



The Framer's Manual

Edition 0; Thesis Research

01

The Ontological Crisis

We are living in a geological timeframe in which the present interference with the more-than-human world is vast, and the situation is only deteriorating rapidly. We denote this as the Ecological Crisis, which it most certainly is. The Ecological Crisis can be defined as:

"The current ecological crisis (comprised of interwoven environmental problems such as global climate change, loss of biodiversity, soil degradation, smogs, toxic effects of synthetic chemicals etc.) is the result of excessive human transformation of the biosphere."^[1]

Morten Tønnessen, however, coins this period as an Ontological Crisis, and this is perhaps more pertinent and appropriate when understanding our humanist impact to co-inhabiting species. To this point, he denotes this Ontological Crisis as:

"a crisis of the known phenomenal world characterized by a sudden, significant loss of phenomenal diversity. In this sense, the ecological crisis is truly a crisis of world scale – a world event indeed. Due to the complexity of the biosphere, and the ability of some creatures to survive under comparatively extreme conditions, there is not much chance that life as such will cease to exist in foreseeable future. So, it is not the end of the world. Nevertheless, it is the end of many a being's world."^[2]

Extinction is not only a real concern but a lived reality. This should come as a stark warning. It must be considered that semiotics are not only produced by the environment around the being but also the other beings in the environment of question. Therefore, the loss of species is a loss of semiotic diversity

^[1] Takács-Sánta, A. *Clarifying the driving forces behind our ecological crisis: a general model.* BIOLOGIA FUTURA 73, 405–410 (2022)

^[2] Tønnessen, Morten. *Umwelt ethics.* Sign Systems Studies. 31.281299.2003

^[8]Emmeche, C. *Bioinvasion, globalization, and the contingency of cultural and biological diversity: Some ecosemiotic observations.* Sign Systems Studies 29(1): 237-262. 2001.

^[4]Tønnessen, Morten. *Umwelt ethics.* Sign Systems Studies. 31.281-299.2003

and Umwelten in a larger environmental condition and landscape. These interspecies semiotics can be of critical importance - see predator-to-prey interactions as a key example of these.

There are many reasons that fuel the Ontological Crisis, to which Claus Emmeche believes the economic drives of civilising processes is the primary attributer. To this point, he states;

"When the civilizing process extends to Nature's own 'self-organizing' systems, it may have catastrophic consequences when another developmental logic is imposed on natural systems. Natural systems have natural barriers. The nature of capitalist civilization is breaking down all barriers for the sake of free exchange of 'goods' and resources.

...
the ecosemiotic effect of which is to extend the symbolic domain of exchange value into new areas of the semiosphere.^[9]

On this note, it is suggested that there can really be no progressive change within the Ecological crisis whilst we still adhere to the financial systems and powers that uphold globalisation and capitalist goals. The World Bank, International Monetary Fund and the World Trade Organisation, as suggested by Tønnessen, uphold these capitalist ideologies that contribute to ontological deterioration through capitalist aims - to which he suggests policies should be avoided and resisted.^[4] It is important, therefore, to understand how these systems, built upon capitalism and hidden processes, truly impact ecology, ontology and more-than-human populations through their semiotic impact, alterations of Functional Cycles and the Umwelten of beings other than ourselves. These systems are

obviously not so easily overturned, we have built societies and civilisations upon them - but the way in which they are currently projected onto the physical world is in a way that maligns the more-than-human below the human. Oelschalger comments that an upheaval is required in human civilisation to realign this offset system;

*"the ecosemiotic thesis points toward a watershed event
– a paradigm shift – in human self-comprehension."*^[9]

This semiotic upheaval is unlikely considering the amount of society, political and architectural infrastructure that already supports the ways in which we as humans operate. Whilst Tønnessen agrees that civilisation shifts to a recalibrated approach of human in its environment is unlikely, he suggest that re-approaching our societal and political attitudes to two key elements may be a starting point of the change in semiotic landscapes; property and territory.^[9] By this it's an understanding that land, resource and being of the planet do not belong to man but are instead the property of ecosystems and semiospheres which do not uphold a humanist bias.

^[9]Oelschlaeger, M. *Ecosemiotics and the sustainability transition.* Sign Systems Studies 29(1): 219-236. 2001.

^[4]Tønnessen, Morten. *Umwelt ethics.* Sign Systems Studies. 31.281-299.2003

02 Making Sense Of It All

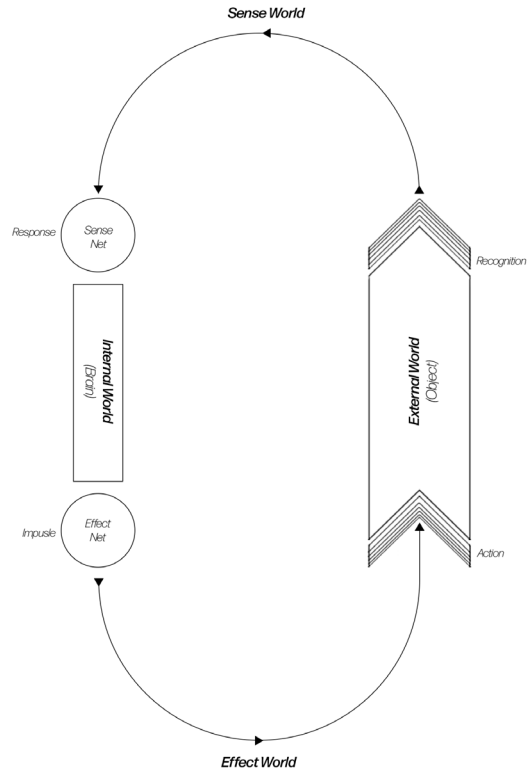
Having the eyes of a hawk, the ears of a fox, the smell of a bloodhound, the ability to move at snails pace - these are just several of the zoomorphological sayings that infiltrate into the English language. The perception - or at least what we're taught - is that the first three are desirable characteristics and strong traits - the later, a give or take.

Metaphors supposedly assimilate the human with the more-than-human experience, supposedly enlightening us to the eyes of others. This may, however, be a dangerous and undertranslated understanding. To elaborate: the saying 'eyes of hawk' allows us to theorise on the strength of the hawks vision in relation to our own visual clarity and distance. The danger is that it doesn't consider the *actual* implications of how its biological hardware and software combine to form the sensory world of the hawk. It's strength in clarity over long distances means poorer sight at shorter distances and a reduces field of view (it effectively has binocular vision).

To return to the idea of the hawk and tie it to the anthropogenic activity - particular hawk species are at a significantly high risk of being killed by wind turbines - unable to adapt their sight, behaviours and morphologies to human infrastructures. These rather complimentary anthropomorphisations of more-than-human senses end up being detrimental to the potential protection of species, as behaviours and senses are overlooked in human activity.

Anthropogenic activity, therefore, is not only a human problem. Jakob von Uexküll detailed the universality of sensing through the reflex arc and functional cycle which drives, as we now know, how any biological entity interacts with their environment.^[7] What we didn't know at the time, and what science continues to peel back, is the layers of hidden ways of seeing and sensing the world. Humans have but one set of biological hardware and software which allows us to register, interact and most importantly react to the world around us. This

^[7] von Uexküll, J. *Umwelt und Innenwelt der Tiere*. Berlin: Verlag von Julius Springer, 1909.

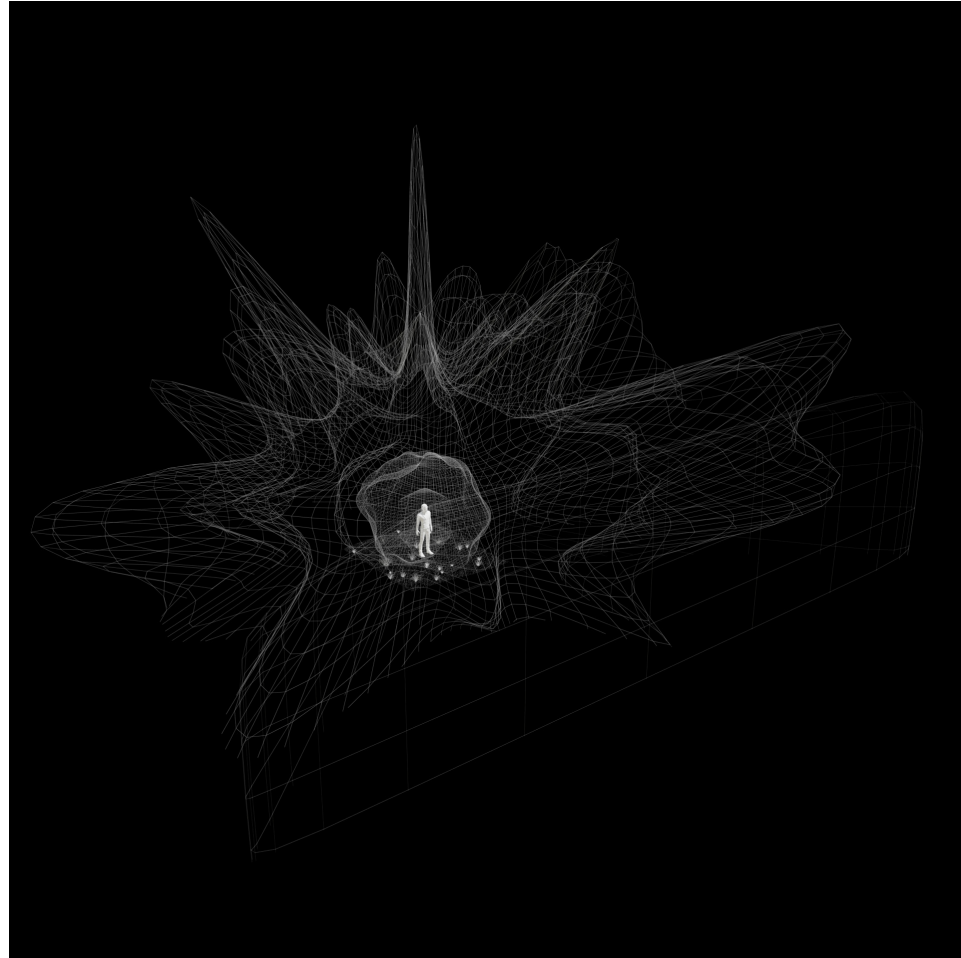


hardware registers us abilities - or senses - of touch, taste, smell, sight and hearing that is processed by neuron software in the brain to create a complete understanding of our surroundings. This then allows us to navigate, alter our behavioural patterns and educate ourselves on the changing environments. This is what makes us human.

^[1] von Uexküll, J. *Umwelt und Innenwelt der Tiere*. Berlin: Verlag von Julius Springer, 1909.

More-than-humans have a completely different experience of the world they live in, based on the biological hardware and software and behaviours they have evolved to have. There is beauty, wonder, strengths, weakness, impossibilities and intangibles in the ways that beings other than humans can sense the world. These are their Umwelten - this is what makes them **not** human. The dilemma of this knowledge is that we are still only able to sense the world as we sense it, despite the knowledge of how others can.

We are now in a position where the human anthropomorphic world firmly intersects the more-than-human Umwelten - to which we constantly expend sensory pollution in the form of light, sound, chemical or environmental change. These sensory and environmental pressures often lead to faltering populations, extinctions or purely a need to evolve to survive.



03

Umwelten and Semiospheres

The Umwelten, as described by Jakob von Uexhill - its 'creator' - is a combination of two separate Welt's; the Merkwelt (the preceptor world) and the Wirkwelt (the effector world) These two worlds facilitate what von Uexhill termed Functional Cycles, feedback loops of sensing and effecting with the world around us through what we are able to sense and our physical abilities to act upon these stimuli.^[8]

Centuries, and millennia, of sensory, physical experience and Functional Cycles have shaped the Umwelten of more-than-human life - more to follow on Umwelten shortly. These experiences and evolutionary pressures have developed speciation and individuality among the thousands of species that still occupy the planet. Thousands of types of eyes, noses, ears, tongues all adapted for the synchronicity of its specific host to environment. These environments, however, are increasingly changing and at a pace beyond the timescales of evolution. In an anthropogenic world, the human has become inconsiderate to the Umwelten of the more-than-human.

_Merkwelt

The Merkwelt is all that a subject perceives. It is a unique world to the species and individual that allow the species to develop in reality.^[9] This relates to the Kantian ideas of noumenon and phenomenon, more specifically the noumenon, in which there is an unknowable world which we cannot sense. More-than-humans are able to engage with the noumenon world through their personalised Merkwelts. We, however, operate in the realm of the phenomenon as our sensory perceptions allow us.

_Wirkwelt

The secondary component to the Umwelt is the Wirkwelt. It is the systems of physical abilities that a species can perform through engaging with its ethogram - its behavioural responses.^[9] The common example is of a bird, a monkey, a

^[8] von Uexküll, J. (1934/2010). *A Foray into the Worlds of Animals and Humans with a Theory of Meaning*. Minneapolis, MN: University of Minnesota Press.

^[9] Bannon, B.E. *Animals, Language, and Life: Searching for Animal Attunement with Heidegger and Merleau-Ponty*. Environmental Philosophy, Vol. 6, No.1 (Spring 2009), pp.21-34

^[10] Bueno-Guerra, N. *How to Apply the Concept of Umwelt in the Evolutionary Study of Cognition*. *Front. Psychol.* 9:2001.2018.

^[11] von Uexküll, J. *Cartas Biológicas a una Dama*. Buenos Aires: Coctus, p. 92 - 93 (1920/2014)

^[12] Definition taken from: <https://en.wiktionary.org/wiki/semiosis>

penguin, an elephant, a fish, a seal and a dog bring placed in-front of a tree and asked to climb the tree before them. Out of all the animals present, the monkey is the only animal successfully able to.^[10] Whilst slightly contrite, the example highlights the implications of physical abilities and behavioural tendencies in relation to setting and environment.

We are constantly discovering the subtleties of more-than-human Merkweltes, and therefore their Umwelten. The issue resides in the fact we're not adapting our humanistic practices and environments fast enough to illicit a response. We continue to manipulate and adapt a noumenal world outside of our perception. The basis to which we design and occupy the human world is through sight and sound, the two senses to which we are most adept. This is primarily how we interpret the world around us, especially as designers of space and place - what we cannot sense, therefore, does not affect us. The assumption that this is the norm is a troubling view - the dog senses the world primarily through scent, whilst von Uexkull explains;

"the world of the Jacobean oyster, for example ,is just movement. And the world for a bright jellyfish is just electricity."^[11]

At this juncture, it might be pertinent to discuss semiotics and the 'Semiosphere'. Perhaps I will begin by detailing what is meant by the term Semiotics in this regard. Semiotics is;

"any activity, conduct, or process that involves signs, including the production of meaning."^[12]

That is to say, it is any stimulus (sign) that we are able to interpret and understand (meaning). The semiosphere in this regard then, is the cumulative stimuli that

we find in a given environment that we are able to understand and attribute a meaning to. This is the sensorial environment to which the Umwelt interacts. Semiospheres in urban environments, through anthropogenic activity, are becoming increasingly complex. Many more-than-humans are unable to translate these semiotic cues and align their Umwelten with the ever-changing, rapidly deteriorating and unknown urban semiospheres. The human is able to interpret and respond to the new urban semiotics, these centres designed based on their Umwelten. New semiospheres are emerging in multiple environments around the world, scarred by the effects of human activity.

This leads onto the idea of categorial perceptions. Categorial perception with regards to external stimuli is exceedingly important when understanding Umwelten reactions to environmental semiotics. Even as humans we understand environmental semiotics to essentially have categorial qualities, that is to say that we can assimilate certain sounds and smells to be similar in their effect and quality. In practical terms this could be when:

"a being operating in functional cycles recognises an object in its Umwelt as belonging to a specific category of objects which makes a difference in its life (e.g., something 'edible,' 'threatening')."^[13]

This process of categorial perception forms the basis for something I'll touch on slightly later in the text, the Phenomenon. Through these perceptions, we are able to assimilate what we can sense and how its semiotics influence Umwelten interactions.

What makes these semiospheres of even more importance is the concept of behavioural, phenomenal and physiological diversity;

^[13] Tønnessen, M. *Umwelt Transitions: Uexküll and Environmental Change*. *Biosemiotics 2*, 47-64 (2009). <https://doi.org/10.1007/s12304-008-9036-y>

^[14] Tønnessen, M. *Umwelt Transitions: Uexküll and Environmental Change*. *Biosemiotics* 2, 47-64 (2009). <https://doi.org/10.1007/s12304-008-9036-y>

"This interpretation is consistent with Uexküll's statement (1928: 198) that each appearing functional cycle (understood as a steady, vital contrapuntal relation between two subjects, or a subject and an object, that has not previously been connected) founds a new animal species."^[14]

Through our interactions as manipulators of environments and processes, the human is increasingly consigning more-than-humans to new functional cycles to which their Umwelt may or may not adapt to. This is in essence, an aspect of evolution and natural selection pressures - however, it further strengthens the notion of the human impact on evolutionary pressures through highlighting the human manipulation of semiospheres.

04 Trap Theory

In one clear scenario does the human fully attempt to align their Umwelt with that of the more-than-human - and that is in the form of the **individual** trap. *(The reason for this distinction will become apparent as this section develops.)*

To the hunter, the successful individual trap represents a physical object designed to work as simply as possible in the ensnarement of its prey. To the prey, the successful individual trap represents nothing - more than the regularity of its habitat.^[15] The physical object poses no additional scents to its landscape, none that are deemed deteriorious if so. The trap provides no apparent visual stimulus - either due to its covert placement or due to its cognitive recognition of shape and materiality. The trap produces no sound that can be heard by the animal, at least none that is deems threatening. To the touch, the trap feels or creates responses that feel familiar - hardness, coldness, warmth. The trap may provide a resource long sought after in the habitat, it may provide a condition of safety rarely found - also. The trap may act on surprise, it may act on inquisition.

No two animals will respond to a trap equally. A multitude of situational conditions must be understood, as well as specific behavioural and habitual tendencies which are personal to the individual. Therefore, to successfully ensnare an animal within a trap, a deep and considered approach to place the human mind within that of the animal must occur.

With this in mind, a concerning thread of research is emerging into two new forms of traps - Perceptual Traps and Ecological Traps. Both traps are predicated on how more-than-human species choose and value their habitats in terms of both the habitats individual qualities and how it may compare to an alternative habitat.^[16] We are now entering a ecological era where we are able to trap entire species into **species** traps - not just individual animals.

Most worryingly, these traps don't require hunters - they purely require humans

^[15] Lahoud, A. **Scale as Problem, Architecture as Trap.** Avery Review. 2016

^[16] Hale, R & Swearer, S. E. **Ecological traps: current evidence and future directions.** Proc. R. Soc. B. 283:20152647. 2016.

¹⁷¹James J. Gilroy, William J. Sutherland, **Beyond ecological traps: perceptual errors and undervalued resources**. Trends in Ecology & Evolution, Volume 22, Issue 7, 2007, Pages 351-356.

¹⁷²Patten, Michael A. and Jeffrey F. Kelly, **Habitat Selection and the Perceptual Trap**. Ecological Applications, vol. 20, no. 8, 2010, pp. 2148-56.

¹⁷³Schlaepfer, M. A., Runge, M. C. & Sherman, P. W. **Ecological and evolutionary traps**. Trends in Ecology & Evolution, Volume 17, Issue 10, 2002, Pages 474-480.

and their anthropocentric activity. More so, these traps don't ensnare an individual more-than-human but entire communities or species. In a world where human activity is changing habitats with alarming nonchalance and polluting the senses and behaviours of more-than-humans, the choice of habitat preference seems an ever-the-more complicated matter.

We as humans, through a complete misunderstanding of Umwelten, are laying traps that we don't even know exist - and how many we are laying is as much of a mystery.

Perceptual Traps are where individuals, communities or species avoid high quality habitats in favour of low quality ones due to a perception that the high quality ones are, in fact, not.¹⁷¹ Ecological Traps are the converse to this - they are the avoiding of high quality habitats with the preference of low quality ones, usually with a trade-off seen as beneficial.¹⁷² Both traps lead to reduced species fitness and as a result evolutionary pressures from the lower quality habitats. The result: extinctions and off-the-cuff evolutions.

Schlaepfer, Runge and Sherman highlight this overriding condition in an article in *Trends in Ecology and Evolution*:

"Organisms often rely on environmental cues to make behavioral and life-history decisions. However, in environments that have been altered suddenly by humans, formerly reliable cues might no longer be associated with adaptive outcomes. In such cases, organisms can become 'trapped' by their evolutionary responses to the cues and experience reduced survival or reproduction."¹⁷³

The environmental cues that Schlaepfer et al refer to here are the semiotics

produced by the environment - human or otherwise - and its inhabitants - human or otherwise. These feed into the 'behaviour and life-history decisions' that inform the specific organisms Umwelten.

Evolution, then, becomes crucial to the concept of ecological traps - hence why Schlaepfer et al refer to these also as evolutionary traps. Evolution is a process, through its ability to provide biological and physiological alteration for increased fitness and survival, that can shape the Umwelten of organisms. Evolution becomes incredibly important in allowing species to adapt to the naturally changing environments - in which case it is important to highlight that humans do not singularly impact the biosphere. Evolution is a process that has existed outside the realms of human experience since speciation began. Anthropogenic activity, however, moves at such a pace that its influences to the surrounding landscape rupture the timescales usually adhered to by evolution. This is not to say, however, that species with malleability in their physiological profiles and with fast breeding cycles cannot adapt themselves to the changing humanist world - however immoral or unethical this may still be. We have seen fast evolutions of animals from the London Underground Mosquitos that have become their own species by becoming 'trapped' in the underground infrastructure, to the tuskless Zambian Elephants now avoiding poaching by no longer growing their tusks, to the American Swallows whos shortened wings now allow them to move out the way of cars more quickly, increasing survival chances in urban centres. This is just to name a small few - whos morphology, and therefore Umwelten - has been required to respond to increasingly divergent environmental semiotics.

These evolutions provide the ability for the species to circumvent the humanist activity, but not all animals possess this ability to rapidly shift and alter their umwelten and with it, their physiology. They fall into these invisible traps - what can cause species loss or extinctions.

^[20] Dwernychuk, L. W. and Boag, D. A. ***Ducks nesting in association with gulls—an ecological trap?*** Canadian Journal of Zoology. 50(5): 559-563.]

^[21] [ibid]

^[22] [ibid]

How do these traps present themselves when we understand them to be as hidden and covert as we do? Our understanding of the possibilities of ecological traps is not inherently new - the first documentation and conception of their proposed existence was in 1972 when L. W. Dwernychuk and D. A. Boag were researching duck nesting habits with relation to Gull populations on Miquelon Island, Alberta. It is here, they determined the terminology of the Ecological Trap.

In their text, 'Ducks nesting in association with gulls - an ecological trap?', Dwernychuk and Boag detail the protection afforded by Gull species from other egg-taking birds to native Ducks when laying eggs.^[21] Whilst this is beneficial to the Ducks as a method of reproductive protection, the gulls are also responsible for the death of hatchling populations and reducing the Duck populations reaching maturity - therefore providing an ecological trap. The security provided by the Gulls to the ducks whilst laying eggs is offset, or a 'trap', as they kill the young hatchlings. The ducks are trapped in a false sense of reproductive security. With lake levels reducing, due to reasons unexplained in the text, and altered climate and weather conditions the island was seen as a 'safe' place for non-Gull species to lay eggs. The bird species choose these environments to lay their eggs away from mammalian populations that may be more prone to stealing eggs. Bird populations prior to the Gull worked in tandem - in a coexistence that benefitted all.^[22]

This exploration is but the initially described instance of what was to be termed 'ecological traps' to which many more have emerged in the 50 years since it was discovered by Dwernychuk and Boag. In the anthropogenic world, these invisible traps become ever more present but their invisible nature and our unknowingness of humanistic change render us blind to these instances. To highlight this is several examples that have emerged since the 1970's -

with a multitude of species in a multitude of environments. These examples can be broken down into over-arching behavioural themes that all relate to the Umwelten of organism in question and how this relates to the altering anthropogenic landscape;

^[23] Phipps WL, Walter K, Michael MD, MacTavish LM, Yarnell RW. **Do Power Lines and Protected Areas Present a Catch-22 Situation for Cape Vultures (*Gyps coprotheres*)?** PLOS ONE 8(10): e76794. <https://doi.org/10.1371/journal.pone.0076794>. 2013.

The Cape Vulture (*Gyps coprotheres*) [1] *Southern Africa*

The Cape Vulture is a species of Vulture endemic to Southern Africa. Its evolutionary path and Umwelten has developed for the species to prefer to forage for prey from high perches - most often trees that are in its local habitat. These trees provide the vultures the ability to survey its habitat and take prey from above. These environmental cues have shaped the behaviour of the Cape Vulture and its behaviours within its landscape in line with its sensorial world. Increasing anthropogenic activity and the human reliance on electricity has created a necessity for systems and infrastructures of energy transfer. High voltage electricity towers now scar many landscapes to facilitate this - to which many Cape Vultures utilise these as their perches; either mistaking them for trees, or not possessing the Umwelten to record the dangerous semiotic cues. Electricity cables, through electrocution, are now the largest cause of death for Cape vultures and other ringed birds. ^[23]

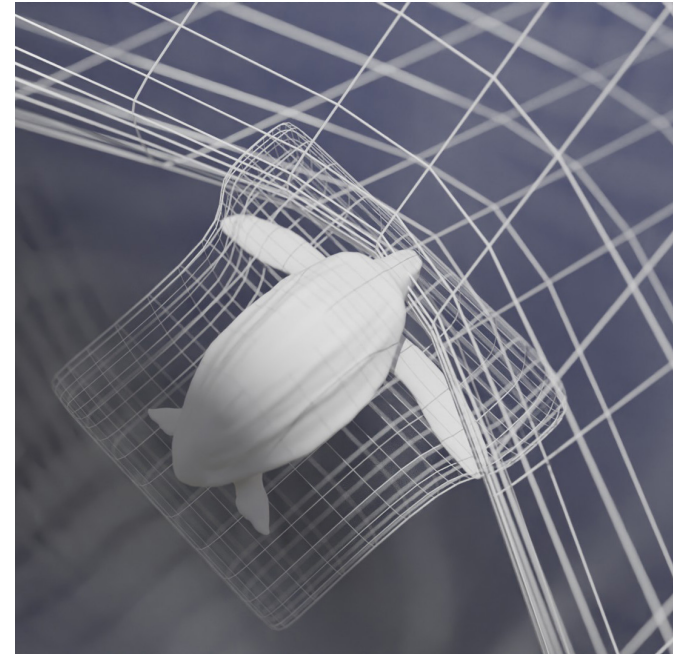


■ Schläepfer, M. A.,
Runge M. C & Sherman,
P. W. **Ecological and
evolutionary traps**, *Trends
in Ecology & Evolution*,
Volume 17, Issue 10, 2002,
Pages 474-480.

Leatherback Turtles [2] *Northern America*

The Leatherback Turtle is a species with habitats that spread across the globe. Unfortunately, humanistic practices and their pollutive effects also share the same scope. One substance that is particularly astute at this - primarily due to its ability to inhabit the particulate and micro-scale - is plastic.

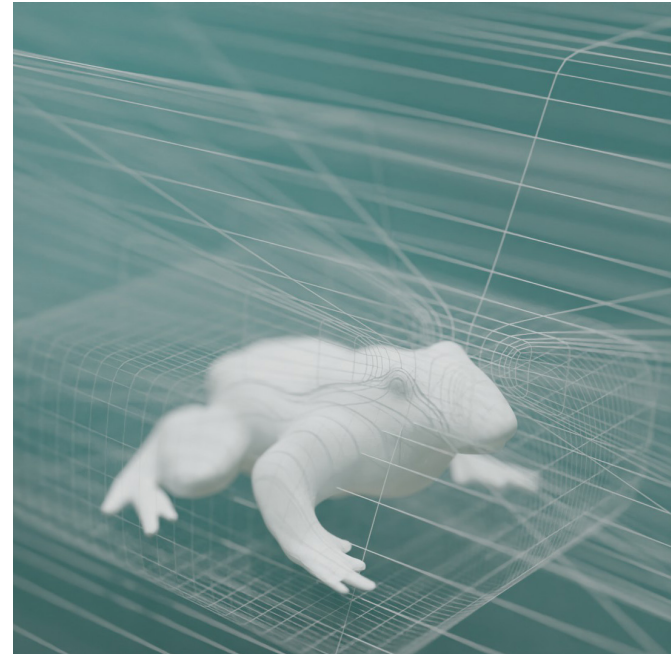
Feeding patterns for Leatherback turtle differentiate dependant on habitat choice and, therefore, the primary predator-prey resources within these ecological niches. In any case, Jellyfish constitute a large portion of the Leatherback Turtles prey resourcing. The affects of anthropocentric activity, and the advent of the societal reliance on plastic as a primary human resource, has elicited vast pollution to the ocean environments - with plastic pollution being just one of many. To the human eye and Umwelten, the plastic in the ocean bears a similar yet distinguishable visual semiotic to the Jellyfish - our cognitive understanding of its as human-made furthers our ability to distinguish it as 'other' or 'unnatural'. To the Leatherback Turtle, the plastic in the ocean can often resemble the Jellyfish through visual and cognitive recognition. Consumption of seaborne plastics and plastic particulates leads to high cases of malabsorption or even intestinal blockage and subsequent pressures on Leatherback Turtle populations. This is but one of the sensory challenges - and ecological traps - the Turtle engages and becomes ensnared within.



^[23] Schlaepfer, M. A.,
Runge M. C & Sherman,
P. W. **Ecological and
evolutionary traps**, *Trends
in Ecology & Evolution*,
Volume 17, Issue 10, 2002,
Pages 474-480.

The Florida Manatee [3] *Tampa Bay*

The Cape Vulture is a species of Vulture endemic to Southern Africa. Its evolutionary path and Umwelten has developed for the species to prefer to forage for prey from high perches - most often trees that are in its local habitat. These trees provide the vultures the ability to survey its habitat and take prey from above. These environmental cues have shaped the behaviour of the Cape Vulture and its behaviours within its landscape in line with its sensorial world. Increasing anthropogenic activity and the human reliance on electricity has created a necessity for systems and infrastructures of energy transfer. High voltage electricity towers now scar many landscapes to facilitate this - to which many Cape Vultures utilise these as their perches; either mistaking them for trees, or not possessing the Umwelten to record the dangerous semiotic cues. Electricity cables, through electrocution, are now the largest cause of death for Cape vultures and other ringed birds. ^[24]



^[28] Semel, B. and Sherman, P. W. **Alternative Placement Strategies for Wood Duck Nest Boxes.** Wildlife Society Bulletin (1973-2006), vol. 23, no. 3, 1995, pp. 463-71.

Whilst these provide a basis for understanding the difficulties or predicting of traps, most consequences are often not recognisable until the infrastructure or actions are already rooted within the practicing life of humans. This, however, should not deter more rigorous approaches to understanding the semiotic capabilities of the actions we undertake. From this could perhaps emerge a semiotic method of design and existence - repositioning our actions within the combined umwelten landscape.

We've seen in practice, however, that these can be difficult to achieve without a heightened consideration of the deeper Umwelt of the organism in question. Primarily by this, we can look into biodiversity measures to maintain habitats for those organisms that are threatened by anthropogenic activity. To return to Schlaepfer et al, they highlight the instances in which biodiversity interventions can generate traps of their own with relation to the research undertaken by P.W Sherman and B. Semel on the wildlife management techniques with regards to Wood Ducks in open marshes. ^[29] They state;

"...erecting nest boxes for wood ducks Aix sponsa in clusters over open marshes (i.e. the traditional management practice) had detrimental effects on reproduction because it did not consider the Darwinian algorithm of the birds for nest-site selection. Wood ducks nest normally in cavities of dead, standing trees and their clutch size is 10-12 eggs. Because there is a limited number of suitable, safe nesting cavities, young females often follow established nesters to active nests. A follower will sometimes lay in the cavity and then either contest ownership of it or simply leave the eggs behind.

By placing boxes in groups over open water sites, managers

attempted to make cavities easier to find. Unfortunately, the conspicuousness of nest locations made it too easy for females to follow others to their active nests, resulting in super-normal intraspecific parasitism in the form of egg dumping."^[29]

This becomes a prime example in which we can see the impact of a misunderstanding of Umwelten and semiotics in wildlife practice and their link to behavioural cues and actions of organisms can in fact provide a trap of their own. Even in the face of beneficial or empathetic management and biodiversity tactics do we see the pitfalls of the dissonance between the human and non-humans Umwelt.

^[29] Semel, B. and Sherman, P. W. **Alternative Placement Strategies for Wood Duck Nest Boxes.** Wildlife Society Bulletin (1973-2006), vol. 23, no. 3, 1995, pp. 463-71.

06

The Phenomena of Legal Framing

How then could we consider the concept of trapping as a metaphoric tool to reverse the idea of the trap onto the human and highlight the lack of more-than-human empathy? A clear and interesting example of a human-human trap is in the form of the legal framing. Framing someone is essentially ensnaring another human within a false narrative a.k.a the crime they didn't commit. The famous 'Making a Murderer' series on Netflix highlighted incidences of framing and coercion with the law - as the trial and wrongful imprisonment of Steven Avery showed. There are many examples of these falsifications, framings and false imprisonments.

Much like the individual trap, in human terms in order to successfully frame someone for a crime they did not commit it requires an understanding of how someone may operate and the relation of that to the systems that they interact in - their behavioural tendencies, their movements and routines, their habitats, their tools. The complete understanding of these and the manipulation of societal conditions allows for the falsification of the truth and of evidence to create alternative narratives for real events. A successful framing is therefore the creation of a more convincing narrative than the truth and the 'trapping' of the innocent party. ***The trap in legal framings are never physical - although they may contain 'physical evidence' - instead, they are mental, psychological or social constructions. They are traps of perceptions.***

In the realm of framing, facts also become secondary to falsifications. The falsification is believed over the truth due to the assimilation of a series of unrelated facts that create a seemingly convincing or 'could-be-true' scenario.

^[27] Take, for example, the belief that climate change is a hoax to promote nuclear power. The conspiracy is designed to take advantage of fears associated with nuclear power productions, as well as with supposed 'covert' economic and political systems out of the view of the ordinary citizen. Whilst the implausibility of the conspiracy is clear, its creation allows for a questioning of the systems

^[27] Karen M. D & Sutton, R. M. ***Climate change: Why the conspiracy theories are dangerous.*** Bulletin of the Atomic Scientists, 71:2, 98-106, 2015.

© Karen M. D. & Sutton, R. M. *Climate change: Why the conspiracy theories are dangerous*, Bulletin of the Atomic Scientists, 71:2, 98-106, 2015.

behind it - nuclear power and political systems.^[28]

Therefore the thesis will develop a distinct methodology to examine these anti-fragments of ecological and sensory dissonance. A Framing Methodology allows for a means to test whether 'perceptual and forensic framing' can be used to spread factual information on more-than-human existence and interrogate the anthropogenic activity of humans and the value of ecological consideration in these anti-fragments. The Methodology will employ a series of more-than-human scapegoats within a certain environment, although the methodology seeks to be transferrable across site and scale. These scapegoats will be 'framed' through an exploration of their Umwelten, behavioural tropes, habitats and forensics - all to be explained further.

Framing in the legal sense also occupies a far more concerning position. The concept of framing is predicated on the systems in which it operates and therefore the act of framing is a commentary on that system as much as it is of the person being framed. Therefore, how could the frame-up methodology become as important as a way of exposing systems of bias and societal prejudice towards non-human life? The human, anthropocentric environment fuels this attitude through its physical systems that allow for subjectivity. How can exposing this physicality of suppression become an important tool to creating empathy and protecting agency? How can the legal system be used to highlight this?





06

Mimetic Desire and Scapegoating

Scapegoats are effectively a legal tier down from the 'framed'. In most cases of scapegoat-ing in modern popular culture, the scapegoat has not committed a crime but is instead, attributed social blame for an event.

Let's start with an important and clear example;

In March of 1984, cases of the AIDS virus were increasing across North America - eventually leading to the AIDS crisis. A study by the Centers for Disease Control and Prevention was tracking the liaisons of homosexual and bisexual men in the California and New York area. Gaetan Dugas was one of these men. Attributed the name Patient O (O standing for 'Out of State') this would later be misread as 'Patient 0 (Zero)' and extrapolated that he originated bringing the disease to the United States. Dugas sadly died later that year, still thinking that he was the cause of the epidemic. Later research cleared him of such title but Dugas was already scapegoated for actions he didn't commit.^[29]

A methodology will employ this idea of the ScapeGoat - an animal that will be framed for a crime that it did not commit whilst also questioning the ways in which the anthropomorphised world is projected onto innocent more-than-humans. Each ScapeGoat will have a specific and unique way of interacting with the human world that it is either forced into, or has forced upon it. Therefore, the ScapeGoats can come in multiple forms, such as the thieving 'Cat Burglars', murdering 'Blood Hounds', coercive 'Sly Foxes', squatting 'Sitting Ducks', snitching 'Stool Pigeons', 'Cry Wolves' or 'Rats', lone-operating 'Black Sheep', under the cover of darkness 'Night Owls' - to name a few. These will be explored further.

The thesis will question what impact the anthropomorphism of more-than-human species into these questionable stereotypes contributes to creating an apparent misunderstanding and mislabelling of the lives and experience of the

^[29] McKay, R. A. 'Patient Zero': The Absence of a Patient's View of the Early North American AIDS Epidemic. Bulletin of the History of Medicine, vol. 88, no. 1, 2014, pp. 161-94.

^[30] COV&R. **What is Mimetic Theory?**

Accessible at: <https://violenceandreligion.com/mimetic-theory/>
Last accessed: 29/05/23

^[31] Girard, R. **Generative Scapegoating**, in Robert G. Hammerton-Kelly, eds, *Violent Origins*; Walter Burkert, René Girard, and Jonathan Z. Smith on Ritual Killing and Cultural Formation, p.122

animals. It could be classified as anthropomorphised misrepresentation of their Umwelten.

To delve deeper into the concept of scapegoating, it might begin with looking at the works of Rene Girard, a french philosopher of social science. Girard proposed that scapegoating was a primary method through which homonims developed, to which he proposed as two separate theories; Mimetic Theory and Scapegoat Theory.

Mimetic Theory

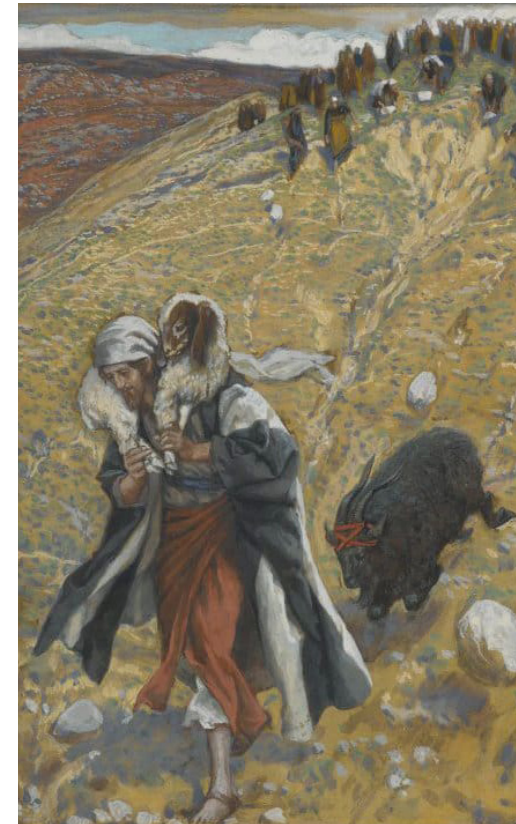
As described by Girard, and paraphrased by COV&R, Mimetic Theory - or Mimetics - suggests;

"that human desire is not a linear process, as often thought, whereby a person autonomously desires an inherently desirable object. Rather, we desire according to the desire of the other. We rely on mediators or models to help us understand who and what to desire."^[30]

It is understandable how this idea may spread itself into the everyday, especially with the advent of media and its hightening in influence - our ability to forge our own desires is increasingly hard.

From this he stated;

"Man is the creature who does not know what to desire, and he turns to others in order to make up his mind. We desire what others desire because we imitate their desires."^[31]



^[32] Girard, R. *Generative Scapegoating*, in Robert G. Hammerton-Kelly, eds, *Violent Origins*; Walter Burkert, René Girard, and Jonathan Z. Smith on Ritual Killing and Cultural Formation, p.122

Girard believed that this was what the concept of the scapegoat was born from, the alteration of a humanistic belief of 'all against all' to the belief of 'all against one'. By this, it wasn't the primarily the ideas of oppression or scapegoating, but more the sense of community or empathy that would come with this shift. This is perhaps an empathy that has become lost when considering the lives of organisms other than ourselves. Mimetic Theory also speaks to the concept of 'herd mentality' in which our inability to have desires of our own can lead to 'follow'.

Desire becomes an unquantifiable condition however, and this breeds difficulties in itself. With relation to desires for specific objects, rather than condition, how finite the resource is becomes a key factor. When two, or more, organisms desire the same object, 'mimetic rivalries' emerge - as Girard termed it. Rivalries dictate that no two organisms can share the same object, to which there must be a mechanism in which one organism prevails over the other. This is what Girard termed the Scapegoat Mechanism.

Scapegoat Mechanism

To take his concept of Mimetic Rivalries slightly further, Girard considered how this might be underpinned by the idea of scapegoating.^[32] This, as Girard saw it, was a method of solving mimetic rivalries by elevating one member above the other and the communal understanding and acceptance of this - scapegoating. Through this, it alleviates the tensions of the all-against-all previously suggested and turns it into the all-against-one.

"One way of solving this problem is to find someone to blame for the conflict that all the rival coalitions can unite against. This unfortunate person may or may not be guilty. All that's required for the scapegoating solution to work is that his guilt is universally agreed upon and that when he

is punished or expelled from the community, he will not be able to retaliate. The proof of his guilt is found in the peace that now returns to the community, obtained by virtue of the unanimity against him."^[33]

The problem referred to here by COV&R is mimetic rivalry - the vying for position or resource. The important part to consider with this understanding of scapegoating is the presence of peace created when the member is scapegoated. The collective peace satisfies the community and alleviates responsibilities of guilt that would otherwise have existed. The peace is one born from violence, seen through an alternate lens.

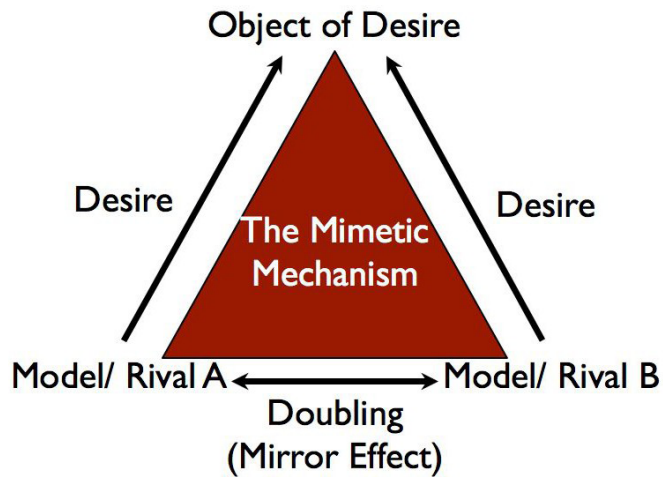
"Mimetic theory allows us to see that the peace thus produced is violent, comes at the expense of a victim, and is built upon lies about the guilt of the victim and the innocence of the community."^[34]

Girard primarily used the ideologies he developed as a method of analysing the impact of religion on the idea of scapegoating. As we know, the scapegoat was a concept created in biblical times to relinquish wrongdoings of the village onto the innocent organism. The presence of a God, or a Devil, allowed for the scapegoating of innocent organisms in their name, and became a collective method of controlling and organising the way in which people live.

More so than community dynamics, the scapegoat mechanism was also predicated on the personal - or the identity. It is more so than how we view others but also how we view ourselves. Scapegoat mechanisms, as could be inferred by Girard with his belief of human culture emerging from it, are inherently human and ingrained within us. It becomes a method of how we view ourselves and project ourselves onto the world - anthropomorphised or otherwise.

^[33] COV&R. *What is Mimetic Theory?*
Accessible at: <https://violenceandreligion.com/mimetic-theory/>
Last accessed: 29/05/23

^[34] [ibid]



"Scapegoating also operates in individuals at the level of identity. We all construct identities over against someone or something else. I'm a woman, not a man. I'm a liberal not a conservative. I'm an atheist not a believer. And most problematically, I'm good not bad. When we need some other person or group to be bad so we can maintain our sense of ourselves as good by comparison, we have engaged in scapegoating. We are using others to solidify our identity the same way a community uses a scapegoat to solve its internal conflict."^[35]

^[35] COV&R. *What is Mimetic Theory?*

Accessible at: <https://violenceandreligion.com/mimetic-theory/>
Last accessed: 29/05/23

^[36] Ronson, J. *So You've Been Publicly Shamed*. Picador, 2015.

In the anthropomorphised world, this presents itself as a complex and dangerous subject. The systems in which we operate, and hierarchies of power that come with them, allow for ease of scapegoating by those at the top. Scapegoats are often met with public shaming - made all the more accessible through the sources of media in which societies are increasingly built upon. Jon Ronson, in his book 'So You've Been Publically Shamed' explore these new dynamics of shaming within society and the influence of media and otherwise in its prevalence.^[36]

This is not to say that media is the only way in which shaming has occurred - more so that it has purely stoked a fire already lit. Shaming has been a method of societal control within communities for millenia. Much like the scapegoat mechanism, public shaming works within similar mechanisms - it is the collective branding of an organism whether their is truth or lies, innocence or guilt. In the anthropogenic era, the media becomes the scapegoaters primary tool;

"A great renaissance of public shaming is sweeping our land. Justice has been democratized. The silent majority

██████████
^[37] Ranson, J. *So You've
Been Publicly Shamed.*
Picador, 2015.

*are getting a voice. But what are we doing with our voice?
We are mercilessly finding people's faults. We are defining
the boundaries of normality by ruining the lives of those
outside it. We are using shame as a form of social control."*
^[37]

Shaming therefore becomes a mechanism of creating a systemic normality. An adherence to what is perceived to be true, or at least what is 'set' to be true, is required to not be scapegoated or shamed. It is then a question of what is the truth, and how the cycle of adherence can be altered for a greater understanding. The platform created by media allows for the roles of justice to be democratised and for the voices of many to be heard which otherwise may not have. It is how we use it that becomes integral.

Statement of Intent

Ecological traps are observed environments of spatial manipulation that result in pressures on natural species populations, as the harm they elicit is greater than the benefits the organism gains from inhabiting the environment. Ecological traps, therefore, are a new form of dangerous environmental condition that calls for the need for a greater protection of animal life in the face of human activity. The project proposes that these protections argue towards a new form of 'legalhood'. The way to enact this 'legalhood' in these trap contexts is through 'framing'. 'Framing' provides the narrative tool that exposes the agency, or lack thereof, of animals in their given context and, therefore, highlights the need for legal protection.

Ecological traps

Ecological traps perhaps provide the clearest, and one of the most critical, examples of a human ignorance to the behavioural capabilities, or agency, of animals. Ecological traps are resultant behavioural decisions of organisms in choosing an environment that is seen as beneficial by the cues that it elicits, but is in fact harmful through consequences hidden to the animal. These hidden consequences are the result of human interference, hence the naming of these conditions as 'traps'. The harm these spaces elicit can either directly cause organism mortalities (in the case of South Africa's Vulture population) or alter behavioural responses to cause a reliance on these human-made manipulations (in the case of Florida's Manatees). In either case, these 'trap' environments place pressures on natural populations as the harm they elicit is greater than the benefits the organism gains from inhabiting the environment. Ecological traps, therefore, expose a serious albeit not entirely new question; how can behavioural responses of animals to their environments be used in the ecological evaluation of human actions? And to a further point, how can this evaluation lead to significant change? To this, a new 'legalhood' could emerge.

Towards a new 'Legalhood'

A level of capability, with regards to the legal system, correlates with a level of culpability. By this, I mean; once a theoretical threshold of capability is met, it moves criminal actions past a point to which an entity then becomes responsible for them. In a simplified sense, we see this with the juvenile legal system, in which humans from the ages of 10-17 are tried and prosecuted within a different legal system, with different legal weightings. This is because juveniles are considered fundamentally different from adults, resultantly having less agency and, therefore, less responsibility for their actions. It is outside of even this realm, in which we find animal life, to which we do not even provide this level of legal standing.

Therefore, when we consider the behavioural responses of organisms to the environments in which they live and the infrastructures, objects and entities in which they interact, the absence of a legal stance on these actions could, and I argue should, be questioned. The legal lens has an ability to act as a barometer on what is considered 'correct' and 'incorrect' with regards to human behaviour - and from this it has the ability to provide protections, or prosecutions, as required. The project argues towards a new form of animal/organism 'legalhood'; one that is able to provide the protections offered within our legal system, aligned with an understanding of situational agency and behavioural capability.

As suggested, any form of 'legalhood' has the capacity to work both ways. The system which is used to prosecute can also be used to protect. And this is an important point. The ability to understand that an organism is indeed responsible for the way in which it acts, and that it acts with behavioural determinism, means that organisms should be held accountable for these actions; whilst they should also be protected for their actions as a result of other organisms. Perhaps to example this; the legal system affords actions against murder, theft, arson whilst

also affording protections towards the coerced, the kidnapped. A prosecutor and a defendant. A criminal and a victim.

A 'legalhood', in loose terms, for animal life is perhaps not impossible to imagine. Historically, through Deodand and Noxal Law, an organism (among other, more inanimate, non-human objects) could be tried in a court of Law as a 'chattel', most commonly as the possession of a human. This trial allowed, in the majority of these instances, only for the prosecution of the animal, the owner, or the object itself - and the chattel to be turned over to the Crown. Despite this not being the 'legalhood' the project seeks to encourage, it highlights a history of animal involvement within the court and the legal system which has until recently, been fairly devoid. The Animal Welfare Bill in 2006 began to bring the legal lens back to animals, although focusing primarily on purely domesticated animals. The Bill also suggests that protection is only provided if; 'the suffering is unnecessary'. In 2021, a major step forward occurred with the Animal Sentience Act, a piece of legislation that recognises animals as 'sentient beings' capable of emotions such as happiness or sadness. Resultantly, any new legislation provided by the government would have to be considerate to the fact that organisms could be emotionally affected. How then, can these protections be taken further to consider how an animal may have the rights to legal representation in the courtroom?

Framing narratives

The project proposes that the method to contextualise this shift towards a 'legalhood' for more-than-humans (for the focus of ScapeGoats, this is animals) is through 'framing' in the legal sense. In essence, framing is a form of storytelling, and it could be argued that our understanding of the world is through the narratives we create.

Framing is an important element of the methodology as it requires a shift in mentality. It requires the audience to consider two notions; that an action is plausible within its contextual environment and, more importantly, that the perpetrator is not only able to perform those actions but also behaviourally likely to do so.

Therefore, whether the framing is believed or not, convicted or not, the factual behaviour it is based on exposes a series of behavioural responses the organism in question can elicit, and therefore a series of behavioural responses that could be judged within a legal system. However, what these responses essentially equate to is the agency in which an organism has within any given environment. What the methodology of framing achieves is not only the exposing and understanding of an organism's agency, but also the alignment of this agency within a far broader set of legal parameters. By doing this, we, as the audience, not only understand the agency that an animal does have within an environment but also the agency it does not have; an agency that is, as yet, unafforded. The lack of agency to defend itself, both legally and environmentally. The most pertinent part of this juncture is when these behavioural responses are as a result of human interference.

Therefore, by affording them this legal definition and exposing their agency within environments of human interference, we then may perhaps be able to find a route out of ecological traps, as we begin to be able to correlate the behavioural agency of animal life within these human-made infrastructure of spatial manipulation. Ecological traps, therefore, become the justification for such endeavours.

"We attempt to gain some kind of control over the world by telling stories about it: we attempt to master it through narratives."

Documentary'

What the project, inadvertently, aims to achieve is the creation of a conspiratorial mindset; one in which the audience to the framing narrative is instinctively invited to immediately question what they are told. In part, this is perhaps afforded by the societal view of the legal system as a 'calibrator' of truth. It manifests as an environment where truth should 'prevail', and allows all, in part, to play the role of judge and juror. Also in part, this mindset is created through a morbid fascination with crime and truth. This has been seen most prevalently with the explosion of true crime documentaries on platforms such as Netflix. The project looks to utilise the ways in which this form of media is able to disseminate factual information alongside unconventional narrative tools.

This approach opposes the perhaps expected approach one might turn to to visually represent the information of an ecological trap; a nature documentary. The nature documentary sets out to tell the unquestionable truth, or at the very least to expose the audience to the facts of the natural world they may not have been aware of. The use of the true crime documentary instead, over this approach, seeks to promote a critical mindset with regards to information on the natural environment and to question authority and its legal institutions and systems. This then becomes a choice of visual representation that plays on, what could be perceived as, a growing lack of trust and faith that we have as a contemporary society, and a questioning of whether a conspiratorial mindset, created through framing, can actually incite greater action and empathy than otherwise.

Agency

As suggested, the overriding goal of the 'framing' methodology is to expose an agency of organisms within given environmental contexts. The urgency to attempt these framings and to endeavour for such a 'legal hood' is to begin to

consider how we can start to engage in a form of world building that is in the interest of a larger ecological web than purely human. Nature and animals, when protected, are often protected legally or by rights in line with the interests of humans, rather than a greater interest of the animal itself. By arguing towards giving animals this 'legal hood' will allow for any person, community or group to advocate on its behalf in a legal setting and potentially afford protective measures. This is where other forms of agency can emerge. The affordances granted by the 'legal hood' are not far removed from the idea of 'personhood', but rather than proposing a duplicitous meaning to that concept, the 'legalhood' I argue for suggests that animals, through the agency they have within the environments they reside, can be held accountable and have accountability taken for their actions based on behavioural decisions. What this affordance aims is to find protections for animal behaviours, conditions and actions that are derived from a direct interference with humans, be it directly or through manipulated space.

Concluding statement

Framing as a methodology has the potential to become a multifaceted approach to considering the ways we can protect animal species from human-induced spatial manipulation. The project suggests that, through the legal lens framing provides, a new form of 'legalhood' could emerge. In the face of the fight to 'know' or 'tell' the truth, the project, through the utilisation of framing, argues that perhaps there is a benefit to taking the alternative side - at least in a narrative sense. The framing allows the framer to act as the prosecutor, positioning the conspiratorially-minded audience as the defence. The hope; that something far greater emerges than that of purely telling the truth. Rather than the sympathy that emerges from the harsh truth of the nature documentary, the framing within the true crime narrative calls to generate empathy.

To come full circle, these animals are now ScapeGoats; we know their innocence, but action may finally emerge from us blaming them.

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