p.65).

The opposition of nature and history that must be dialectically overcome is, according to Adorno, based on two binaries by which they are primarily distinguished. The first is the opposition of transience and permanence. For Adorno the concept of nature has been mythicized as that which is essentially static, timeless and predestined. History on the other hand is transient, contingent and the production of novelty. The second is the binary of unity and division. Nature is the unified and harmonious state of being, and history, as an unresolved project that upsets and unsettles this harmony is characterised by its incompleteness. Adorno seeks to reconcile nature and history by identifying transience as a quality that nature and history share. Upon the second opposition of unity and disharmony he aims to challenge received ideas by critiquing the concept of nature as unity. Within the dialectic, and according to its logic, this reconciliation is a continuous process rather than a simple outcome.

This chapter will examine the idea of natural history particularly in terms of its given association with the concept of allegory and the image of the ruin, and attempt to frame Huyghe's practice through these ideas. Adorno takes the concept of allegory from Walter Benjamin, and for both these men the allegorical mode is the aesthetic, poetic and experiential embodiment of the dialectical method. Allegorical interpretation is proposed as a way of seeing art but also as a way of seeing the real world. It is the means (and here we must turn to Benjamin) to appreciate the dialectical character of the relationship between nature and history in the experience of art, the products of a culture more broadly, and the creations of nature itself. Huyghe's body of work will therefore be evaluated in terms of Benjamin's identification of the reconciliation of nature and history with the allegorical mode. Benjamin's discussion of the allegorical brings in two further concepts that will likewise be explored in relation to Huyghe's work. For Benjamin the condition of allegorical interpretation is the melancholic gaze. Allegory and melancholia become components in a particular brand of ruin theory in Benjamin's writing. Images of decay and ruin in Huyghe's work will be subjected to this gaze in which both nature and history become ruins.

Finally, a parallel will be drawn between Huyghe's stated aim of making art that is indifferent to the human spectator, and Adorno and Benjamin's realisation that the idea of natural history amounts to a degradation of human experience. Decay, ruin and irrevocable transience, Huyghe and Benjamin may well agree, are spectacles that maintain a certain indifference to the human observer. Both Adorno and Benjamin see this as regrettable, but Benjamin embraces it as a necessity in an active project to approach the idea of natural history by erasing the human subject. Huyghe's quite specific engagement with these themes, in which ruined forms are seen in the context of ecological systems thinking, will be considered in terms of what is useful in Benjamin for forming insights on the work but also how Huyghe transforms the motif of the ruin and surpasses Benjamin's vision to serve the purpose of anthropocenic thinking.

5.1 The dialectic of nature and history

Adorno identifies the concept of nature with that of fate, destiny, law - nature as a predetermined eternal reality. It is this conceptualisation that Adorno seeks to negate in his 1932 essay *The Idea of Natural History*. Adorno argues that this concept of nature, moreover, is constituted by and through its opposing concept – that of history. Natural being is defined as static and timeless, and historical being a sequence of novelties, contingencies and accidents. History stands in opposition to timeless nature “as a movement that gains its true character through what appears in it as new” (Adorno, 1984, p.111). Consistent with the Hegelian tradition Adorno views the subject of history (the human being) in emancipatory terms - as the expression and articulation of a liberatory force. Adorno however departs from Hegel’s philosophy of history in which ‘Geist’ (spirit or mind), as the agent of history (understood to belong to both the individual and the collective) does not inevitably evolve in the direction of freedom. This is Adorno’s pessimism. For both Hegel and Adorno history is defined as that which promises human liberation through the possibility of the occurrence of the new. This liberation is the liberation of human nature or nature in the human. Finding himself in less optimistic times than Hegel Adorno diagnoses a regressive tendency imminent to the progress of the spirit, a corruption of the Enlightenment ideals of modernity that he names “instrumental” reason. Adorno sees reason ambivalently as both the prerequisite condition of liberation and as the instrument of the domination of nature (both human and non-human) (Horkheimer and Adorno, 2002, p.149). For Adorno, history therefore is the possibility for both the liberation and the domination of human nature.

Adorno sees any ultimate opposition between nature and history as false, and considers that a unification or reconciliation of the two, which he identifies as the central problem of critical social theory, is a task requiring a dialectical consideration of their opposition. The dialectical movement is the overcoming of the contradictory aspects of opposing concepts through recognising that the former concept contains something of the latter and visa-versa. In this recognition a synthesis may be found. But for Adorno, and for Hegelian philosophy of history more broadly, the operation of the dialectic

is much more than just a way of doing philosophy - it is the mechanism behind historical change itself (Horkheimer and Adorno, 2002, p.149). Likewise, Adorno's dialectic of nature and history should not just be seen as an interpretative framework but a force behind the emergence of concrete relations between nature and history *as* history. Adorno warns us that to grasp the idea of natural history will not be a straightforward or easy task, characterised as it is by a dialectical structure. The idea of natural history goes beyond the conceptual categories of both nature and history. It is not a synthesis of opposing concepts through a simple modification of these concepts but rather a transformation of these concepts into a third.

5.2 Dialectical nature

The concept of nature that is to be dissolved ... would come closest to the concept of myth. [...] what as fatefully arranged predetermined being underlies history. [...] The misconception of the static character of mythical elements is what we must free ourselves from if we want to arrive at a concrete representation of natural history (Adorno, 1984, pp.111-123).

Dialectical thinking, recognising that the same always contains something of its other, resists "identity thinking" (Adorno, 2007) and applied to the natural world resists both the possibility of a fixed concept of nature as well as a recognition of the flux of nature itself. Adorno's move is not simply to replace one concept of nature with another though, but to challenge the concept of nature as fixed at all, either ontologically or epistemologically. The alignment of Adorno's critique of nature and Huyghe's project can be seen on several levels – in form and in content and perhaps even in implicit references to Adorno's writings. The resistance of identity thinking is recognisable in Huyghe's work as the resistance to classificatory thinking. One of Huyghe's stated aims is to problematise classification systems such as Linnaean taxonomy or even those of ordinary language. Huyghe's animals are not to be encountered as having a fixed identity according to such thinking (Huyghe, 2016, p.30). The identity of these animals is fluid. The entities populating his installations

are to be no more identified with the names or concepts “dog”, “fish”, “crab”, “microbe” than the audience for the work is to be identified as “human”. A skinny Ibizan Hound features in several Huyghe’s installations and environments. The name that the animal answers to is “Human”, as if to confirm the instability of such labels.

Adorno’s role for art, in Flodin’s reading, is as a “second reflection [that] reveals a crack in the cultural construction of nature and through that crack we may glimpse the possibility of a nature beyond this construction” (Flodin, 2018, p.7). But in a contemporary context the argument that nature is a cultural construction may be considered (in certain terms) settled. However, Huyghe can be seen have transformed the terms of Adorno’s critique. Huyghe’s projects demonstrate the thought that the Anthropocene marks the transition of the social construction of nature from the discursive to the material realm. Huyghe therefore changes the terms by which art can reveal the construction of nature. The holistic impact on the natural order of the planet by forms of human agency transform physical nature in an equivalent sense to the transformation of the image of nature through the idea of nature.

This shift of critique is reflected also in Catherine Malabou’s philosophical use of epigenetics. Epigenesis is the principle that gene expression is modified by the environment of the individual carrier of those genes. Where this mechanism is active the final form of an organism is therefore not fully programmed in advance but is the result of an interaction between genome and environment. Malabou considers this philosophically and politically significant. Dorothea von Hantelmann puts forward Malabou’s theory as a context for Huyghe’s use of biological systems. According to von Hantelmann, for Malabou the emerging field of epigenetics reveals that interpretation and symbolisation is not something outside of material life. Within the feedback loop between genome and environment the mechanism of epigenesis is recognised as a kind of “interpretation”. By describing it thus Malabou extends the discursive character of post-modern social theory to the domain of nature itself. Malabou’s argument, “places the development of all living beings in an intermediary space between biology and history or culture”, creating “a hinge between the symbolic

and the biological” (von Hantelmann, 2019). It is this hinge, Hantelmann says, that Huyghe has created in such works as *After A-Life Ahead* 2017.

5.3 Ruins

We see in Huyghe’s body of work the recurrent motif of the ruin. In his complex installations images of neglect and abandonment prevail. Architectural spaces are given over to an uncontrolled occupation of the non-human and objects from art history are left to see what other non-human agencies will do with them. The focal point of Huyghe’s seminal Documenta 13 site-specific work *Untilled 2011-12* is a compost heap where culture and history are left to decompose: An oak tree that Joseph Beuys originally planted for Documenta 7 lies uprooted, weeds find niches in stacks of concrete slabs reminiscent of a Carl Andre sculpture, and a colony of bees make a home from Max Weber’s 1930s statue of a reclining female nude. The ruin also appears as a central motif in Benjamin’s reflections on the relationship between nature and history in *The Birth of German Tragic Drama*. Adorno draws on Benjamin’s text when he states that according to a certain kind of perception “everything existing transforms itself into ruins and fragments”. The gaze that transforms everything into a vision of ruin and is essential for “radical natural-historical thought” (Adorno, 1984, p.121) is necessarily melancholic. Huyghe’s scenarios of decay and loss, as both physical and historical realities, may also invite Benjamin’s melancholic gaze.

Huyghe typically references human history through the objects of art history: A broken 19th Century neoclassical statue covered in moss, Monet’s *Water Lilies seen from below*, a submerged Brancusi sculpture. These images recall Benjamin’s definition of the ruin as “history merging into the setting” (Benjamin, 1998, p.92). Huyghe’s ruins are the ruins of modernism and colonialism. Their quality of merging is these artefacts’ newly found porosity to biotic systems. Their setting is the set of ecological relations that they encounter. Huyghe’s interest here seems to be how these cultural artefacts, in states

of neglect and decomposition, can enter into and compose new relations. We might understand these relations as sculpture's *biologically* "expanded field" (Krauss, 1979, p.30-34) - to appropriate Rosalind Krauss's phrase.

Benjamin's ruin theory is presaged by that of Georg Simmel. However, in Simmel's 1911 text *The Ruin* the dialectical tension between nature and history has absented itself. For Simmel "the unique balance - between ... inert matter ... and informing spirituality breaks the instant a building crumbles" (Simmel, 1958, p.379). By contrast, whatever we are seeing in Huyghe's strange states of decay is not nature as a leveller of spirit or signifier of human hubris. In Huyghe's ruins the fight between matter and spirit, nature and history, is not yet settled. It continues in a contested space of multi-species politics. Ecological thinking is present here in denying the opposition between human order and natural order that Simmel intimates (Luttiken, 2015). Simmel goes on to claim that ruins express the truth that "all that is human is taken from earth and to earth shall return" (Simmel, 1958, p.382). This wisdom is exactly what Adorno challenges as the myth of nature as an eternal cycle in *The Idea of Natural History*. Huyghe's desire to eliminate human direction as much as possible (Huyghe, 2014) frames the work within the art historical discourse of the ruin. However, the emergent assemblages of artefacts and biological agents that take over their own postnatural evolution put aside many inherited values associated with order and disorder.

Benjamin's somewhat bizarre formulation that through the melancholic gaze everything is transformed into a ruin arises from his indebtedness to the theological concept of a fallen nature. Pensky recalls the significance of this idea to Benjamin – "from the theological perspective of fallen nature the baroque regarded material objects ... the objects of physical nature ...themselves as containing within their very finitude ... the compacted moral-religious history of the world" (Pensky, 2004, p.233). Importantly, Benjamin sees this mystical notion as having a critical agency within the context of modernity. His logic is thus: If nature is fallen then it is itself the outcome of an historical event. Fallen nature as the assertion of an historical (qua ontologically incomplete) nature opposes the

concept of nature as unity. Furthermore, by applying an immanent critique, the meaning of the myth of the fall can be secularised as an account of the social and historical construction of the concept of nature. For Benjamin, and arguably for Huyghe, nature is historicised by virtue that it is not yet complete. It is a mere fragment of the unified nature that existed before the fall. Seeing nature as a ruin, as a fragment, and thus as paradoxically artefact-like renders nature uncanny. The ambiguity of what is natural and what is artificial in Huyghe's work brings on the uncanny perception that nature is itself a ruin.

5.4 Natural history as allegory

In the language of the Baroque, the fall of a tyrant is equivalent to the setting of the sun. This allegorical relationship already encompasses the presentiment of a procedure that could succeed in interpreting concrete history as nature and to make nature dialectical under the aspect of history. The realization of this conception is once more the idea of natural history (Adorno, 1984, p.121).

Here Adorno states the importance of allegory as a means of thinking the idea of natural history. Within this context, Beatrice Hanssen comments - allegory is to be “no longer merely interpreted as a historically specific trope but rather as a form of memory or historical commemoration” and that “as a historico-philosophical category, allegory ... testifies to a profoundly altered relationship with nature” (Hanssen, 1998, pp.76-77). In a further equation that again alludes to the mystical tradition Benjamin asserts that allegory is “nature's mourning” (Benjamin, 1998, p.159). Allegory, as a way of seeing, and not bound by its historical context of the Baroque or even of Benjamin's era might be identified as a useful tool in the critical perception of the Anthropocene. Seen by Adorno as a means of revealing the suffering of a dominated nature, allegory becomes relevant to the present.

It is proposed here that the biological entities and systems in Huyghe's work can be read as an allegory of history. This is approached through a discussion of the role of teleology in biology and in the philosophy of history. It is permitted by an analogy that can be made between history and organic life according to their teleological character. Modern biology dispenses with a future-oriented teleology, describing the evolution of organs without the language of aims and ends. However, within a functional account of organic structures a weak teleology still lingers. A retrospective teleology (in contrast to a future-oriented one) is implicit in the language of functional biology – organs evolve according to no plan, but their function is inevitably conceptualised as a certain kind of purposiveness. Benjamin and Adorno's philosophy of history has a parallel weak or retrospective teleology (in contrast to Hegel's aims and ends focussed idea of historical progress). It considers historical events to be meaningful only through the benefit of hindsight. Seeing the sense, reason and direction in history can only happen after the fact (Thompson, 2013). Within these views, in both natural history and human history we see that what has happened to get us to the present had to happen to get us here, but also that there was no necessity for history to happen in the way it did. We can see in Huyghe's work the presentation of living systems as essentially contingent but none-the-less highly coherent. Their suggested plasticity of behaviour and form testifies to the open-endedness of natural processes. If we read these animal bodies allegorically as the anatomy of human history Huyghe's living organisms stand for a certain idea of historical events as prospectively contingent but retrospectively necessary.

5.5 Nature as unified or divided

Idealism and classicism share the idea of beauty as a unified and seamless whole, often compared to the self-sufficient organism. While Adorno ... expresses a certain agreement with this view... he never-the-less believes that modern art needs to ... problematize this ability to avoid deceiving us into thinking that reconciliation is achieved [...]. That is why Adorno pushes the idea of fracture, brokenness, or reflection as necessary for art's truth content (Flodin, 2018, p.12).

It is as fragments, or rather as forms showing the lines by which they risk fracturing apart, that Huyghe's animals embody the dissonance between nature and history. As direct interventions into the biotic Huyghe uses artifice to produce a dissonance in our perception of the unity of organisms. The dog mentioned earlier and that appears in more than one exhibition context is subtly visually altered by Huyghe. Its form is "broken up" in Huyghe's words by the application of pink dye to one of its legs. His stated aim is to render the animal "separated from herself" (Huyghe, 2016, p.30). Given the emphasis on allegorical interpretation in this present text such an adjustment testifies (as allegory) to the untruth of harmony in the conditions of modernity, which Adorno considers to be the primary purpose of modern art. Elsewhere Huyghe draws our attention to how discoveries in the life sciences themselves confound our expectations of organic unity and harmony. The solitary fish that occupies the aquarium in *After A-Life Ahead* is perfectly divided fore and aft in the same colour scheme as Huyghe's dog, but this time the sharply abstract delineation of its form is part of the marine animal's natural colouring. Furthermore, two peacocks present within the installation during its opening days are examples of genetic mosaicism. Sometimes referred to as "chimeras" the body tissues of these birds are composed of more than one genotype. Although this division is not visible it is deeper and more essential than anything we may see.

The dislocation of the Ibizan Hound's visual form is in striking contrast and contradiction to its organic wholeness. Colour functions as an arbitrary segregation on the level of appearance – a breaking up of doggy unity on the phenomenal level, whilst its organic unity persists. Huyghe's divided entities still thrive and continue to appear to act in a coordinated and singular way. The dislocation between perception and the real within these examples implies a denial of classicism's principle of beauty in art as the organic unity of perception and reality. Such strategies imply divisions within what we tend to consider biological unities but also a schism between mind and nature, subject and object.

5.6 Transience in physical systems and the leaking of fiction into reality

In nature the allegorical poets saw eternal transience, and here alone did the saturnine vision of these generations recognize history (Benjamin, 1998, p.179).

Benjamin sees the reconciliation of nature and history only negatively in the moment of their mutual passing away - in the experience of transience. Adorno, developing Benjamin's thought, says "the deepest point where history and nature converge lies precisely in this element of transience" (Adorno, 1984, p.119). What Benjamin and Adorno refer to with the term transience is not the change or flux of repeated cycles, of the kind Simmel implies, but rather the concept of irreversible and irrevocable change. Cyclical change amounts to an eternal stasis, and the return of nature to the mythic dimension. Radical transience however smashes this myth. According to Adorno transience in both nature and history is that which prevents a return to a previous state, a state before modernity in historical terms, or a more archaic organisation of matter in physical terms. Transience accounts for fleetingness and loss. In his lectures on *History and Freedom* from 1964-65 Adorno offers Hölderlin's poem *The Shelter at Hardt* as a model for understanding what he means by radical transience - a concept his idea of natural history is so dependent upon. The poem tells the story of an exiled medieval king Ulrich who evades his captors by hiding in a natural rock shelter in the forests of Hardt, Germany. Flodin tells us that what is important to Adorno in Hölderlin's telling of this story is that "only because the traces of Ulrich's stay at the natural shelter have long since been covered by vegetation, does nature become eloquent, expressing a transience that points beyond itself" (Flodin, 2006, pp.5-6). The expression of transience in Hölderlin's poem is, furthermore, one that reflexively expresses the transience of the poem itself. For Adorno it is the degree to which this or other artworks reflexively "confront [their] own inevitable transience and decay" (Hanssen, 1998, p.79) that art realises itself.

In Huyghe's installations technological elements, often conceived as machines with an input, an output and a feedback mechanism have the role of mediating between biological and man-made

elements. These cybernetic systems may be seen as the sculptural equivalent of dialectical tensions and forces. In his contribution to Tino Sehgal's 2016 curatorial project at The Palais De Tokyo the rate of growth of human cells in an incubator is linked to the air conditioning system of the museum - thus allowing new relationships to emerge between heterogeneous elements. Elsewhere Huyghe uses technologies of feedback to deliberately isolate living systems from their context, such as the aquarium works of the *Zoodram* and *Nymphéas Transplant* series. Aquariums maintain an independent equilibrium by regulating temperature, oxygen and water quality. In these examples the use of such technology achieves a kind of false stasis of natural microcosms. These aquatic environments are without place, mobile, itinerant – and in this sense geographically supremely transient. This characteristic contrasts with the artificially sustained timelessness of the world behind the glass. But even this permanence is revealed to be illusory when we consider that these works are not fully isolated systems. They are sustained by electricity generated elsewhere, and with an inevitable ecological impact. Arresting transience in one place has a cost in another. In this analysis these works become a critique of the aesthetic value of permanence.

To move from an analysis of transience in physical systems to one that locates it as a literary and art historical motif reflects Huyghe's interest in "the vitality of the image, in the way an idea, an artefact, leaks into a biological or mineral reality" (Godden, 2012). In Huyghe's most recent major work *Umwelt 2018* the Serpentine Gallery is overrun with bluebottle flies. The fly's art historical association with transience is not lost on Huyghe. Within the memento mori and vanitas traditions flies are a reminder of the transience of life. Within the context of Huyghe's show this signifier comes to life accompanied by flickering images generated by a neural network. The images appear and pass away with a fleetingness that the human eye struggles to keep up with. Flies landing on the wall scale LCD panels on which these images appear become pixels, or rather dead pixels. The images (if they can be called this) jitter and twitch with fly-like agitation. They have the quality of pareidolic hallucinations. We learn that the images are the result of an AI algorithm translating the data from the electrical activity of the visual cortex of a human subject. The work thereby becomes a window

on the interior of human thought. Umwelt embodies the transience of thought but also the possibility that the ephemerality of thought itself can be objectified and archived. Such experiments foretell the possibilities of contemporary technology to objectify, and therefore to potentially instrumentalise, the natural phenomenon of thought itself.

5.7 Natural history as the erasure of human experience

Nature and history are concepts and as such refer to a range of human practices of the organisation of otherwise disparate sets of empirical experiences. If dialectically fused into their ‘zero point’ of indifference, however, these two concepts generate an idea, which is a modality of concept with no correlate in any given experience. [...] The idea of natural history ... amounts to a degradation of experience as a perspective, or a way of seeing (Pensky, 2004, p.231).

The ruin as the concrete image that emerges at the site of nature and history at their moment of maximum dialectical interpenetration is allowed or encouraged to present itself once the subjective intentionality of the magisterial subject, the sovereign observer, is erased so far as possible from the site of ruin (Pensky, 2001, p.118).

In these two quotes from Max Pensky there is an account of Benjamin and Adorno’s view or the role of human experience in their shared idea of natural history. In the first Pensky identifies Adorno’s acknowledgement of the problem of experience, and in the second he describes Benjamin’s embrace of it. Pensky then goes on to describe Benjamin’s active erasure of the human subject within the rationale of his ruin theory as “a complex and frankly somewhat unhinged experimental methodology”. What seemed unhinged when Pensky wrote this in 2004 seems less so after the rise of non-anthropocentrism and anti-correlationism in art and philosophy of the 2010s. What must have seemed implausible before the recent critique of Kantian “correlationism” (Meillassoux, 2009) confirms Benjamin’s relevance to this current endeavour. Benjamin’s reflections on the ruin represent a form of non-anthropocentrism *avant la lettre*.

The degradation of the subject in Benjamin's allegorical version of the idea of natural history is explained thus: Allegorical signification is the subjective projection of meaning onto a nature that is indifferent to interpretation, accompanied by the recognition of this very fact of indifference. The melancholic gaze is the result of the regrettable dialectical play of meaning and indifference. For Benjamin, human experience and meaning is a necessary sacrifice for seeing nature as history and history as nature. Considering this final characteristic, the question for us becomes – what connection can be made between Benjamin's realisation of the experiential inaccessibility of the idea of natural history and contemporary attempts to encounter the Anthropocene by de-privileging the human perspective? Thus, what has been seen as the relevance of Benjamin's decentring of the subject in the context of the post-modern critique of authenticity has quite a different relevance in the context of multi-species politics in the Anthropocene.

Huyghe's explicit non-anthropocentrism aims to erase the sovereign (human) subject. And Huyghe, like Benjamin, sees decay as a spectacle that maintains a certain indifference to the human observer. In *After A-Life Ahead* the seats of the former ice rink that is the site of the installation are conspicuously silent and empty. Placed on a thawed slab of the disused rink an immortal line of human HELA cells grows - a "human" form of life lacking an experiential dimension. An aquarium periodically blacks out denying visual access. However, subsequently to these degradations of human experience Huyghe proposes alternative modes of experience to replace them. A bee colony – a recurring motif in several projects– presents a model of distributed perception and cognition antithetical to Benjamin's sovereign subject. The decentred intelligence of such systems has analogies in contemporary neuroscience's insight into the decentred operation of consciousness in the brain. Rather than making art that is not to be experienced at all, Huyghe's art is to be encountered by subjectively projecting itself outside of a particular and historically contingent way of conceiving of sense, mind and experience.

5.8 The natural-historical human condition

While it may be dubious to consider the title of the 2011 piece *Zoodram 5 (Recollection)* as an Adorno quote, to consider the work in this regard may be revealing. Adorno and Horkheimer's invitation to internalise the idea of natural history is summed up in *Dialectic of Enlightenment* as "the recollection of nature in the subject" (Horkheimer and Adorno cited in Kleinberg-Levin, 2008, p.91). Into a large aquarium incorporating dramatic lighting Huyghe introduces, among other things, a giant hermit crab and a perfect copy of Constantin Brancusi's 1910 sculpture *Sleeping Muse*. The hermit crab following its instinct to improvise protection from any suitable hollow form that it finds, usually the shells of other sea life, makes an unlikely home of Brancusi's head. If we consider this arrangement to be embodiment, expression or even allegory of Adorno's remembrance of nature in the human, what does it tell us about what it would be to internalise the idea of natural history? If we take Huyghe's sculpture as evidence of Adorno's "recollection" we can speculate on the nature of this transformation. It is a transformation that we can only evaluate by being sensitive to its aesthetic qualities. If we see this image as Brancusi's anthropomorphic sculpture recognising itself as nature, the result of this recognition is quite disconcerting. The resemblance of a human head, in any expressive quality that it still has, removed from its usual conditions of display and given this new life, is distinctly uncanny. The hermit crab carries the serene visage of *Sleeping Muse* rather like a bad puppeteer would orchestrate the movements of a puppet, producing awkward and graceless movements. This reanimation of the human image by a non-human agency, if seen as the expression of the non-human in the human, might be read as the surfacing of the unconscious (as nature) behind the psychic construction of the subject. But what may sound desirable theoretically in the example of Huyghe's *Zoodram 5* is diabolical. The sleeping head's movements are neither alive nor dead. The recollection of nature in this case is an undead perversion of the reconciliation of matter and spirit.

We see again the motif of an animal presented in anthropomorphic disguise in *Untitled (Human Mask) 2014*. The film shows buildings deserted after the Fukushima nuclear plant disaster. The only

inhabitant of these abandoned spaces is a rhesus macaque wearing a traditional Noh theatre mask. We occasionally catch a glint of the animal's eyes through the mask. This uncanny spectacle reverses the mimetic function of humans assuming animal form that anthropologists have commented so extensively on, and that has been seen as the archaic basis for art and ritual. Within this context the ritual of wearing animal disguises is typically described as securing a contract between the human and the non-human. As an inversion of this motif, Huyghe's masked monkey inverts the structure of human/animal relations. Huyghe's film in its theme of radioactive pollution and desertion presents a scenario where nature and history are unreconciled. The scenario may also be framed within an art historical convention where the image of a monkey is a substitute for the human, in which terms this work becomes about "the human condition" (Guggenheim Bilbao, 2019).. But Huyghe's image, which could equally argue that to be human is only to be human as a mask, problematises both a straightforward animal symbolism and the implicit essentialism in the term human condition. What remains after the withdrawal of humans from Fukushima, and what is transformed into fiction in the film is the non-human fated to continue the charade of playing human. Masks conventionally signify fate in many theatrical traditions – and in this abandoned place, the fate of the non-human is seen through the image of a human face which paradoxically persists in the absence of the human gaze. In the confusion between the human and the non-human within Huyghe's film the Fukushima disaster may be seen as a dissonant natural history. The impact of this radiation accident exists over deep time. Within the deep past the identity of the human becomes indistinct from that of the primate with which it shares a common evolutionary lineage. Like *Recollection* the scenario of *Untitled (Human Mask)* is a recollection of the non-human in the human. But the closeness of the animal protagonist to us in behaviour and form, invites a non-anthropocentric reading where within this fiction the monkey ancestor sees its evolutionary future as human, a prophetic dream in a proto-human mind.

Conclusion

The dialectical critique of nature and history reveals the illusory ways in which history is reified as nature and that are complicit with the domination of nature. It also reveals the possibility of the liberation of human and non-human nature within and through this dialectic. In the conclusion to *The Idea of Natural History* Adorno addresses György Lukács statement that revolutionary historical consciousness starts from a critique of mythic nature. Myth, Flodin summarises, is complicit in the domination of nature by turning nature into “something merely static and unchangeable; nature perceived as the continuous repetition of the same events”, for it follows that “what can be predicted can be manipulated for one’s own benefit (Flodin, 2018, pp.7-8). Furthermore, Adorno following Lukacs, diagnoses the relationship between history and nature within consumer capitalism as one in which history is petrified as nature. Capitalism assumes the false and illusory status of “second nature”. However, Flodin continues, it is Adorno’s view that although “our nature dominating society has congealed into second nature ... through philosophical interpretation, it can be exposed as something man-made that has come into being historically, and thus possible to transform” (Adorno, 1984, p.118). Adorno’s dialectical critique of nature and history reveals both the illusory ways in which history is reified as nature (and that are complicit in the domination of nature) but also the possibility of the liberation of human and non-human nature within this dialectic. Perhaps through the experience of Huyghe’s work such a historical consciousness might be glimpsed, and glimpsed as a consciousness that must include both the human and the non-human as historical agents.

Huyghe’s practice transforms the thesis of the social construction of nature, by seeing this construction in both discursive and realist terms. In Huyghe’s installations the openness of nature to the production of novelty is facilitated through the setting up of feedback conditions between natural and technological elements. As such Huyghe proposes alternative histories and futures for nature. We may really construct nature (or rather nature will construct itself) if it is able to reinvent itself continuously. By reading Huyghe’s installations as an experiment in the Adornoian promise of a

nature to come (Adorno, 1997, p.65), by the presentation of living systems and organisms as unfixed in their nature, certain characteristics of the postnatural animal in art and as art are identified.

6 ANIMAL SURFACES

Introduction

Having explored and elaborated characterisations of the postnatural animal within contemporary scholarship and introduced practical examples in a critique of Pierre Huyghe's oeuvre, the thesis now turns to the author's own art practice as an original contribution to this field. The final three chapters of the thesis analyse the body of submitted artworks according to three aims. The first is to find out how the aesthetic value of organicism when attached to animal bodies, can be challenged. This first focus is to consider animal appearances, and more particularly animal markings, as indexes serving a critique of the organicist conception of nature. The practice takes animal markings and patterns as materials that serve the articulation and invention of states of animal dislocation from a natural status. Animal imagery is handled in a range of ways to transform animal surfaces. For example, in one piece, images of modernist artworks are projected onto the patterned coat of a living animal. In another, a moving animal pattern is projected onto fragmented objects. In another still, patterned animals appear and disappear amongst a series of props and architectural constructions. In this latter piece, animal patterns come to be emblematic of the broader proposition that to be patterned is to be necessarily irreducible to a single form of knowledge.

Within these works the strategy is to investigate the effects of interrupting the organic unity of the animal body in various ways. Given that it is through the concept of organic unity that animal nature has been understood by the nature thinking that both the thesis and the practice seek to question (Morton, 2008), what is sought in the practice-based enquiry is a coherent proposition of animal life that problematises this characteristic. One work seeks to do so by proposing the viability of a fragmented animal body. It presents an image of the animal body as having in one modality of visual knowledge a unified identity and purposiveness, but in another as riven with discontinuities. Another plays visual tricks to disrupt the homogeneity and therefore smooth continuity not of the animal body

this time, but of the space that the participating animals inhabit. The heterogeneity of space produced is analogous to the variegated markings of animals. Another still sees the flowing markings of an animal, that would otherwise be taken as an index of the animal's organicity, interrupted and disrupted by jagged inorganic shapes.

6.1 Interrupted animal surfaces

One kind of attempt at interrupting the perceived organic unity of the animal body is evident in the work *Continuity & Discontinuity* (Figure 1). This mixed media work incorporates plaster objects, a large table, and a data projector. The plaster objects are curved cylinders in shape, the ends of which appear to have been forcibly broken. Within these objects there is a textural contrast between smooth, sleek surfaces and jagged rougher areas. A data projector projects a moving image onto these objects. It is a simplified and abstracted image of a snake. The projection is carefully 'mapped' to correspond to the shape of the forms. The aim of the fusion of objects and projected moving image is to create a sense of a fragmented animal body that none-the-less has a sense of continuity and unity through movement. The projection of a snake-skin texture onto the plaster forms transforms and animates them, giving a sense of movement that contains its own contradiction – the objects themselves having an insistent stillness. Stillness is somehow contained within movement (or visa-versa).

To briefly analyse how this visual paradox is sustained we might recognise it to be based on our visual perception applying a law of continuity. We may feel compelled to read a kind of ghostly continuation of the animal form between the elements. What is of interest to the theme of the organic unity of the animal is that this effect sustains an ambiguity whereby the moving snake at one and the same time registers as composed of discontinuous fragments but is in another sense unbroken. The cylindrical forms with their broken ends, allude to perhaps previously belonging to a larger whole.

Despite the fragmentation a purposeful movement continues uninterrupted. A sense of a whole is caused by the continuity of movement.

The piece draws on two very different kinds of knowledge that we have about snakes – their natural history and their cultural history. We might broadly say that the former is everything we understand about the living animal - its evolution, habitats, behaviours etc. We might then maintain that the latter is everything we know about snakes that is excluded from the former category, everything concerned not directly with the living animal but with its representation. From these two histories we receive very different kinds of meaning about snakes, which are mutually exclusive. The natural history of snakes cannot include the art history of snakes, the art history cannot include the natural history (although it may represent aspects of it). However, it is hoped that such a mutual exclusion and division of the natural and cultural history of animals becomes less certain when what are highlighted are the representational aspects of animal's natural historical lives. Indeed, animal camouflage and warning displays are proposed as cases of representational practices in nature that challenge such a strict distinction.

But to discuss the natural and cultural history of snakes as separate forms of knowledge if only for now, from the former we learn that snake patterns typically function either to warn; as with the coral snake that warns predators of its toxicity with prominent red, white, and black bandings, to deceive; as is the way of the corn snake that adopts the same colours as the coral snake but is in fact non-toxic, or as camouflage; as with many species of pythons who's hunting success relies on not being seen. As predators of forest habitats python markings simulate by a distribution of pigment in the skin, the effect of dappled light characteristic of these environments. The dappled markings of pythons make the animal hard to visually detect by breaking up its silhouette and boundaries, by confusing and encrypting.

Turning to the cultural history of snakes, in ancient Greece snakes came to signify healing, continuity, and renewal. It is no entirely arbitrary convention that the animal holds these meanings – having a body form that suggestively lends itself to metaphors of cyclicity, as for example in the translation a snake form receives in the Ouroboros emblem. In Greek statuary snakes typically make an appearance alongside figures where their function is to have symbolic meaning or identificatory purpose, such as their accompaniment of depictions of the goddess of healing and medicine Hygeia (Wellcome Collection, 2017).

Such attributions of significance to a particular animal according to its characteristics may be understood to be a primary way in which humans make sense of animal life (Levi-Straus, 1964). But as meanings for human consumption the cultural history of animals may be understood to consist of so many projections of human meanings onto animals. However, what particularly informs the piece *Continuity & Discontinuity* from the art history of snakes are not the meanings of snakes in Greek statuary themselves but rather the afterlife of these meanings in the ancient art object. What is striking about what remains of images of snakes in Greek statuary is that they typically only remain in incomplete form - with parts of the animal form either missing, lopped off or visibly repaired. In a mid 2nd Century statue depicting Hygeia for example only a short section of the carved form of a snake's body remains where it meets the human figure's right elbow. How such snake images appear to us now therefore, as discontinuous fragments, is interestingly paradoxical to their original symbolic meaning of continuity.

The piece of work invites the viewer to make further poetic leaps based on this entanglement of natural and cultural history. Indeed, it invites us to bring together these two forms of understanding. We are told that snakes regularly shed their skin. The piece invites us to perceive the snake markings in the piece as strangely fixed but unfixed. The experience of the markings is as both fixed like flesh and unfixed like light and shadow. The piece invites us to see the python's body dematerialised as light or light reified as the python's body.

The work engages with a critique of animal symbolism - such as the association of snakes with continuity. It engages in such a critique, through the construction of an image of a fragmented snake. In Greek sculpture we also see broken snakes, which are proposed here as an imminent critique of animal symbolism. It can be argued that the association of snakes with continuity in classical art, is dependent upon and derived from a more general association of the living organism with the ideals of unity and harmony. The association of snakes with continuity is considered therefore to be an example of aesthetic organicism, and a co-opting of an animal body to this aesthetic principle. Organicism is critiqued in the piece by the construction of a snake body that is somehow broken but not broken.

This piece therefore deals with and addresses a characteristic that seems fundamental to organisms, the sense of the organism as a unified whole by virtue that as an organic system the whole must depend on the parts as much as the parts depend in turn on the whole. The intended effect of the piece, achieved necessarily through artifice, is a simultaneous destruction of this quality of wholeness (with the breaking of the snake-like form into fragments) and a preservation of it (in the experience of an unfragmented body moving through these fragments). The habit in the perception of animal bodies that is intended to be broken here is one in which the materiality of the animal is seen to be coextensive with its animality. Here, in some sense, materiality and animality have been separated or made relatively independent from each other. Something of the life of the snake, its movement, is preserved despite the absence of a unified whole. By aiming to break certain perceptual habits the piece seeks to break the habit of interpreting animal characteristics as resources for human meanings.

6.2 Displaced animal surfaces

The moving image work *Cat in a Lecture Theatre* presents a sequence of shots of a domestic cat moving within a dark space interleaved with cuts to black. The only light source in the scene is a slide

projector that illuminates the animal, and casts images onto its body. The projected images are a series of abstract sculptures by the British artist Anthony Caro made in the late 1960s. The predominantly linear brightly coloured shapes of the painted steel sculptures are seen against the tabby pattern of the cat's fur. As the cat moves the images of the sculptures are distorted. Sometimes the effect is to highlight the contours of the animal's body as the coloured lines within the images pass over it. Sometimes these lines crossing the animal's body are reminiscent of an animal harness. Sometimes the coloured light feels like it is a stain on the animal's fur.

The visual interaction between the projected images and the pattern of the cat's coat transforms both the appearance of the cat and the readability of Caro's sculptures. The images of the sculptures become flattened and register as projected light rather than as photographs of discrete objects. The visual language of the forms is linear, contrapuntal and abrupt. The cat's pattern that they encounter may also be understood as a language – belonging to a natural language of patterns that Alan Turing sought to describe mathematically. The tabby cat's pattern is a concrete expression of a fundamental organic principle – a the self-determining and self-generative living pattern. The visual interruption of the cat's pattern, may thus be read as challenging the organic status of the animal. Furthermore, the out of placeness of the cat may be seen as the interruption of an organic relationship between the animal and its environment. Reduced to intersecting lines of colour by the mediation of the animal as screen, the Caro images delineate and divide the fluid form of the cat in a way reminiscent of the lines delineating cuts of meat in a butcher's shop illustration, or of the various stays and straps of an animal harness. The collision of the organic and the in-organic thus also reveals a darker aspect – allusions to instrumental forms of animal representation and control, such that Schelling speaks of as limiting the vitality of animals.

The images are accompanied by a soundtrack of Caro being interviewed about the projected works. Are we and the cat somehow in a space with Caro? Are we in a lecture hall? It is implied that the animal's body is interrupting the passage of the projected images. That they are perhaps intended for

a screen to accompany Caro's commentary. If we read the cat as interrupting the transmission of the intended visual information, we may read it as out of place, as an unwelcome animal. We might indeed say that the animal's body receives the images like a screen, but unlike a typical projector screen the surface of the animal is not a neutral and blank medium of reception. The interruption by the cat's body denies the neutral and decontextualizing form of transmission of the blank screen of the lecture theatre. A sense of contingency accompanies a sense that the animal is out of place or in the wrong place, as if it finds itself here by chance and its interruption of the projector's light is by chance. This is a domestic animal to be sure but there is a certain unruliness of the animal in this place. This unruliness is no less than we experience whenever animals surprise us with their behaviours, habits, and spontaneities.

If we do read the scene as a lecture room then we are in a space for the transmission of cultural narratives, an institutional space for the making of and communication of histories, including art history. The juxtaposition of images of art and a living animal here is intended to be a meeting of institutional purposes with their antithesis, represented by the presence of the out of place animal. The intended effect is to imply an intrusion of that which is not culture, and a distortion of that which is culture, on the site of the living body of the animal. We may consider that the cat is out of place, but we may alternatively judge that this artificially darkened space is a good substitute for the nocturnal habitat to which the animal is well adapted. The cat shares this darkened space with icons of human culture, and indeed is made visible, made spectacle, through their projection. Here the term "projection" may shift from its material to its psychological register.

6.3 Slippery animal surfaces

We may think of animal surfaces visually, but we may also think of them physically— the physical characteristics of which determine an animal's ways of relating to their environments as well as the

possibilities of the human/animal relationships they enter. The visual suggestion of a harness created in the above piece arouses an interest in forms of animal control of which a harness is taken to be emblematic. Upon this theme we might recall Schelling's comments about tethered horses introduced in Chapter 1. What makes Schelling's harnessed horses both real and metaphorical is undoubtedly their belonging to his philosophical mentor and target of some criticism Johann Gottlieb Fichte. Schelling we will remember complains that "by letting six horses be put before his wagon" Fichte is applying the power of reason over the animals but also at the same time restricting their "natural vitality". For Schelling, furthermore, this special vitality of animality equates to its organic character, which in turn is the privileged characteristic of being in his organicist philosophy (Schelling, 1988, p.72). Thus, it is salient to consider the body of work in terms of the investigation it makes into the relationship between animal surfaces, technologies of control and the projection of organicist aesthetic principles onto animal bodies, that may be seen as the legacy of the philosophy of nature of Schelling, amongst others.

In the untitled digital drawing (Figure 3) a series of curved lines are applied to the contours of an image of a racehorse. These lines suggest ropes that if imagined to be laid flat would be revealed as three overlapping loops. This arrangement of lines is intended to recall Jacques Lacan's Borromean knot – a knot shape that consists of three linked loops. Lacan uses this motif to illustrate his understanding of the relationship and interdependence of the realms of the "imaginary", "symbolic" and "real" (represented by the three loops) within the human psyche. Thus, the drawing's subtle reference to psychoanalysis, as lines that cross the horse's flanks like a harness or loosened reins, is an allusion to a connection between physical control and psychological structures. The drawing might be seen to articulate human-animal relations as an affair of crossing braids and ropes, to be considered both technologically (with the reference to animal control techniques) and metaphorically (with the reference to Lacan's Borromean knot).

This shape, with its association with the human psyche, and traversing the surface of a non-human animal, invites us to speculate upon the relationship between psychological structures and the structures of control that pertain between humans and animals. In Schelling's vision of bridled horses, the harnessing of animals expresses a tension between the raw vitality of organic forces and their inhibition and direction through technology. Such a technology for controlling animals is in turn an expression of rational thought. The bridle drawn onto the animal here may likewise be considered a manifestation of thought – but drawn with a Lacanian topology that challenges the privilege of reason we might thus consider systems of animal control as also informed by unreason.

Heraldic Restraint (Figure 4) develops the theme of animal control and the instrumentalization of animal bodies further. It does so with the recognition that instrumentalism may be as present in the representation of animals as in their physical exploitation. It considers the phenomenon of animal symbolism in these terms and returns to critiquing the animal as symbol. The piece, along with the body of work as a whole, wishes to say that if animals remain symbols, we fail to encounter them on their own terms. Indeed, the practical enquiry does not underestimate how animals have are shackled to symbolic thinking, and the problems of overcoming this. The human propensity to turn animals into useful concepts with which to think about human/world and even human/human relationships may be most famously expressed in the anthropologist Claude Levi-Strauss' statement - "animals are good to think with".

Heraldic Restraint intends to bring the tension between the animal as living entity and the animal as symbol to the fore by translating a living animal into a symbolic one. The piece references the visual language of animal heraldry. Heraldry serves here as an example of the use of animal imagery to convey symbolic meanings and abstract concepts. Heraldry originating within the feudalistic context of 12th Century Europe as "a system of visual identification of rank and pedigree". This being primarily determined as allegiance and position within the noble families of Europe (the basis of 12th Century power) heraldic emblems served as a visual code to communicate this power and status.

Animal imagery forms the underlying vocabulary of these heraldic codes. Within this historical setting animals serve as proxies for human characteristics - the particular (supposed) characteristics of animals of various kinds identified with the characteristics of human groups. Heraldic imagery signals the group to which the bearer belongs, as well as communicating a particular set of messages about the basis of that group's power and position. Animals thus prove to be "good to think with" in the context of 12th Century Europe by their convenience to stand for various messages that people wish to express about themselves and to communicate to each other.

The piece is composed of a welded steel structure to which leather straps are attached. The straps are suggestive of the purpose of holding something, and perhaps due to the connotations of restraint, something living. They are arranged to correspond to the artful positioning of animal limbs that are seen in a particular form of heraldic visual culture - the coat of arms. The pose that these restraints allude to is typical of what in the technical vocabulary of heraldry is termed a *supporter*. Supporters are the animals that flank, left and right, a central shield motif within the coat of arms visual schema. Importantly to the ethics of the work constraint is only to be imagined. This is not a bio-artwork. Thus, the viewer may pick up on the theriomorphic pattern of the straps and imagine its usage. The material form of the sculpture may also be seen to be reminiscent of the kinds of animal restraint employed in animal testing, agriculture, and sport. Furthermore, the viewer may imagine what the result of translating the animal language of heraldry into the medium of a living animal body reveals. If we do indeed imagine this as a devise for constraining an animal in a heraldic pose, it might then be seen to serve as a concrete equivalent of the psychological operation by which animals are made to conform to symbolic purposes.

Like Schelling we may consider the animal's resistance to physical impedances as quintessential to animal vitality. Indeed, the propensity of animals to maintain a certain physical autonomy from the environment, preserving self-directed mobility, may be identified as a most general evolutionary imperative of animal life as such. To use the devise on a living animal we can imagine would produce

extreme discomfort and distress. We might indeed take this physical antagonism as expressing an antagonism on a more abstract level between animal life itself and the meanings we make of animals. As an equivalent of thought, the devise (provoking this tension) posits the translation of animals into symbols or metaphors as a kind of violence and evokes the living animal as an agent of resistance to this process. The work hopes that human thinking and meaning stick to animals as poorly as the devices of animal coercion do to slippery animal surfaces.

By way of a footnote to a discussion of this piece, a certain problem may be seen to be highlighted for bio-art by its evidence. Indeed, the theme of this piece may be seen to precisely speak to this problem. The problem is that when living animal bodies are integrated into artworks there may always be coercion taking place. Even if a work of bio-art takes pains to follow appropriate ethical considerations and avoid physical or psychological coercion, rendering animals complicit with forms of human meaning making within art arguably carries its own representational violence. The critique that certain bio-artworks have made of the instrumentalization of animals is always potentially to be undermined by the act of composition itself as a form of control, but also by the very character of art as a meaning making activity.

6.4 A problematic work

The potential problematic of bio-art therefore is the issue of animal autonomy. The slippery animal body strongly embodies this autonomy. Artworks that endeavour to engage the living animal, such as this body of work, may perhaps not inevitably or unavoidably approach this problem. Another piece *Untitled (Dog) (Installation)* strongly embodies this problem and is considered unresolved because of it. It is a good example of the need to evaluate the intention of a piece in relation to what arises in its execution. The piece engages a companion animal, a Border Collie named Bill, in a biologically extended sculptural proposition. The animal wears a harness from which is suspended a

further structure. The structure is a perfect icosahedron. A very bright LED light casts shadows of the dog and the geometric form onto the surrounding space.

The intention with the piece is to create an architectonic conceit whereby the space the animal occupies is visually dissolved by the pattern of shadows that is created. The pattern may be seen to create a diagrammatic space that interacts with and to some extent visually replaces the physical space. This theatrical spatiality furthermore is an index of the movement of the animal – as the animal moves, turns, and changes orientation the pattern moves with it. The aim is for the space to be dynamic through the movement of the animal from the perspective of the viewer, but to recognise that from the perspective of the animal, as always at the centre of the projected lines, there is a visual stillness. A proposition of relative movement. The viewer becomes aware of the animal's movements by its transference and amplification into the surrounding space. The viewer might experience the non-human animal as its own centre, an organism that constructs its own space, and thus read the projection of light and shadow as a concrete equivalent of the projection of subjectivity. The viewer is within the reconfigured space. A non-anthropocentric perception of the multiplicity of species spaces may arise.

However, these aims come up against a serious problem. Strapped into the specially modified harness the dog is reluctant to move at all. The dog seems unable to behave in a way that would meet the intentions. Indeed, a primary behaviour is to attempt to step out of the structure – this perhaps revealing canine perception, cognition and action to be a barrier to the prosthetic nature of the piece. This barrier might indeed be understood in terms of a species-specific phenomenology of the animal's comprehension of the relationship between its body and the things around it. The incorporation of a harness is necessary and central to the piece, by providing a stable physical integration of the animal and the projection apparatus. However, as a piece intended to draw attention to the autonomy of animal perspectives, it functions in this aspect as its own contradiction. Other experiments that therefore don't inhibit the animal's free movement are more coherent and consistent with the aims of

the body of work, such as the encounter of an animal body with artifice through the medium of projected light in *Cat in a Lecture Theatre* or the use of motion tracking to more benignly ‘harness’ animal movement in *Nose Test* (Figure 6) and *Rodchenko Bones* (Figure 14).

6.5 Animal surfaces as dappled worlds

The moving image work *Dappled World* (Figures 8, 9 and 10) treats animal patterns and surfaces as less direct inspiration than the work under the previous headings *interrupted*, *displaced* and *slippery* animal surfaces. Animal surfaces here guide an understanding of relations between things in the world more generally and serve as a model for how we might think about the texture of the world, and the world as textured. The title of the work refers to Nancy Cartwright’s 1999 book *The Dappled World: A Study of the Boundaries of Science* (Cartwright, 1999). Cartwright uses the term dappled to identify certain characteristics of nature that resist scientific reductionism. Cartwright’s use of the term *dappled* (a word that through this usage becomes a concept) in turn is inspired by Gerard Manley Hopkins’s 1877 poem *Pied Beauty*. Within the poem Hopkins identifies a range of phenomena across the boundaries of nature, culture, and technology as having a quality of dappledness. Animal patterns are dappled, but so are clouds, field patterns, and the “tackle and trim” of trades (Hopkins, 1877). A dappled world for both Cartwright and Hopkins is a world which contains an innate variability and variegation. For Cartwright, inspired by Hopkins, to be dappled is to have a texture that cannot be reduced to a homogenous substance, or a single frame of knowledge. Dappledness for Cartwright is a quality that accounts for the irreducibility of nature to physics and chemistry, a quality of heterogeneity by which phenomenon cannot be exhausted by a physico-chemical explanation alone. Dappledness for Hopkins furthermore has overtly spiritual and religious implications.

The piece aims (as its title suggests) to contribute something distinct to these authors’ visions of dappledness, and to extend them to the world of animals. It aims to recognise an irreducible

heterogeneity of animal life, of the spaces that they inhabit and that they are indeed generative of. The piece was originally produced as a commissioned artwork for the event *Art and the Rural Imagination*. The event, to include a symposium and an exhibition, was planned to take place in the New Forest in the Summer of 2020. The theme of dappledness was thus also chosen as a response to the New Forest, as an environment in which we experience this quality in the most immediate sense – i.e., dappled effects of light. Indeed, the commissioned work saw a shared significance in the dappled surfaces of animals and dappled effects of light as a starting point for its development.

Experiments started with projecting patterns of light onto animal bodies. *Untitled (Dog)* (Figure 7) is one of these initial tests. A data projector casts a geometric pattern of black and white shapes into a room. By the evidence of the resulting documentation, it could also equally have been light from a window interrupted by a patterned screen. There, partly hidden by the patterns, is a now familiar Border Collie. Its colouration echoes the black and white visual scheme of the projection. Apart from the convenience of commandeering this particular family pet in this and other works, there is something of singular interest and relevance to the work in the markings of this breed. Such markings are known in animal husbandry and breeding practices as pied or piebald. The distinct combination of colour interspersed with white is a marking type that Border Collies share with many other domesticated animals. Indeed, it is pied markings that the animal shares with the “brindling cow” of Manly Hopkins’ poem. The work thus shares with Manly Hopkins’ poem a piebald animal as a starting point for a journey that will lead us toward a more extended understanding of dappledness across the nature/culture boundary. In both Hopkins poem and this work such dappled animal markings are intended to be an index of what contemporary environmental thinkers might prefer to call the entanglement of nature and culture (Harrison, Pile, et al., 2004). Indeed, the association between pied markings and nature/culture entanglement is not only a poetic one. Animal genomics inform us that piebald markings are a distinctive and unique result of domestic breeding. Such markings therefore betray in the very materiality of biological bodies the mixing of nature and culture.

The projection of a regular black and white pattern on the more random pattern but otherwise similar tonality of the dog is intended to explore this entanglement of nature and culture further. It is intended to evoke questions of both the animal's relationship with its environment and with itself, considering the entanglement of nature and culture within it. The projection renders the presence of the animal ambiguous by de-emphasising the boundary between the animal and the space it is in. A weakness of this test perhaps is the generality of this visual effect. A projection of near any shapes or colours and would likely have a similar effect. Light projection itself has a unifying effect by imposing a continuous visual field onto contingent forms and surfaces. However, the aim is to explore something rather more specific – by making the shaded tones of the projection the same as those of the coat of the animal the visual interaction is intended to add up to a third pattern - a more complex pattern articulating the entanglement of the animal with domestic space.

What is of further interest in this experiment is how the medium of projection might function as metaphor for a particular way of understanding environments. The projection produces a field of continuity in which the animal and the space it is in are inseparable, as is an ecological conception of organism and environment. As such a conceit is present that media technologies are an environment. The pattern that dissolves the form of the dog, if seen for its materiality as light and shadow, becomes an electronically generated equivalent of the kind of effect we may see on a forest floor. It may thus be interesting to explore projected light further as a postnatural environment within which animals are to be postnatural in turn.

The more ambitious work *Dappled World* subsequently develops from this initial experiment. The moving image piece leads the viewer through a series of scenarios in which animals encounter and negotiate human-made objects and spaces. These animals spontaneously find ways to move in and through these objects and spaces. Human configurations of space are in turn distorted: A table is constructed in such a way as to perform a rupture in familiar domestic space; an interior scene of lamp light on a wall shifts into an experience of landscape; water flows strangely over the bodywork

of a car. The animals have dappled and pied markings (some familiar now from other pieces of work) - a Border Collie, a tabby cat, a goldfinch. The intention is that the spaces in the video themselves become in some sense dappled - creating ambiguity between figure and ground, same and different, inside and outside. Like the book that the work shares its title with *Dappled World* seeks to articulate dappledness on physical, phenomenological and epistemological levels. Animals and plants become physically dappled either by processes within their natural history, where camouflage helps them to survive, or through an entangled history with humans, where piebald markings are a result of domestication. The world, like animal bodies, is phenomenally and epistemically dappled if we consider that it can be perceived and conceived quite differently from multi-species points of view. Animal surfaces become a cypher for such thoughts within the piece.

Conclusion

The image of broken or fragmented snakes – such as we see in the remains of ancient sculpture seems a useful motif in a critique of organic unity. In classical aesthetics (and in romantic organicist aesthetics drawing on the classical tradition) that which is composed of parts to make up a unified and harmonious whole is what counts as a certain kind of actualisation - the actualisation of beauty. In biology, the organism is actualised through the integration of the function of organs. It is thus by both an artistic and scientific rationale that wholeness and unity are constitutive concepts for understanding nature. The organism both physically survives, and aesthetically justifies its existence, as a metabolising unified whole. What these conceptions of the animal share, it is argued, is a privileging of the concept of organic unity, that may be given the name *organicism*. The thesis has argued elsewhere that organicism as a way of seeing and knowing is constitutive of the natural animal. The sculpture *Continuity & Discontinuity* attempts to translate an aspect of the proposition of the postnatural animal into experience in contrast to organicism. It presents a state of animality, as a state of theatricality, in which distinctions between continuity and discontinuity, movement and stillness,

completeness and fragmentariness are suspended. Organicism is troubled in the re-construction of the animal as postnatural. It is problematised in the experience of the snake form within the piece, as like a shadow, somehow moving through but embodied in insistently fragmentary parts.

This and another work, *Heraldic Restraint*, embody strategies for critiquing the operation of animal symbolism. *Continuity & Discontinuity* through its reference to broken animal symbols and *Heraldic Restraint* by the association it makes between animal coercion and the production of animal symbols. The latter piece carries a tension between a would-be conventionalisation of the animal as symbol and the vitality of the living animal body itself. It presents the posture of animals as the site of this contestation. Operations of animal symbolism are critiqued as part of the broader proposition that these operations represent an anthropocentrism to be overcome by engaging the alterity and vitality of non-human animals.

Another work discussed, *Cat in a Lecture Theatre*, considers an animal surface as an apparatus for mediating and reconfiguring cultural meanings. Within it the displacement of an animal body is the condition for a certain reconfiguration of the history of art. Becoming a surface that interrupts the transmission of images of modern art, the animal body distorts images of art out of recognition. The non-human animal blocks human cultural transmission. The organic qualities of the animal's patterning enter a visual dialogue with the anti-organic language of modern art. The flowing, smoothly transitioning forms pattern of the animal is modified by the broken rhythms of modernist sculpture. The nocturnality of the animal represents the repression of the non-human but also the condition for its surreptitious appearance within the space of cultural transmission.

Animals are found to be slippery. Their surfaces reject apparatuses of inclusion in human worlds. This quality of animality opposes the co-option of animals to instrumental ends, and instrumental forms of reasoning, by its resistance to physical control. Attempts to make artworks in which animal participants are brought into contact with sculptural constructions, highlight characteristics in animal

bodies and behaviours that resist and evade the very means of an artistic approach to the subject matter. Even when the aims of this expanded approach to sculpture are to de-instrumentalise animals by drawing attention to species perspectives, the forms of control applied to make such images work against these very aims and instead draw attention to the instrumentalism of the act of artistic composition itself. We might reflect on this as the result of the very alterity of the animal's mode of being in the world, or even the animal's alterity to the necessary conditions of art as such.

The dappling of animal surfaces is to be read as both metaphor and material evidence of the entanglement of nature and culture. The work *Dappled World* recognises by its title epistemological and poetic conceptions of dappledness (a quality of irreducible heterogeneity). In the pieces on this theme dappledness is considered a quality of both animal surfaces and the environments animals share with each other and with us. The physical dappling of animals is taken to be a map of the necessarily more abstract irreducible heterogeneity of multi-species spaces. Scenarios are constructed that hope to make concrete the otherwise hidden heterogeneity of species spaces.

Where animal histories are intimately connected to human histories, such as is the case with domesticated animals, entanglements of nature and culture are considered to have the character of dappledness. The pied markings of the Border Collie, for example, are a direct index of the entanglement of cultural practices and biological materials. In the work therefore this and other animals are unmade ready-mades – objects to be read anew in their recontextualization as art and as an index of the idea of epistemic, phenomenal and spatial dappledness.

This chapter has discussed some of the practical body of work in relation to the theme of animal surfaces. It has explored how the work has found animal surfaces to be, and indeed constructed them to be, a motif for experiencing animal life in novel ways. It has shown how the work makes us aware of these surfaces as important in both their physicality and visibility. It has considered the animal surface as a medium that can carry, distort and disrupt information, and communicate nature/culture

entanglements. It has endeavoured to articulate how animal surfaces in the work resist the reduction of animals to symbols and the related disavowal of the alterity of animal worlds by anthropocentrism. It has identified weaknesses and dead ends within the body of work that relate specifically to the discovered characteristics of animal surfaces, in which the aims of the work are directly confronted by the alterity of living animals.

7 ANIMAL ENCOUNTERS

Introduction

According to the second theme of animal encounters the author's body of work explores the narrative possibilities of the interaction of animal bodies with props and objects that bear a range of references and identities including sculpture, furniture, machines and architecture. Specially constructed sets and props are made to host animal performances. The works are propositions for seeing how animals can occupy space differently to humans, and how these differences create new meanings.

The contemporary eco-critic Timothy Morton claims that the ecological era is "the revenge of place over space" (Morton, 2016. P. 48). The practice seeks to embody this revenge. The conception of space that it wants to overcome is that of modernity and even modern art. For Morton's the antidote to space is place - a term that names the distinctiveness of a particular environment and the organism's position within it. Space is singular, regular, and continuous. Place however are plural, overlapping and nested. Corroborating Morton's assertion that the concept of space casts a homogenising effect upon environments, and identifying this as a concept born of modernity, the practice works with animals in the active deconstruction of space. Furthermore, the transformation of space into place within the work is recognised to have a strong connection with a certain conceptualisation of ruins. Indeed, ruins are understood as exemplary of the revenge of place over space. On some primary level when human space is taken over by non-human organisms this process involves the destruction of space and the production of place. Because place is dynamic it can overcome space. Organisms themselves being the dynamic factor are themselves generative of the proliferation and multiplication of place where there was once only space.

Furthermore, the body of work seeks to conceive more-than-human space and place in opposition to organicist thinking. Against organicism, and in line with Morton's vision of species coexistence,

space is characterised within the body of work as heterogeneous and discontinuous. In the work animals participate in structures of experience that are typically identified with conditions of modernity. The moving image serves as a means for creating a speculative space in which artefacts are given new meanings. These meanings lie somewhere between human and animal worlds. In some scenarios and narratives animals show their dislocated nature by successfully inhabiting spaces of rupture in architectural constructions. In others, animals are caused to have an uncanny agency that dislocates them from their organic natures.

7.1 Intertextuality and multi-species worlds

The moving image is chosen as a medium for its potential to place the viewer in a particular relation to the action, for the possibility of movement and revelation through the passage of time, and for its ability to bring objects and animals into a narrative space. Let us consider first the rationale for the latter. Let us consider how the medium can assemble narratives around objects. Let us consider the particular possibility of narrating relations between animals and artefacts of a shared visual culture. We may call this appropriation of existing visual cultural motifs visual intertextuality. The purpose of the intertextual mode employed by the work is to take something that already has certain cultural meanings and associations and either extend, revise, or contradict these.

Let us take, for example, the second scene of *Dappled World* (Figure 9). The strange construction of the table in this scene, which is revealed as the camera moves around, is a copy of a prop from Peter Jackson's 1997 movie *The Lord of the Rings*. In Jackson's film the oddly dislocated table is used to achieve the cinematic effect of "forced perspective". Here the object takes on a different meaning when animals interact with it. In another work, *Come On Kes*, two existing visual 'texts' (or textures) that would otherwise never meet are brought into a dialogue with each other. The former is a scene from Ken Loach's 1969 film *Kes* and the latter are the elements of the language of modernist

abstraction. These are given to collide in a strange synthesis. The results of the collisions and interactions present within these two pieces are discussed later in the chapter, but in terms of the use of intertextuality per se, this characteristic is considered to be a good equivalent for the structure of multi-species spaces themselves. Within both intertextual works of art and multi-species spaces, existing meanings are in a process of continually negotiating with each other. The meaning of something in an environment for one species takes on a different meaning when recontextualised by the interests and internal narrative of another. Intertextuality may thus be seen as a *modus operandi* of multi-species thinking.

The act of appropriation, quotation and allusion in the work is intended to do two things. The quotation of a scene from a movie for example, by knowingly referencing the world of cinema, is intended to signal that we are already in the space of fiction and of techniques for building fictional worlds. The ‘forced perspective’ prop in *Dappled World*, by referencing an existing object from material culture, may furthermore function somewhat differently than a trick piece of furniture without this cultural reference. In relation to a real table the table-like object constructed for the filming reads as incomplete and fragmented. But if, on the other hand, its status is judged in relation to the prop from the Peter Jackson movie, as a copy of object with a clear existing identity, it reads quite differently - as complete in relation to its model. The camera takes us on a tour of this constructed object. At one time the two sections of the table appear as one (as they do in the movie scene and upon which the illusion of forced perspective depends), and at another the dissected structure of the table-top is revealed. This reveal is the concrete index of the fictional construction. An index that is absent and hidden whilst the fiction persists but revealed when we shift out of this modality. It is this status of completeness that the table attains as quotation, the oscillation it receives within the video between wholeness and fragmentariness that is important to establishing the intended relationships between human and animal worlds within the work. Both are, in the species perspective sense complete, but objectively contradiction each another.

When the gap that the forced perspective effect depends upon is revealed it is the fictional modality itself that is laid bare. When the animals pass through this gap the effect is something like a more-than-human Brechtian estrangement (Buchanan, 2010). Bertolt Brecht's theatrical technique of first establishing a fictional world and then performing a rupture within it (commonly by the actors breaking the comforting illusion of the play by directly addressing the audience) is aimed at engendering reflexivity in the audience. The scene is defamiliarized and made strange. Brecht's technique, engendering a certain distancing of the viewer from the theatrical illusion, is seen as the condition of political consciousness regarding the content of the narrative. Breaking the naturalistic illusions of theatre is the possibility of political consciousness in this context. The scenes of *Dappled World* may function somewhat like this. Space is made strange. Animal place-making is the making strange of space. Animal agency being the cause of the breakdown of visual illusions within the scenes, engendering in turn reflexivity in relation to the construction of the illusions, thus promises a more-than-human political consciousness regarding space and place.

The creation and rupture of fictional worlds is not only seen, from the position of the practice, as a function of art but also as a function of the presence of animals. Fictionality is given to characterise animal life as much as art. The animals in the work fictionalise the spaces they inhabit. The camera fictionalises the space somewhat differently. The camera does not adopt the POV of the dog, or the cat or the bird – for the camera is its own animal. Cameras and animals have species perspectives. The moving image works aim to provide an expanded more-than-human, and therefore non-anthropocentric, characterisation of fiction, that would otherwise seem most stubbornly associated with human forms of knowledge and experience. Afforded by the medium of video, cultural objects enter a fictional space that permits them to take on new meanings. This structure, best characterised as intertextual, thus establishes intertextuality as a valuable means in the aim of the practice to contribute to de-anthropocentrising art. Fiction structured as intertextuality is commensurate with species worlds. Diversity of species perspectives embody a diversity of narratives about the world. The collisions of these narratives are like the juxtapositions of intertextuality. Animal evolution is the

process behind speciation, which in turn (and in these terms) is the proliferation of narrative frames. Animals are intertextuality registered in evolutionary terms and as living matter.

7.2 Spatial flexing

All three scenes in the moving image work *Dappled World* share a feature. In each the camera presents a different kind of illusion. Animals are the agents that drag us out of these illusions. In the first scene (Figure 8) we believe we are seeing a solid wall upon which light casts a shadow. But this is subsequently revealed as an illusion that collapses with the appearance of a small bird. In the second scene our senses are given to be unreliable when a dog emerges from the middle of a solid enough looking table. In the third scene a cat climbs on a car, but there is something amiss in the shape of the car revealed by the animal's movement. In all these effects there can be seen something that recalls and develops aspects of the initial collage discussed previously. Indeed, in *Dappled World* the character of collage is reproduced by cutting up space through the construction of carefully conceived props. The scenes are like a stage magician's tricks.

In the previous chapter, the title of this work was explained as an invitation to see dappling as both a characteristic of animal surfaces but also of the world if we recognise it to be composed of nature-culture entanglements. The work's central aim in this regard is to articulate space itself (not only things in space) as dappled. The first scene employs light and shadow as a metaphor for the experience of dappledness in this spatial sense. The scene is a simple architectural interior. Lamplight dramatically strikes a wall. We are looking up. We see a bare light fitting. The style of coving identifies this as a modest and ordinary domestic space. But it is too perfect, too contrived – like CGI. There is a strong tonal contrast in the scene between where light strikes the wall and the surrounding shadow. Surfaces are sharply into areas of light and dark. Abruptly, with the appearance of a bird our perception of the scene changes. The bird perches impossibly of what we had come to read as the

edge of shadow. The division between light and dark is transformed into a division between inside and outside. We come to realise that the room is discontinuous with its surroundings. The more we see, the more we recognise that it is a stage set. What we had read as a modulation of light on a surface, a most simple and geometric effect of dappled light, becomes a rupture between interior and exterior space, between surface and void. A small bird perches on the curved edge of a shadow.

In the concluding scene (Figure 10) something rather different happens. We see a tightly framed shot of the front of a modern car. Its flat grey colour suggests perhaps that we are looking at an AutoCAD rendering rather than a physical object. But it is a physical object. Water begins to move across the surface of the form. A trickle at first but finally building to a powerful flow. In the movement of water, it is the intention that something anomalous might be perceived. What we are seeing, and this is revealed later, is a perfect negative cast of the car form. From the initial perspective of the camera the surface over which the water flows has the illusion of being convex, although in reality it is concave. The water pools and gathers in such a way as to create a discrepancy between the perception that the form is coming forwards, and clues to its physical reality as a negative, concave shape.

By translating a car form into its spatial negative the intention is that this machine of modernity in some sense becomes benign, or perhaps even ecologically friendly. The scene and therefore the piece concludes firstly with rain filling the form, perhaps where something might be able to grow, and finally with the cat we encountered earlier walking across it. Creating these encounters between both water and the sculptural form on the one hand and the object and the animal on the other are intended to have the effect of pushing and pulling space toward and away from the camera. To make space breath. Our visual perception of three-dimensional form bends and is bent again by the presence of flowing and still water, moving and still animals. With this pushing and pulling the intended effect is that the animal and the smooth shape of the car seemingly coexist in the same volume of space.

As has been discussed in some depth in a previous chapter the original context for showing this piece was a symposium and exhibition due to take place in the New Forest in Hampshire. Indeed artworks, of which this was one, were commissioned to respond to the theme of rural landscape or more specifically the particular landscape of the New Forest. What seemed fitting to the broader endeavour of the work to explore the relationship between animals and modernity was how in the New Forest cars have come particularly to signify a hazard to animal life. The open grazing approach of land management in the national park, seen as a tradition to be preserved, brings cars and animals into catastrophic contact on a regular basis. Collisions between vehicles and both livestock and native species having become in the last decades a major issue for both the ecological and agricultural management of the area. The shift in *Dappled World* of our perception of a car from concave to convex, forming the conclusion of the piece, was thus also intended to produce a tension between animal and car that alludes to the event of a collision. If intimating a collision though, this is a dissonantly silent and non-violent one. The everyday bleak relationship between animal and destructive machine is subverted, perhaps suggesting other unexplored possibilities for the entanglement of animals and modernity.

According to Morton, place from an ecological perspective “doesn’t stay still but bends and twists”. The change from seeing the world as place rather than space is the shift from seeing place and space as static phenomena to seeing them as dynamic phenomena. In the piece *Dappled World* animals make places and spaces - they bend, twist, dislocate and multiply them. Because animals are dynamic this ensures that space is neither a given nor ever complete. The presence of the animals in these scenes is intended to effectuate such a dynamic bending and twisting of space (or place). Car bodywork bends and twists, indeed twists itself inside out. Stable fixed human-centric spaces are revealed as illusions. Exterior and interior space collapse, thus revealing the superficiality of this distinction within the conditions of the Anthropocene. All these things are done by little animals.

7.3 Spatial dislocation

The practice seeks to discover, as Morton would put it, places that are “bigger on the inside than they are on the outside”. It investigates how there may be “places within places” when conceiving of space and place from a multi-species perspective (Morton, 2016, p.45). It applies these propositions to nascent dimensions within the material culture of modernity. We have seen that the construction of multi-species worlds calls for a bending and twisting of space. In the description of the practice that follows this same endeavour is identified with dislocations in the continuity of space. This line of enquiry starts with the digital collage *Untitled (Elk)* (Figure 12). In this image the form of car and an animal body intersect. Like the final scene of *Dappled World*, this may likewise be read as a curious transformation of a collision. However, this time the visual proposition relies upon a visual interweaving of elements.

The visual experiment was partly informed by accident report photographs of road collisions with large animals. Such images shock but also occasionally surprise. Animal bodies become entwined with the structure of vehicles, resulting sometimes in unlikely and bizarre compositions. These scenes of impact are very literal examples of nature/culture entanglements. However, this dark inspiration is transformed in its subsequent handling in the work. An ecologically and ethically negative experience is transformed into a speculative and imaginary one. In the collage the car and the animal occupy the same space according to a rather different proposition than road traffic accidents. By weaving the two images into one visual space the result an impossible co-existence of human and non-human territories. Particular characteristics of the car afford this visual weaving – the shut lines in its otherwise sleek surface provide the paths along which the two images can be spliced. The spatial effect is not to preserve space as it might pertain to either animals or cars, but to create a discontinuity of space itself.

How both the animal and the vehicle occupy space is rendered ambiguous and even incoherent by the confusion of figure and ground and the absence of contiguity in machine and animal parts. The splicing of the two images creates a confusion of spatiality that is not an interesting confusion but one that dilutes the importance of space altogether. The spatial incoherence of the collage may indeed be a weakness. But this lack of resolution identified a problem that prompted a further enquiry. With this having been learned, development of the theme of spatial dislocation takes the form of the subsequent moving-image work *Dappled World*. With it the concern for weaving space moves into the temporal dimension. Animals are engaged as live performers, and now weave their way through physical objects. However, there is still an important element of pictoriality at work. Indeed, the double modality upon which the piece operates - at one time relying on the logic of pictorial space and at another an extendedness in the third dimension - is central to achieving its aims. This double modality is what two-dimensional collage is unable to embody.

The central scene of *Dappled World* relies on an experience of spatial anomaly. It induces this experience by alternately drawing our attention to pictorial and three-dimensional space. A short description will suffice. A dog jumps onto a table, and then jumps off again. It performs the same action a few times and it varies somewhat each time. The dog leaves and a cat appears, moving quite differently, more carefully and deliberately. It explores the table-top and inspects the objects on it. A little bit of humour occurs when it unexpectedly slips on a tea towel. Through the movements of the dog and the cat we become aware that something visually or spatially odd is going on. When they enter and leave the scene they seem to do so through the apparently solid surface of the table. These appearances and disappearances happen quickly prompting greater attention to these moments when they recur. At times the dog seems oddly fixated on a blank surface. As the cat tours the table-top the animal seems to change scale. Up until this point the camera has been static, but now it begins to move in a series of tracking shots. As it does so we become aware that the table that had looked like a single object is an elaborate two-part construction. It might dawn on us at this point that the animals have been appearing and disappearing through the gap between the two parts. When the animals

finally leave the scene the camera dwells on the means of construction of the spatial and visual trickery. This exposition might prompt us to reflect on the experience of the animal's strange movement and visibility, and the chargedness of the previously unseen and hidden spaces that served the illusion.

The central prop in the scene is constructed according to the principles of the cinematic and theatrical technique of 'forced perspective'. Forced perspective is a technique for the manipulation of the perception of scale. The famous stage architecture of the Teatro Olimpico in Vicenza, Italy 1580 serves as a seminal example of the technique's use within the context of theatre production. In many other theatres raked stage designs serve a more subtle manipulation of the viewer's perception of the space of the stage for the purpose of adding dramatic depth. 20th Century cinema inherits and develops these techniques in its own quest for manipulating scale and space. The single point of view of the camera allows for more dramatic effects and extended forced perspective techniques to be conceived. The table construction in the video is based on one such technique by which the illusion of continuity between two areas of a scene, that are in fact physically discontinuous, can be achieved. The table's divided form appears to be continuous from a certain viewing position.

In the history of cinema such props have served to create illusions of scale for the purposes of spectacle and fantasy. Here the prop is employed reflexively – to articulate and reveal the dislocation of space that the cinematic technique is necessarily dependent upon. Forced perspective is typically used in theatre and cinema to create illusions of changes of scale in elements of the action, such as making something look smaller or bigger than it really is. Here the anomalous spatiality that the technique relies upon is co-opted for another purpose.

Between the two parts of the table there is a space that is not perceptible from the point of view of the audience. For the purposes of forced perspective this is a dead space, a space where for something to enter or leave is to impede the intended effect. In *Dappled World* animal participants enter and

leave through this space thus breaking the illusion. This hidden part of the trick, that does not remain hidden, thus breaks the spatial homogeneity established by the single point perspective of the camera. As the animals move the single point perspective is repeatedly broken and restored. Their entrance is a surprise. Indeed, the spatial dislocation creates the possibility of surprise. The strange status of the space through which the animals move is intended to be an ecologically revised concept of space that is revealed to be bigger on the inside than on the outside.

Conclusion

A recurring aspect of the body of work are its allusions, quotations or direct appropriations from visual cultural history. Such intertextual characteristics of the work are proposed here as a way making possible the reconfiguration of certain cultural and historical baggage by retelling that material through the mediating presence of animals, and constructing alternative, more-than-human narratives around these materials. Such references stand for something that is in this sense challenged by animal presences. Intertextuality in turn is seen as a more-than-human phenomenon - the work seeking to treat the coming together of species worlds as inter-species intertextuality.

The moving image work *Dappled World* quoting cinematic special effects techniques reveals something about the underlying anthropocentrism of cinema as well as the latent potential of these techniques for considering imagery and spatiality in non-anthropocentric terms. The theme of how space might be conceived in more-than-human terms is central to the work discussed in this chapter - a certain production of space taking place in encounters between animals and made artefacts. Such encounters squash and stretch space, make rifts and lacunae in it. This non-uniform, textured, and variable spatiality is produced by the presence of animals with the help of props and stages that are conceived to afford these qualities. The final scene of *Dappled World* consequently considers the stakes at play in these contestations of space as ecological ones.

The works discussed in this chapter are concerned with encounters of animals with the unexpected. These unexpected juxtapositions seek to make animals strange to break certain habits we may have in the way we are used to seeing them. The encounters constitute an expanded sculpture practice in their concern for spatiality, understood formally, but also as the space of animal movement, and of which animals and sculptural props happen to contingently share. But the direct medium of sculpture is often not adequate, and is to be translated through the moving image, where the narrativity of more-than-human spaces is to be articulated.

8 ANIMALS AND MODERNISM

Introduction

Having developed a range of thinking tools for considering the relationship between animals and artefacts, this chapter turns to analysing the practice component of the PhD through the specific theme of animals and the artefacts of modernity. The practice endeavours to engage with the status of animals in modernity specifically by constructing encounters between signifiers of modernity and animals. Sometimes the structures that the animals interact with reference the technology of modernity, at other times props directly quote or indirectly allude to art objects from the history of modernity. The moving image serves as a means for creating a speculative space in which emblems of modernist art history are given new meanings. Animals effectively accommodate in their life worlds avant-garde motifs, that in their formal innovation attest to the modernist principle of historical discontinuity and in the worlds of the animals attest to the spontaneous inventiveness of animal behaviour in order to make sense of them.

8.1 Multi-species modernism

For the body of work a moment in early neuroscience becomes a touchstone for imagining the relationship between animals and modernism differently. In the late 1950s Harvard University researchers David H. Hubel and Torsten N. Wiesel's conducted pioneering work on the neuroscience of vision. As model organisms for their experiments Hubel and Wiesel chose domestic cats. A series of experiment from 1959 sought to measure correlations between visual stimuli and localised activity in the brain. In one such experiment an unfortunate animal is subjected to a series of visual stimuli while a probe measures the activity of a single neuron in its visual cortex. In order to generate a range of visual effects to that could be produced repeatedly and systematically Hubel and Wiesel devised a

system of shutters and lenses that created illuminated bars of light on a back-projected screen. The shutters could be moved around to adjust the thickness, length and orientation of the bars of light, and to move the abstract shapes across the animal's field of view. Testing various visual stimuli, the pair of scientists found that a neuron being observed would fire only when a bar of a very particular thickness and angle was passed across the animal's visual field.

On one occasion the distinctive click of the detector was to be heard with the appearance of a well proportion shape set at an equally pleasing angle. The occasion is preserved in some grainy footage that Hubel and Wiesel shot to record the experiment, as well as perhaps to mark the occasion of the important result. If we are to see this experiment as an occasion for considering in the question of the relationship between animals and modern art, we might be forgiven for putting aside the strict neurobiological significance of the results and noticing the striking similarity between the visual stimuli that Hubel and Wiesel chose and a certain vocabulary of modernist abstract painting. The elements that Hubel and Wiesel decided upon to test animal vision are those very same elements of which Kazimir Malevich's paintings from the 1920s are composed. We might judge that in the scientific context the shapes were chosen due to their visual simplicity, and in the artistic one due to their primacy as elements in painting. In both context these simple abstract forms are chosen as most rudimentary elements of visual experience. Indeed, if we took a series of stills from the Harvard professor's footage of variously dimensioned and oriented rectangular bars drifting across a visual field, we have (apart from the absence of colour) something curiously like an inventory of Malevich's 1920 painting *Nine Red Rectangles*.

What does this correlation mean for neuroscience? In strict neurobiological terms, not a lot. But within the epistemology of the thesis, that lies between the discipline of ethology and the discipline of art history, it is significant. Within these terms the visual language of modernist abstraction can be seen to have some relationship with animals. Perhaps we see that modernist aesthetics and non-human animal perception exist in a shared space. Indeed, this is what is proposed to be evident in

Hubel and Wiesel's film. This perhaps is to look at the film in a deliberately awry way. Indeed, what if we do look at it not as science but as art? Considered art it might then be related to other artists moving image works that include animal such as *Un Chien Andalou* 1929. In Luis Buñuel's surrealist film, the actress Simone Mareuil like Hubel and Wiesel's tabby cat, also has one eye forcibly held open. If we do permit a reading Hubel and Wiesel's film beyond its strict neurobiological significance, it shows what an encounter between an animal's phenomenal world (that in the film is indicated by the click of a firing feline neuron) and modernist art might look like. If this analysis seems unduly positive given the coercive means that the neuroscientists necessarily bring to bear on the model animal, recognising a certain similarity between Hubel/Wiesel and Malevich's projects as both applying methods to register visual attention and response, a darker tone is cast on the relationship between animals and modern art by this comparison. Hubel and Wiesel's short film serves as a touchstone for accessing an aspect of the body of work – inviting a playful speculation upon the relationship between modernist stylistic elements and animal life.

The piece *Come on Kes* (Figure 11) appropriates and transforms a scene from Ken Loach's 1969 film *Kes*. Graphic elements are applied to the original footage through motion tracking. *Kes* is a story of a boy who escapes his troubled family life by forming a close bond with a wild kestrel (the eponymous Kes). In the scene we see the boy Billy developing this bond with Kes. He is training the bird to come to him. Over this scene visual elements are applied that allude to the abstract language of modernist painting and sculpture. These forms more specifically have similarity with the stylistic language of Malevich or the sculptural language of Anthony Caro. The subsequent correspondence in the video between these elements and parts of the protagonist's body attaches an anthropomorphism to even these abstract shapes. But the abstract geometric coloured elements through the movement-based tracking become like a costume, or even like armour and weaponry. This transformation embodies a denigration and abuse of the pure visual language that the work references.

The CGI elements also function to disguise the boy. At the beginning of the scene Loach's direction switches between the eyes of the boy searching for the distant bird and the attentive gaze of the bird itself. If we accept the added CGI as an integral part of the scene, the boy's digitally applied disguise might be read as either an active attempt to fool the bird, by hiding and breaking up the human form or a projection of how the boy's appearance might be transformed in the eyes of the bird. Either way the figure of the boy is reduced to the movement of simple, non-organic forms. The relationship between Kes and Billy is transformed into an imaginary interaction, which functions as a proposition of recognition, responsiveness, contact and control. Furthermore, the use of motion tracking here, to transfer movement from living forms to otherwise inanimate artefacts, is intended to chime with the animist principle of interchangeability in the agency of the living and the non-living, blurring the distinction between living body and non-living digital technology.

Perhaps one difference between Hubel and Wiesel's cat and Billy's kestrel that is of interest to the question of the world of animal visual meanings, is that the latter, we are informed by ethology, belongs to a family of birds that resist domestication. This barrier to domestication persists on many levels of the species' nature, but one of these a capacity for visual and auditory recognition. The relationship between a companion species and a human is afforded on the basis of a certain empathy of the animal to the moods and disposition of the human interlocutor, raptors (the family to which kestrels belong) have no such instinct. By the account of those who keep them, these birds of prey have, what will be anthropomorphically interpreted as, a certain coldness. Konrad Lorenz famously discovered a mechanism which may account for this human perception of the coldness of certain animals. Lorenz studied the behaviour of geese and found a particular mechanism by which offspring form a bond with a parent bird (Lorenz, 1979). This mechanism he termed *imprinting*. In a developmental process almost exclusive to birds the juvenile animal will imprint on an image of the parent bird. What Lorenz discovered, and that distinctly characterises the phenomenon, is that imprinting is a purely conditioned response. There is no instinctive or inbuilt recognition of the parent. Lorenz discovered through, given certain experimental conditions, goslings would imprint on

a whole range of visual stimuli unconnected to and needing to have a visual similarity the natural stimulus (i.e. the likeness of the parent bird). Famously, one hand-reared brood of greylag geese imprinted on Lorenz's Wellington boots.

To train a raptor it is common to imprint the young animal not directly upon the image of its trainer, but upon the glove that will subsequently be the visual stimulus that brings the bird to hand. To these companion species the human interlocutor is reduced to the recognition of an inanimate object. In the work *Come on Kes* the boy's disguise invents an imaginary animal worlding which establishes modernist abstraction as imprinting stimulus and unlikely parent image. The eye and brain of the bird does not see the figure of the boy, it does not recognise 'Billy'. The boy is abstracted through the animal's gaze. The boy's form becomes pure movement. The human (form) is present in its absence through the non-human gaze, as an abstraction of the body into the motion of simpler elements. The boy becomes formalised, becomes a formalist object (analogous to the formalism of modernist art). The bird's gaze is strangely the gaze of modernism. The bird's gaze turns nature into culture in a way that makes a conventional definition of culture problematic. The effect of its gaze is autonomous from the human gaze. The world of the bird (its "umwelt" in Jacob Von Uexküll's language. I.e., the world as it is experienced by a particular organism (von Uexküll, 1957) is no more natural than the world constructed through the human gaze.

8.2 Multi-species ruins

The moving image work *Ioganson Bird Table* (Figure 13) presents us with an everyday scene of garden birds. The birds are seen to alight upon and move around a structure. The openness of the structure, its scale and composition welcome the spontaneous interaction and motion of the animals. The jump, they feed, they squabble. They take flight. They react to each other's movements. They take advantage of the composition of the three-dimensional structure to adopt a vantage point, to

claim a space and to orient their senses. The structure in the video consists of three identical straight steel rods, held in a particular spatial arrangement by cord under tension. Such an arrangement of mutually dependent forces of tension and compression is described in engineering as a 'tensegrity structure'. This tensegrity arrangement furthermore might be recognised a 'flip flop' - one cord remains slack while others are in tension, creating the possibility for the elements to flip to another stable arrangement that would mirror the first. The scene takes place against a bright green background reminiscent of a special effects green screen.

The movement of the birds is contrived to echo the form of the steel structure through the application of layering and editing to the video. The relationship between the movement of the birds and the composition of the structure is clear in the unmediated interaction of the birds but layering and editing subsequently transforms the movement of the birds to become more explicitly analogous to the structure. Through editing and layering the flying birds are caused to line up with the compositional elements of the structure. At certain points in the action the arrangement of groups of birds come to echo its linear forms. These effects appear and disappear.

The structure with which the birds interact, and to which the title provides a clue, is a reconstruction of a sculpture by made by Karl Ioganson in 1920. The original sculpture having been destroyed, this copy is based on measurements taken from a series of photographs documenting the 1920 exhibition in Moscow of work by the OBMOKhU group in which it featured. The moving image piece is thus intended to function as an appropriation and re-interpretation of Ioganson's sculpture – its original meanings transformed and reconfigured by the non-human scenario that it enters.

As a copy of a historically important avant-garde artwork the prop does not have the same aura as the original. It does not possess the atmosphere that is embodied by the original as an index and witness to early 20th Century modernity. But as a copy without a surviving original, it functions like a resurrection or a memory. As a prop for a video sequence it is resurrected in order to attain a fictional

life, and to function as a player in a scene. By quoting this piece of art history the author's artwork inherits something of its meaning, but also puts these into a novel dialogue with other meanings. To apprehend the new meanings that emerge when sculpture is given over to birds, a less anthropocentric formulation of the term *meaning* itself is invited. The structure that the birds spontaneously interact with, is meaningful to the birds due to its particular affordances. For the birds the sculpture is a map of significances according to the particular needs and interests of birds. It affords a place to perch and to feed. The configuration of elements must be manoeuvred through in flight. The rods are like the branches of a tree to be grasped. Individual birds often return to the same position between flights. The sculpture is territorialised by non-humans. In the interaction of the organisms with the structure there is a logic in the spatial play of living bodies that arises from the logic of the sculpture itself, but also from the logic of birds.

Taken out of its art historical context and relegated to a bird table, the object loses the autonomy and associated claims of transcendence envisaged by modern art. In their aim Ioganson's sculptures of this time can be closely associated with those of Russian constructivism, which attributed a particular significance to line as an element of painting and sculpture. Line embodied force and energy – both physical and spiritual. The straight line became the embodiment and primary element of this aesthetic idea. The claim of constructivist works of art to articulate spirit in concrete form, is intended to be renegotiated here in the presence of birds. The movements of the birds feel the influence of the lines of force in Ioganson's sculpture.

New meanings emerge in the absence of the sculpture's original art historical one, or rather in the presence of its absence. Such tangibility of lost meaning, it is proposed, is the structure of experience of ruins. The scene is considered a scene of ruin, because what it articulates is a faded meaning. What are present are the signs of the absence of the meanings this relic of modernism once had. It is a trope of ruin art indeed for birds to appear among what materially remains when human meanings have departed. But the aim of this work and others is not to smoothly reproduce a well-established code of

ruin art. For the video work is intended as a scene of lively ruin. The invasion of the non-human, the decay of cultural signs and their legibility, is not to be taken primarily as a reminder of human and historical transience (as the ruin trope often comes to signify) but rather as a recognition that in the moment of loss a multitude of non-human worlds and meanings (that are indeed ever present) start to surface.

Notwithstanding these merits, a critical reflection upon the piece *Ioganson Bird Table* does reveal it to have certain faults and shortcomings. The intervention of editing may be considered heavy-handed and may detract from the rationale. The indexicality of the image, and the sense of an unmediated capturing of an event, is weakened. A better solution is imaginable but of practical difficulty . This solution would rely more greatly on chance rather than applying editing and layering to the footage. It would be to capture fortuitous alignments by selecting from a large amount of obtained footage. There would be a wish here to achieve in this extreme selectivity a strange, anomalous and seemingly un-natural movement of birds, that is none the less objectively natural in relation to its subject matter (i.e. indexical and unmanipulated). The anomalous event is the event of interest but is also by its very nature the rare event. Given enough recording capacity and time these events could start to be captured and form a vocabulary for achieving some of the aims. At best the pattern of editing as it stands might be seen as a translation of the linear composition of the sculptural form into a temporal pattern. In both analyses however the agency of the editing somewhat overwhelms the agency of the birds.

8.3 Re-animating modernism

Rodchenko Bones (Figure 14) adopts a similar strategy to the piece just discussed, colliding an icon of modernity with non-human worlds. This second moving image piece to incorporate birds seeks to record, translate and transform their movement in a way that makes us think about animal agency,

collective agency and the connection between animal life, puppetry and animism. The piece develops from an interest in the animistic allusions of puppetry. Puppetry may be seen as a pervasive art form across cultures, in which what is appreciated as the effect of puppetry is the bringing of inanimate materials to life. In puppetry the boundary between the animate and the inanimate becomes ambiguous. The expressivity of the puppeteer is transferred to the anthropomorphic or zoomorphic artefact. The quality of the transferred movement is indeed itself responsible for anthropomorphic or zoomorphic recognition. The object receives an agency, a soul, a spirit. Psychology tells us of the causes and sources of this recognition (Read, 1915).

The video features a reconstruction of an object that appears in a photograph taken by the Russian artist Alexander Rodchenko of Lyubov Popova's studio in 1924. Like *Ioganson Bird Table* birds are seen to alight and move through a recreated constructivist object. The bird movement is motion tracked and further visual elements are added to follow these movements. These elements are human bones that move in correspondence with the movement of the birds.

The piece makes birds the agency of controls over the movement of elements of the human figure. In so doing it seeks to trouble the relationship between what is transferred and what is received by the animal to and from these other forms. The steel structure becomes a marionette controller, its vertices becoming the control points for a range of motions. The puppeteer is non-human. The first interest in this experiment is whether this reversal of typical puppetry whereby the human body controls a non-human body retains something of puppetry's uncanny effect. The second interest is how the movement of the bones might read as volition, as is the effect of skilled puppetry. Given the movements of the CGI bones are the result of the agency of multiple bodies rather than a single controlling operator it is of interest if these multiple agencies can still produce a sense of a form coming alive. It is hoped that something in the way the birds move, how they mutually gather, avoid, evade, or clash, might serve as an equivalent to the way parts of a human body move with a certain intelligence. This conceit depends on there being, both in the movements of a single body and the

movements of multiple interacting organisms, some coordination. The former we are wont to think of as centralised, decisive and goal oriented and the latter as distributed, reactive, and improvised. The piece invites us to see these two kinds of movement as not so distinctly different. Furthermore, it might lead us to question judgements of centralised or distributed organisation as not such clear criteria for differentiating between volition and passivity, wilfulness and mechanism.

By exploring how non-human agency might construct the human, the piece intends to turn-around anthropomorphism. Exploiting digital motion capture to create the pretence of non-human puppetry, may construct the human image as uncanny. The nervous movement of birds combine as the movement of a limb, however, an unsettling gap and alterity persists in this transference. This scene of dancing bones may highlight the boundary between the living and the dead. Animated skeletons are perhaps comic because they fail to respect the boundary between the living and the dead, between meaning and non-meaning. However, a skeleton that dances in correspondence with the movement of birds pertains to a different disrespect of the boundary between meaning and non-meaning. A human form that uneasily incorporates the agency of the non-human is intended to speak of the postnatural human. The argument for postnaturalism is here premised on experientially upsetting the boundary between centralised (human) and distributed (non-human) kinds of movement.

Conclusion

This chapter discusses the specific functions that appropriation, both from high and popular culture, serves in the body works. Theodor Adorno states that the modern work of art must bear witness to the experience of rupture and dissonance that characterises modernity. Modernist works of art challenge the value of harmony and the organicist principles of classicism. The encounters between animals and modernism within the author's body of work, and discussed in this chapter, cause

something of the anti-organicism of modernism to rub off onto animals as well as our perception of them.

The encounters between animals and emblems of modernism in the works *Ioganson Bird Table* and *Rodchenko Bones* are invited to be seen as images of ruin. However, seen as such these works effect a non-human turn in ruin theory . If we see in these works ruins of modernity, this quality is to be understood somewhat differently than it is in certain other ruin theory as it has been applied to modernity (Boym, 2010). Other works have been described, to borrow a phrase from Timothy Morton, as “a revenge of place over space” (Morton, 2016. P. 48). Indeed, the process of human material culture falling into ruin seems to be such a kind of revenge. As a re-configuration of space and place ruins in the author’s practice lose their negative affect.

These two works make an intertextual play of animal worlds and modernist art works. They make these artworks animal friendly, as a remedy to the perhaps philosophical hostility to animals in the intentions and aims of the modernist movement. They both involve birds. The former piece tries to show birds as sympathetic to the language of modernism, moving in tune to it. The latter considers the animals as agents in the afterlife of modern art, that by their agency as a kind of puppetry, give it an afterlife as something undead in the sense of uncanny.

CONCLUSION: POSTNATURAL ANIMAL BODIES

Summary

The thesis began by characterising the postnatural animal through a story of *Contested Animal Bodies* in modernity. It initially framed this as a clash between the Enlightenment ideas of animal as machine and a Counter-Enlightenment idea of the vitality of animal bodies. It traced the development of this claim and counter-claim to Darwinian and anti-Darwinian characterisations of animal life in the 20th Century. It introduced two versions of anti-Darwinism regarding the characterisation of animals – one that challenged a mechanistic image of animals in a continuation of the romantic spirit by recognising more-than-human autonomy and expression, and the other that posited the presence of an anti-vital principle in animal worlds. The chapter concluded by framing these ways of seeing animals through the anthropological proposition that there is a multiplicity of worldviews through which animals are perceived in diverse ways.

In the second chapter, *Art as Animal, Animal as Art*, the thesis continued by examining and unpacking arguments by which animals escape a mechanistic characterisation by being seen as art, or as like art. It recognised that an identity is formed between art and animals in contemporary bio-art and traced the origin of this proposition to 18th Century romanticism. It proceeded to consider bio-art within a romantic rationale for seeing animals as like works of art. The chapter concluded by identifying what insights may be gained about the conditions of possibility of contemporary bio-art in relation to romantic animal aesthetics by imagining a romantic literary work of art *as* bio-art. Living animals considered as art, and thus no longer as nature, thus introduced the proposal of the postnatural animal.

The next chapters *Display and Excess* and *Mimicry and Mimesis* developed prospects for characterising the postnatural animal by engaging with contemporary new materialist scholarship. The arguments of Elizabeth Grosz, Donna Haraway, Bertrand Prevost and Brian Massumi were

examined and used to develop further insights as to the characterisation of the postnatural animal. The boundary between animal nature and human culture was blurred by identifying in one chapter the phenomenon of animal display as escaping and exceeding Darwinian explanation, and in the other the case of animal mimicry and camouflage was given to share the features of mimetic relations within human visual culture.

The attention of the thesis then shifted to a consideration and examination of how contemporary art can be interpreted as advancing the prospects of the postnatural animal. The case study *The 'Idea of Natural History' in the Work of Pierre Huyghe* formed the fifth chapter. It picked up on the theme of animal as art by analysing Huyghe's bio-artworks in these terms and developed the argument that contemporary art is a space where postnatural animal futures can thrive. The postnatural future of animals in Huyghe's work was identified with a collapse of natural history and human history. Theodor Adorno's dialectical concept of natural history was introduced in support of this reading.

The final three chapters made an extended analysis and evaluation of the author's own art practice in relation to the thesis aims and arguments. The author's portfolio of works was discussed under three themes to identify its contribution to the characterisation of the postnatural animal, and to the possibility of realising the postnatural animal through art practice. The first theme of *Animal Surfaces* permitted certain novel characterisations of the post-natural animal to be made. It recognised findings within the practice that ran against the aims of the thesis and discussed these as being equally revealing. The second theme by which the author's practice was scrutinised *Animal Encounters* identified the postnatural animal with a non-anthropocentric characterisation of space. In the video work discussed in this chapter encounters between animals and constructed props were framed as attempts to facilitate the revenge of animal place over human space. The third theme *Animals and Modernism* connected the aims in the author's practice to Huyghe's and identified the former's contribution to a shared territory. Pieces within the body of work that stage interactions between

animals and copies of modernist artworks were proposed to add to the characterisation and realisation of the postnatural animal by identifying it with the motif of the ruin.

Findings

The role and meaning of animals in romantic aesthetics is both revealed and negated by considering bio-art strategies through the lens of romantic ideas about the differences and similarities between artworks and organisms. In bio-art we note that there is typically some staging or framing of living organisms - even if that is only the framing of the institutional space of art itself. When organisms are art works (as with bio-art) the unmediated animal presence interferes with certain terms upon which romanticism defines the relationship between art and nature but also build on these terms for seeing art and animal life on a continuum. This finding is evident in the analysis of Schelling and Kant's comparison of living animals and artworks in relation to the strategies of bio-art in Chapter 2.

Contrary to the aesthetics of organicism animal patterns can be articulated as expressive of an imminent heterogeneity. Residual characterisations of the animal body as unified and harmonious, furthermore, are dispelled by interrupting and dislocating animal surfaces and patterns. Animal bodies can be visually fragmented but remain coherent. A state of animality, as also a state of theatricality, is achieved in the author's practice, in which distinctions between continuity and discontinuity, movement and stillness, completeness and fragmentariness are suspended. Encounters between animals and modernism within the author's body of work cause something of the anti-organicism of modernism to rub off onto animals and our perception of them. Evidence for these findings is seen in aspect of the author's practice which subject animal surfaces and patterns to a range of transformations. Central here are the outcomes *Continuity & Discontinuity*, *Ioganson Bird Table* and *Cat in a Lecture Theatre*.

Art that incorporates or collaborates with living animals may realise the condition of the postnatural animal as a site in which relations between human space and animal space is altered. The mediums of sculpture and moving image can create a pluralised and heterogenous spatiality to account for the multiplicity of animal “umwelts” (Uexküll, 2010). Bio-art proves its appropriateness for realising the autonomy, creativity and spontaneity of animals (i.e., proposed characteristics of the postnatural animal) by preserving the autonomy of art itself. This recognition of animal autonomy as art is evident in the practice of Pierre Huyghe and works by the author *Dappled World*, *Nose Test* and *Ioganson Bird Table*.

The Anthropocene, defined as a condition in which natural history and human history have collapsed into each other is (following Walter Benjamin’s definition) a state of ruin. But the thesis finds that the concept of ruin must be radicalised within the context of the Anthropocene, in which nature itself is in a state of ruin. This revision of ruin theory relates to the post-natural animal because animals cease to be natural when they are the inhabitants of ruins. Evidence for this finding is identified in the practices of Pierre Huyghe and the author, in which it takes the form of animals interacting with the relics of modernism.

The experience of the post-natural animal, of the sort where the distinction between nature and culture is blurred, may involve an experience of the uncanny. The author’s works *Continuity & Discontinuity* and *Rodchenko Bones* serve as evidence of this finding, as do Pierre Huyghe’s *(Untitled) Human Mask* and *Zoodram 5*.

The argument that the postnatural animal may be realised through art that collaborates with living animals also has a potential pitfall. Upon working with animals to make artworks they are found to be slippery and uncooperative. Their behaviours, and indeed living surfaces reject and resist apparatuses of inclusion in cultural worlds. The thesis proposed that the animal is liberated from its repressive categorisation as nature by becoming art but finds that if art is understood as an act of

composition, it inevitably acts to control its elements. The problematic therefore is that the living animal as art is subject to compositional control. This finding is evident in the author's practice as the unruliness and avoidance of living animals to become elements of the artworks, particularly in the experiment *Untitled (Dog)*. Against the stated intention the piece seems not so different in effect from another work in the author's portfolio *Heraldic Restraint* that explicitly critiques the limiting of animal vitality and autonomy.

Conclusions

The thesis has considered humanities scholarship on animals, particularly that which focusses on the alterity and agency of animal life. It has argued that an understanding of the relationship between humans and animals in the present requires a characterisation beyond a discursive framework. The acquiescence of post-modern humanities to speak only discursively of animals is seen as a flaw. For the humanities to speak only of the image of the animal is too great a concession to naturalism's monopoly on speaking of the visual, material, biological, and behavioural reality of animal.

The author's body of artworks speaks of these dimensions of animal life in other terms - by employing animals as materials, collaborators, and agents. Animals perform some of the labour of the work. The practice recognises that animals are entangled in works of art, and therefore in discursive systems. The practice recognises that artworks have a place in art history, and that institutions of art condition their production and reception, but maintains that by the incorporation of animal agencies within works of art they exceed a human cultural place and meaning. Practices, habits, and ways of life that arise from the interaction of species in environments, including art practices, are not reduceable only to human meanings.

The thesis offers insights about animal life that vie with the life sciences for the status of non-anthropocentric knowledge about animals. New materialist accounts of animal bodies and behaviours are trans-disciplinary – referencing art theory and philosophy alongside ethology and physiology. The postnatural animal implied by new materialist critique and speculation - the animal that is not reduceable only to the terms of natural historical description - requires language deriving from the arts and humanities to reflect, echo and capture its characteristics.

The art practice component of the submission has tested the proposition that animal behaviours and bodies are intelligible in trans-disciplinary terms. It has identified a mode of experience whereby there is an equivalence between animal as biological systems and animal as art. The practice and the written thesis together have determined a role for animals in art not as subject matter, but as active agents that escape both natural historical and art historical description. The practice engages with the postnatural historical condition of animals as elements of a more-than-human art. The postnatural animal is against the organicism that would otherwise invite a comparison of artworks and animals because neither nature nor history is an organic self-contained unity in the Anthropocene. Organicism is troubled by the fragmentation and re-constructions of the animal bodies in the thesis' chosen exemplar artworks. The postnatural animal is the animal that is neither harmonious, unified nor complete. It is characterised, like modernity, by discontinuity and rupture – and by these qualities as an unfinished project.

The practice sees the postnatural animal not as a given (for givenness is naturalness) but rather as that which requires work, the labour of art, to be brought about. The nest of a bowerbird, for example, may be said to be an artwork, but the animal cannot independently make an *avant-garde* artwork. A more-than-human modern artwork, rather, arises from the interaction of the animal with elements novel to its world.

The thesis has resisted characterising the practices of the author and of Pierre Huyghe as human/animal collaborations. To recognise them as such is only identify them as a type of entanglement which animal husbandry and pet ownership, for example, can also be identified with. Unlike these practices the artworks of the author and Huyghe redefine the position of both the human and the animal.

The practice envisions a postnatural future for animals that relies on more-than-human learning and the development of traits. These traits however cannot be found by ethology, at least not by the definition it receives from Nikolaas Tinbergen as “the study of animals in their *natural* environment” (author’s emphasis) (1963, p.420). The practice, rather, studies animals in environments that are not of a natural order. Tinbergen takes herring gull behaviour to tell him something about animal nature (Tinbergen,1950), the thesis however takes it as indicative of the animal’s susceptibility to entanglement with the artifice of the experiment itself.

The identified slipperiness of animal bodies resists co-option towards practical instrumental ends, and thus indirectly to instrumental forms of reasoning. Some of the forms of control exerted over animals in the author’s artworks operate against the aims of the practice and draw attention to instrumentalism in the act of artistic composition itself. We might reflect on this as the result of the very alterity of the animal’s mode of being in the world, or even the animal’s alterity to the necessary conditions of art as such.

Contribution to knowledge

The first contribution of the thesis is to the scholarship of Pierre Huyghe. In the thesis Huyghe’s work receives an original framing in relation to dialectical notions of history and modernity. Within Huyghe’s oeuvre postnatural animality is identified with the entanglement of art history and natural

history. Theodor Adorno and Walter Benjamin's dialectic of history is given an original interpretation through an examination of Huyghe's bio-artworks - whereby in Huyghe's work a historical consciousness is glimpsed that must include both the human and the non-human as historical agents. Huyghe's oeuvre is evaluated in relation to three characteristics – an aesthetics of the ruin within the work, an emphasis on transience in physical systems, and an effect of indifference to the human viewer. These are identified in turn with Benjamin's conditions for the dialectical reconciliation of natural history and human history, namely, the relationship of nature and culture to be found in ruins, and the attenuation of human subjectivity, and Adorno's recognition of natural states and cultural moments as equally transient. In the final analysis Huyghe's installations are read as a non-anthropocentric experiment in Adorno's promise of a nature to come (1997, p.65).

The second contribution is to fill an identified gap and redress an underexplored aspect of contemporary critical animal studies. The field has often sought to question human exceptionalism by focussing on animal interiority as a contested attribute. Acknowledging the inner life of non-human animals has been a central strategy in the move away from anthropocentrism by the humanities. The focus of the thesis however is to consider animal physicality, appearance and behaviour to form a critique of aspects of Enlightenment modernity's concept of animal nature, without taking recourse to psychologism. Animal visibility is understood to have a language and intelligibility of its own, and as such animal bodies are explored as the site of contested accounts of animal life.

The third contribution of the thesis is to take a step further than much new materialist and posthumanist animal studies. Such work as that of Elizabeth Grosz baldly recognises animals as artists or as having artistic sensibility (Grosz, 2011). However, a certain triviality is identified with such statements. This triviality is due to the non-historical generalisation of how the term *art* is being used in such scholarship. Given the aesthetic richness of animal display behaviours and appearances such critiques of human exceptionalism regarding artistic agency may ask, 'are animals artists' and

‘are animal bodies nature’s art’? However, positing modernist art as exemplary of aesthetic anti-organicism, the more specific contribution of the thesis is to ask, ‘can animals be *modern* artists’ and ‘what is the relationship between the aesthetics of modernism and the aesthetics of animal life?’

In the context of the Anthropocene, where human history and natural history have arguably collapsed into each other, the practice proposes that the animal artist is thrown into historicity. Preserved within a nature reserve, the bowerbird’s putative non-human art remains non-historical – which is not to deny that the animal’s behaviour has evolved over time, but only that its creations remain outside of dialectical historicity. The natural bowerbird’s temporal condition is not the dialectical time of modernity. The historicized bowerbird artist however would be the animal whose practices are changed by the entanglement of instinct, learning, sculpture, digital media, language, etc. In the author’s body of work the entanglement of artifice and animal bodies causes a dialectical tension that generates new forms of more-than-human practice. These encounters, developing posthumanist and new materialist accounts of how animals exceed our image of nature, generate excesses in relation to, let us call them, traditional ways of animal life. This potential is only to be realised, perhaps in stages or phases, in certain aspects, or in situated ways.

Impact outside of the thesis argument

The written thesis and the accompanying art practice is intended to call for a particular attitude of the reader, the viewer, and indeed the author - that is, to put ourselves in a position where we do not know in advance what the animal is. Where we do not know what distinguishes animals from humans. Where we suspend judgement to discover new singularities, identities and ways of life for animals that would not be permitted under the name of nature.

The postnatural animal is an embodied practice, and indeed animal bodies and animal surfaces are taken to reveal that animals are always-already postnatural. In postnatural animality the distinction between the organic and the in-organic, between nature and artifice has collapsed, because in the Anthropocene the distinction between nature and culture has become inoperative. Postnatural animal bodies are seen on a continuum with cultural forms (technics, body adornment, art).

The thesis recognises all animals out of place and out of sorts as potential forms of resistance. It calls for the art of the Anthropocene to construct a space in which animals can genuinely surprise us and form new ways of life by their capacities of excess and negation. The postnatural animal is the animal for which its body and behaviour are not its nature but its art - an art that cannot be immediately co-opted into a framework of human significance. An art that embodies the animal's autonomy and agency against an identification of animality with mechanical nature. The animal as art resists being seen only as a resource.

ILLUSTRATIONS



Figure 1.

Paul Finnegan, *Continuity and Discontinuity (Still)*, Plaster, video projection, Dimensions variable, 2021. <https://vimeo.com/manage/videos/565551722>

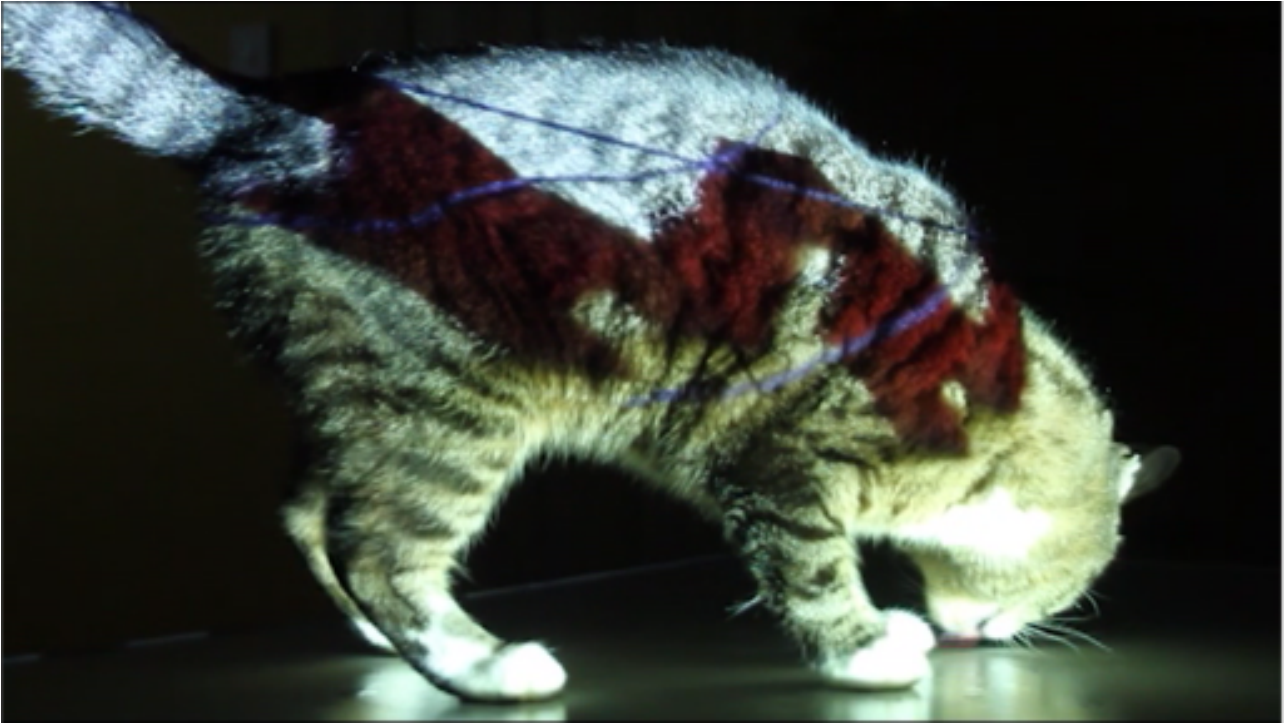


Figure 2.

Paul Finnegan, *Cat in a Lecture Theatre (Still)*, Video, 4 mins 20 secs, 2017.
<https://vimeo.com/manage/videos/565424684>



Figure 3.

Paul Finnegan, *Untitled (Horse)*, Digital photograph, 2020.



Figure 4.

Paul Finnegan, *Heraldic Restraint*, MDF, welded reclaimed steel, leather straps, 110 x 78 x 91cm, 2017.



Figure 5.

Paul Finnegan, *Untitled (Dog) (Installation)*, Graphite rods, LED light, dog harness, Border Collie, 2019.



Figure 6.

Paul Finnegan, *Nose Test (Still)*, Video, 6 secs, 2019.
<https://vimeo.com/manage/videos/566564625>

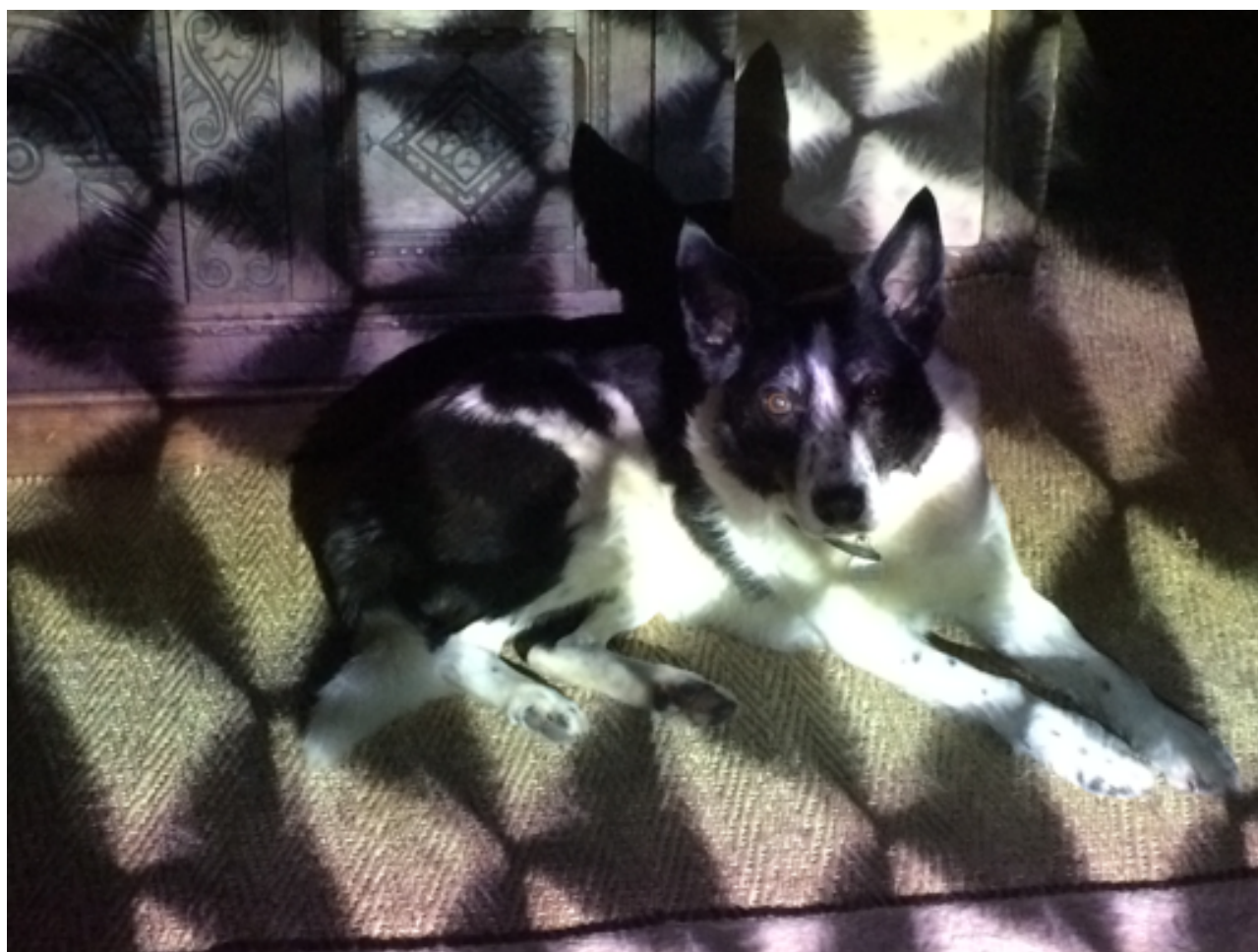


Figure 7.

Paul Finnegan, *Untitled (Dog)*, Digital photograph, 2020.



Figure 8.

Paul Finnegan, *Dappled World (Still)*, Video, 5 mins 44 secs, 2020.
<https://vimeo.com/manage/videos/564833961>



Figure 9.

Paul Finnegan, *Dappled World (Still)*, Video, 5 mins 44 secs, 2020.
<https://vimeo.com/manage/videos/564833961>



Figure 10.

Paul Finnegan, *Dappled World (Still)*, Video, 5 mins 44 secs, 2020.
<https://vimeo.com/manage/videos/564833961>

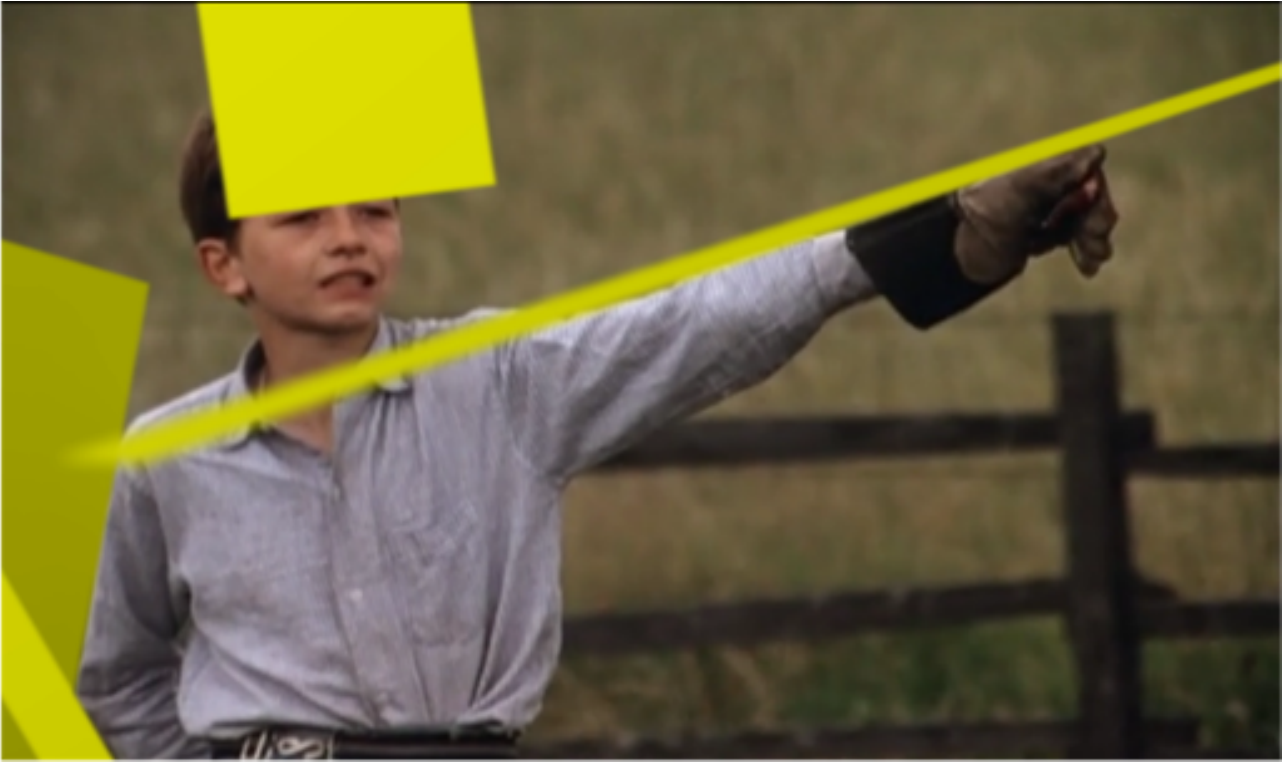


Figure 11.

Paul Finnegan, *Come on Kes (Still)*, Video, 57 secs, 2016.
<https://vimeo.com/manage/videos/564792228>



Figure 12.

Paul Finnegan, *Untitled (Elk)*, Digital photograph, 2020.

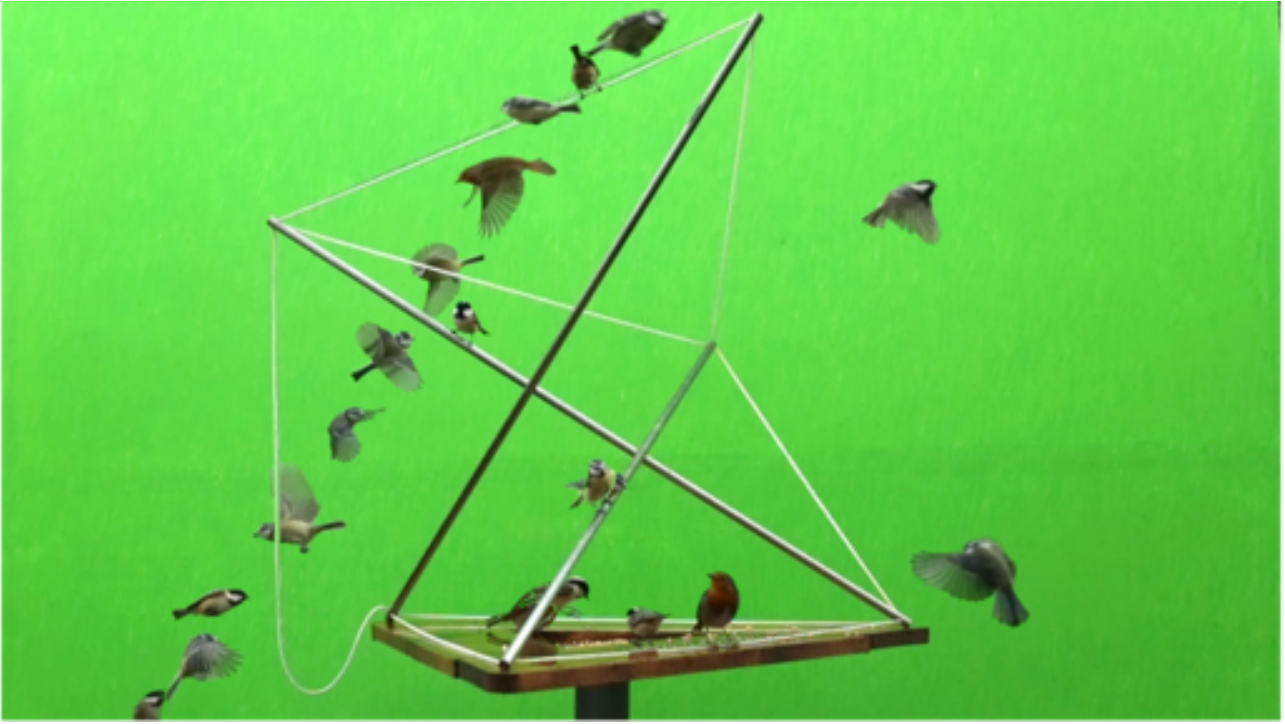


Figure 13.

Paul Finnegan, *Ioganson Bird Table (Still)*, Video, 1 min 40 secs, 2017.
<https://vimeo.com/manage/videos/565414184>

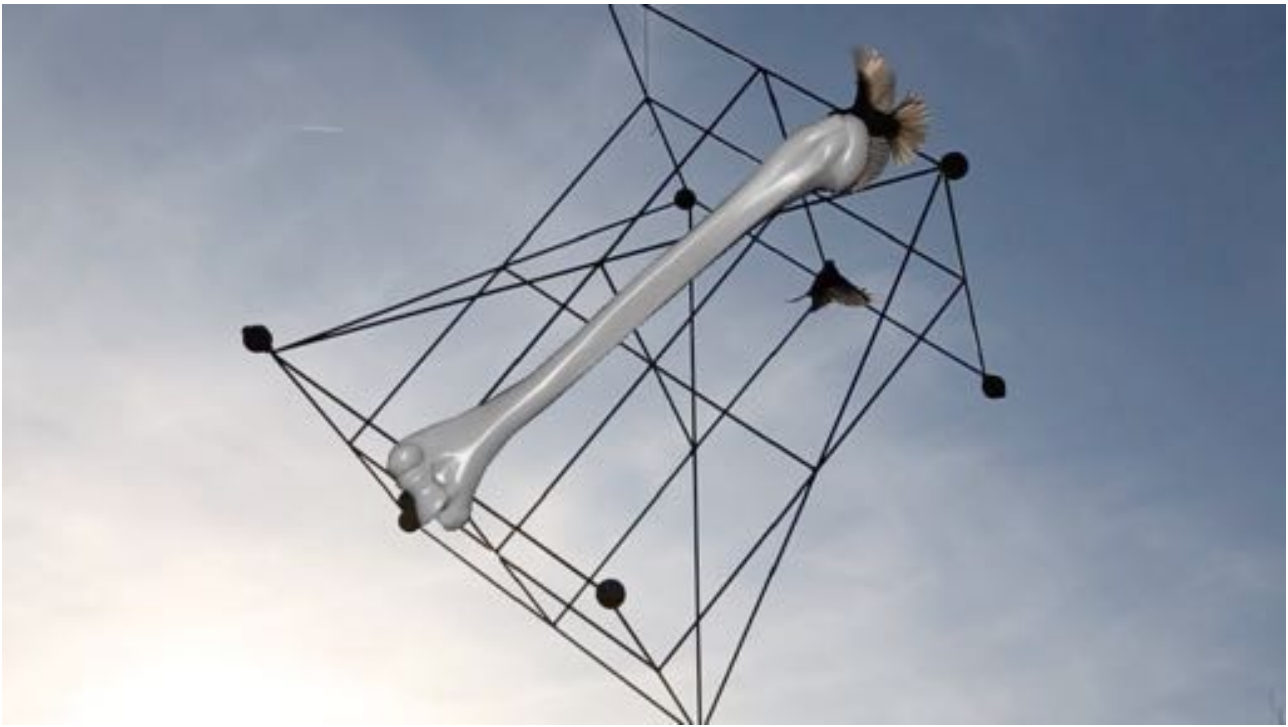


Figure 14.

Paul Finnegan, *Rodchenko Bones (Still)*, Video, 17 secs, 2021.
<https://vimeo.com/manage/videos/567878490>

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