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Seen from the Viewpoint of a Fish: Posthumanist Observation in Lucien Castaing-Taylor and Véréna Paravel's *Leviathan*

Abstract. *This article conceptualises Lucien Castaing-Taylor and Véréna Paravel's experimental documentary* Leviathan *(2012) using Niklas Luhmann's observation theory and Cary Wolfe's writing on posthumanism which, significantly influenced by Luhmann's attack on anthropocentrism in social theory, questions the importance of human agency for social and psychic systems.* Leviathan, *I argue, engenders perspectives drawn from visual culture that enable a rethinking of hierarchical humanist ethics based on species membership, contributing to posthumanist critical discourse.*

Leviathan *offers a radically non-anthropocentric take on the topic of industrial fishing, presented via innovative use of camera placements and cinematic points of view. Unpredictable camera movements involving contingent framing and angles generate an open-ended work not tied to the human gaze. Shooting from a caught marine animal's point of view forces the viewer to assume an unexpected perspective. To analyse this particular perspective, I turn to Luhmann's theories about an observation not tied to human subjectivity, where the subject of observation is simultaneously an object, and where the external world is equally inaccessible to humans and nonhumans alike. In this schema, present in any observation is a constitutive blindness that can only be seen by another observer, but it is this very blindness which makes the observation possible.*

Keywords: *visual culture, experimental documentary, second-order systems theory, social theory, posthumanism.*

Raktažodžiai: *vaizdinė kultūra, eksperimentinė dokumentika, sistemų teorija, socialinė teorija, posthumanizmas.*

This paper considers Lucien Castaing-Taylor and Véréna Paravel's experimental documentary *Leviathan* (2012) in the light of Niklas Luhmann's observation theory and Cary Wolfe's writing on posthumanism as a critical discourse. I discuss how Luhmann's questioning of the importance of human agency for social and psychic systems and his attack on anthropocentrism in social theory has been taken up in Wolfe's more recent articulation of posthumanist thought. Furthermore, I examine the non-anthropocentric approach to documentary filmmaking developed in *Leviathan*, presented via its innovative use of camera placements

and cinematic points of view. The film, I argue, engenders perspectives drawn from visual culture that enable a rethinking of hierarchical humanist ethics based on species membership, contributing to posthumanist theory.

Posthumanist Techniques in *Leviathan*

Leviathan follows a commercial fishing trawler sailing from New Bedford, Massachusetts, into the North Atlantic.[1] A significant part of the documentary is filmed at night or at dawn. The directors use multiple miniature waterproof GoPro cameras affixed to their bodies or those of the working fishermen, at times placed on the deck among caught marine creatures, or attached to a stick which dips in and out of the sea as the ship breaks the waves. These cameras are commonly used for filming extreme sports, or in challenging terrain and weather conditions, as well as for capturing rapid movement.[2] The film is very dynamic even though it is not eventful. Events are replaced by the incessant movement of the ship, machinery, humans, animals and nature, depicting a busy life at sea. (See figures 1 and 2.)

The cameras' movements are often random and to some extent uncontrollable because of how they are placed, though of course more control is permitted by the editing process. Cameras are rarely upright and still; for a significant part they are tilted to one side, or at times upside down. For instance, when a camera is hung in front of the trawler, it dives in and out of the ocean showing both the remains of the fish dumped in the sea and hungry seagulls flying around the leftovers. (See figures 3–8.)
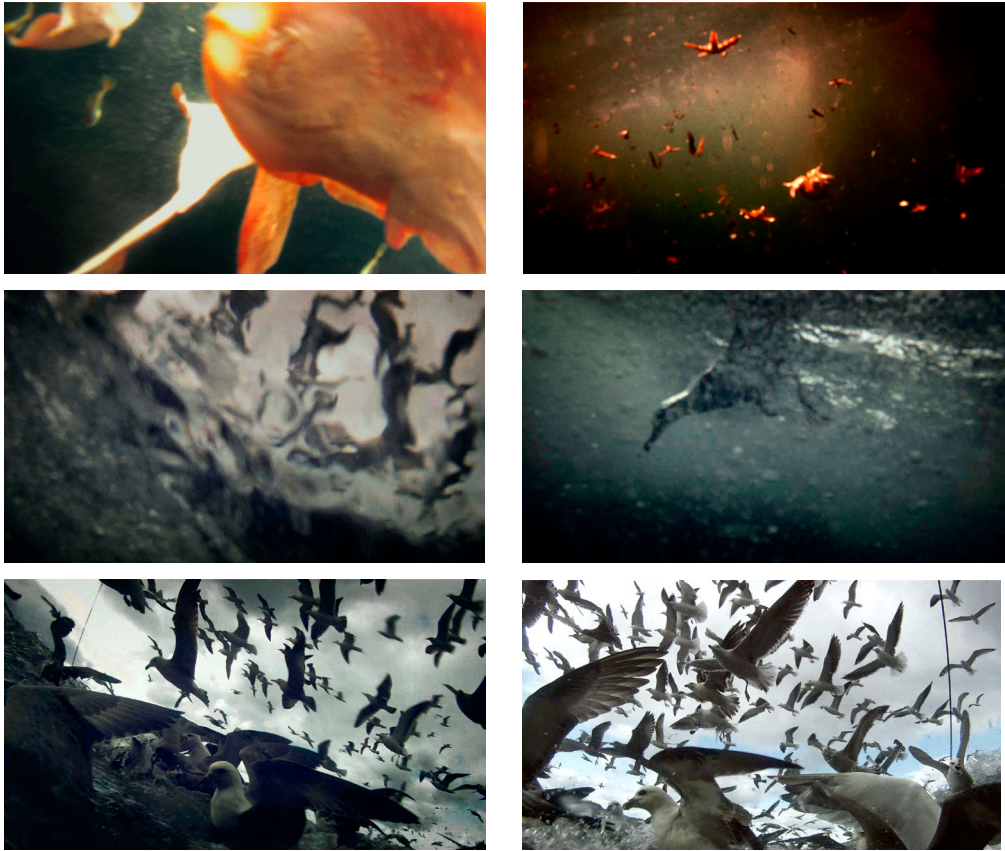

Figs. 1 and 2: **Film stills from *Leviathan* [documentary film, DVD]; Dir. Lucien Castaing-Taylor and Véréna Paravel. Cinema Guild/Arrête Ton Cinéma, USA/France/UK, 2012. 87 mins. [Dogwoof, 2013].[3]**

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[1] Besides the obvious biblical connotations (the book of Job), critics have pointed to several literal references in *Leviathan*, especially Melville's *Moby-Dick* (1851), as the commercial trawler in the film starts its journey from the same port as Captain Ahab's whaler. *Leviathan* has also been compared to George Franju's documentary *Le Sang des Bêtes* (*Blood of the Beasts*, 1949; see Gratza 2014; unpaginated).

[2] The directors also used Sony EX1 and EX3 HDCAMs, along with DSLRs (see Dallas 2012; 86).

[3] I am very grateful to Lucien Castaing-Taylor and Véréna Paravel for giving me permission to reproduce a selection of film stills from *Leviathan* in my article.

Figs. 3–8: **Film stills from *Leviathan*, dir. Castaing-Taylor and Paravel, 2012.**

The last 15 minutes of the documentary are dominated by upside-down shots with an inverted sky and ocean as the camera is attached on booms. The film has a slight nauseating effect, as if mirroring the seasickness experienced by many on board. These unpredictable camera movements involving contingent framing and angles generate an open-ended work not tied to the human gaze, as the filming is freed from the human act of looking through the viewfinder.[4]

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[4] Paravel has described the practice of attaching cameras to bodies as 'the body [becoming] the eye' (quoted in Dowell 2013; unpaginated). The filmmakers strapped the GoPros to themselves while shooting the deck scenes with fish dumped from the nets, where they literally crawl amidst the fish. On filming overboard Paravel notes: 'when the camera is diving into the sea, it's one of us holding the other one over the rail and filming overboard with just a [camera attached to a] stick' (quoted in Dowell 2013; unpaginated). The fishermen wore cameras too: 'little cameras were a way to approach the body of the fisherman but also the fish' (quoted in Dowell 2013; unpaginated). We may add that in this process the camera itself becomes the body. Notably the directors

Specific filming techniques are directed at unsettling conventional documentary modes. Throughout, a self-consciously discontinuous style of framing and editing is used, drawing attention to the medium and the technique itself. The widespread use of dynamic camera movements while at the same time choosing unfamiliar points of view is particularly obtrusive. Here the viewer can acknowledge that she/he is invited to identify with seeing from that particular perspective. Via such techniques linear narrative is suspended. *Leviathan* has been described as experimental non-narrative cinema, and as presenting a 'new take on the observational mode characteristic of ethnographic cinema' (Wahlberg 2014; unpaginated).[5] The filmmakers themselves are members of Harvard University's experimental Sensory Ethnography Lab (Castaing-Taylor is its director).

Leviathan's experimental approach to sound is also significant. While the film's dialogues are restricted to brief exchanges (generally work instructions) between the fishermen, there is an abundance of noises: babbling ocean sounds, the rattling of chains, creaking equipment, seagull cries, and the ship breaking waves. Operations on the trawler turn into an engulfing symphony of noise.[6] This approach to sound, especially in the scenes where the crew operates machinery, underpins the overall focus on the depiction of an intertwined relationship between humans, animals, machines and the environment.

In *Leviathan* the relatively mundane setting of the fishing vessel is defamiliarised through camera perspectives and placements, for example submerging into and resurfacing from the sea. But the most striking scenes of defamiliarisation are arguably filmed from the level/perspective of the fish on the deck, where the directors place themselves amidst the catch. (See figures 9–12.) The scene where the viewer's gaze glides along with the fish is unsettling and confusing. From whose point of view is it filmed? Who, if anyone, is behind the camera? Who is observing the fish?

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lost several cameras at sea before turning to GoPro cameras, which have wide-angle lenses and no viewfinder or LCD screen. Kirby argues that the use of GoPros transformed the filmmakers' role in *Leviathan* as they no longer needed to focus on composing shots, and used their bodies instead of eyes to film (Kirby 2016; 60).

[5]   Alanna Thain has argued that while more traditional observational cinema uses the so-called 'fly on the wall' approach to provide an 'externalized referent', in *Leviathan* 'the birds are inseparable from their environment' (Thain 2015; 42–43). At the same time, Ohad Landesman has suggested that the film offers 'multiperspectiveness' akin to a fly's 360-degree view of the world, without any 'drive or pursuit of a certain object or subject that justifies the abrupt camera movement, the distorted compositions or the oblique camera angles'; this 'omniscient viewpoint without a leading narration or subject is grounded' in a traditional focus on witnessing in observational cinema (Landesman 2015; 15).

[6]   The filmmakers chose to mix the sound recorded by in-built mono microphones of the GoPros as 5.1 surround sound; it was layered with recordings made by stereo microphones with the addition of effects. For discussions of the role of the soundtrack (composed by Ernst Karel and designed/re-recorded by Jacob Ribicoff) in *Leviathan*, and of the unique possibilities provided by the use of the GoPros to capture the noises see Dallas (2013; 87, 108) and Chang (2015; 16).
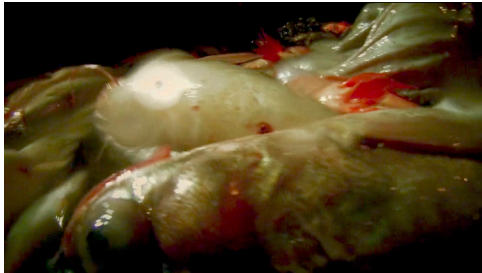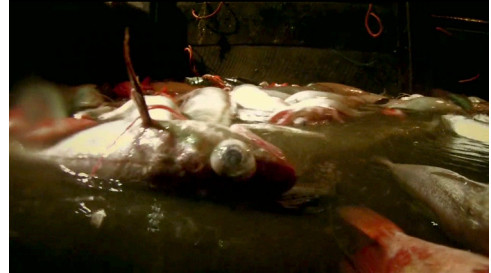
Figs. 9–12: **Film stills from *Leviathan*, dir. Castaing-Taylor and Paravel, 2012.**

How do we observe the marine animals as an audience? How do the dying, flopping fish observe? Do fish observe us? One could even imagine a marine animal looking through the viewfinder carried along by the excess water on the deck.

To analyse the usage of this particular perspective and the specific kind of viewing invited by it, I now turn to Luhmann's theories about observation not tied to human subjectivity, where the subject of observation is simultaneously an object.

Observation Theory and its Implications: von Foerster, Maturana and Varela, and Luhmann

Luhmann's writing on observation in the context of second-order systems theory is influenced by biological studies – particularly Humberto Maturana and Francisco Varela's well-known account of nonhuman visual systems and human nervous systems – and by the cybernetician Heinz von Foerster's discussion of the radical contingency of observation, the embodiment of knowledge and self-organising systems. Niels Bohr and Werner Heisenberg long ago put into question the distinction between scientific observer and observed phenomenon in the context of quantum physics. The implications of the impossibility of 'distinguishing between observed and observing system on the subatomic level' became a crucial concern of cybernetics 1940s onwards (Rasch 2000; 10). In the 1970s, second-order cybernetics, especially in von Foerster's work which combined mathematics and neurophysiology, pioneered the epistemological shift away from observed systems to the observer or observation itself.

In traditional scientific discourse observer and observed were carefully separated; any reference to observation itself was avoided, as was the possibility of running into paradox. For von Foerster, however, 'a description (of the universe) implies one who describes (observes it)', and so what is now needed is 'the description of the "describer" or, in other words, we need a theory of the observer'; this shift of focus also entails a major epistemological shift: it 'calls for an epistemology of "How do we know?" rather than "What do we know?"' (Foerster 2003d; 247–248). For von Foerster an observer describing properties of an object actually describes properties of the observer. Also, their environment contains no information in itself, since information has meaning only in relation to the observer's own cognitive structures. Moreover, only another outside observer can trace the boundaries of the environment of the first observer, distinguishing between what belongs to an organism and what belongs to its environment: 'This is a privilege that the organism itself does not have, as it knows only one environment: that, which it experiences' (Foerster 2003b; 242). Second-order cybernetics or as von Foerster puts it the 'cybernetics of cybernetics' is a cybernetics of observing systems, amounting to a constructivist epistemological position that shifts the focus of enquiry away from properties of the object to those of the observer of these objects (Foerster 2003a; 285). Von Foerster talks about observers observing their own observations as a self-referential operation – the observation of observation – or in Luhmann's words as 'observation in a process of observation' (Luhmann 1995; 443). This operation becomes an important notion in second-order systems theory, where observation is seen as a contingent process that always entails 'blind spots' and the possibility for descriptions to be otherwise.

While von Foerster's interest mainly lies in the study of cognitive processes, Maturana and Varela were working within the framework of biology. At the same time, as with von Foerster, Matura and Varela were attempting to question the objectivity of knowledge on a philosophical level, raising fundamental questions about what it is to know and how we know in the first place. Maturana in his late 1950s work famously demonstrated how the visual system of frogs constructs reality rather than represents it. With Varela he later arrived at important epistemological conclusions about observation of living systems, proposing that

> the frog sees what it wants, or needs to see – small, fast-moving flies rather than large, slow-moving cows. [...] Like the frog, the observer [...] does not discover a pre-existing reality, but creates it in the act of observation [...] which turns reality into the product of the dynamic interaction between observer and the system of which he or she is a part. (Lechte 2008; 339)

Generally in Maturana's understanding the observer is a human being and thus a living system; likewise he/she is a speaking being, one enacted through discourse: 'Anything said is said by an observer. In this discourse the observer speaks to another observer, who could be himself' (Maturana and Valera 1980; 8). For the observer, an (observed) entity becomes an entity in the act of description, which can only take place if he/she can distinguish the entity from at least one other interacting entity: 'This second entity that serves as a reference for the

description can be any entity, but the ultimate reference for any description is the observer himself' (Maturana and Valera 1980; 8). In Maturana's and Varela's observation theory, anything said is said by or to an observer: an observer describes, observers are connected by the language they use, and observers are the elementary nucleus of society, forming it by and in their use of language. In the epistemological sense, their project partakes in the unsettling of the Cartesian understanding of a human being as a rational subject, by focusing on 'the *interpretive capacity of the living being*', and by conceiving of 'the human being as constituting the world rather than discovering it' (Luhmann 2009; 63).[7] Importantly, the idea of overarching knowledge or any coherent totality of it is rejected.

Maturana and Varela arrived at these radical epistemological conclusions about living systems' observation by demonstrating how the observer constructs reality in the very act of observation, in the interaction between the observer and, as already noted, the system of which he or she is a part. Luhmann's work within the field of social theory, however, offers much more nuanced theorisation of observation and of observer's relationship to its environment. In this systems theory the system/environment distinction is the key coordinate, where a system's environment is seen as necessarily more complex than that system. System and environment are not, however, in a hierarchical relation with one another, neither are they to be understood as opposites. This basic distinction is meant to replace the familiar hierarchical paradigm of a whole and its parts. Systems cannot come into existence without the reduction of complexity, which is a basic process of differentiation. It should be noted that 'system' in Luhmann does not imply 'a purely analytical system, a mere conceptual construction, a bare model' (Luhmann 1995; 442). Luhmann's systems are opaque and recursive, they use their own output as input, as they operate based on structures that are the product of systems' own operations.[8]

The starting point of this anti-foundationalist theory as well as its end point is difference. Psychic and social systems are self-referential, dynamically stable and complex systems.[9] They

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[7] And what is more, in this theoretical framework, human beings are seen as 'points of accumulation among the social networks in which [they] live, rather than individual wills or characters' (Luhmann 2009; 63).

[8] In other words, systems are *autopoietic* entities. A discussion of Luhmann's (as well as Maturana and Varela's) usage of the concept 'autopiesis' is beyond the scope of this article.

[9] Self-reference in Luhmann's theory replaces the concept of the subject. 'Self' refers to both the self-referentially operating system, and an operation through which a system distinguishes itself from its environment. Luhmann's position on this issue is as follows: 'The concept of a self-referential system is more difficult to introduce but less subject to misuse than the concept of the subject. Above all, it does not presuppose focusing on the subject (or at least a kind of subject). Thus it is more suitable to the centerless world picture of contemporary science' (Luhmann 1995; 439). The centrality of the conscious carrier of an operation is displaced, as self-reference draws the focus away from 'who' or 'what [...] is the subject of observation, description, knowing, distinguishing, and so forth' (Luhmann 1995; 439).

continuously 'make a difference between the system and its environment'; this difference is reproduced by any operation of the system directed at self-reproduction, and it is in this sense that Luhmann talks about operationally closed systems (Luhmann 2000b; 36). System differentiation is a process that carries on within the systems as well, so there is a repetition of difference between system and environment within the systems themselves, which produces subsystems. There is no single all-encompassing environment in Luhmann's theory: each system constructs its own environment.

Systems operate by selecting elements based on their own self-referential codes from their more complex environment, while remaining closed to the information coming in from the environment. The greater the complexity of the environment, the more system needs to increase its selectivity. Each social system, be it art, economy, or religion emerges by drawing distinctions via its own unique coding 'as a choice between yes and no' – this is essential in the process of differentiation (Luhmann 1995; 445). An example of this binary code is legal/illegal in the case of the legal system. While the systems themselves are not stable, the yes/no code that they use as the basis for differentiating themselves from their environment or other systems is stable; Luhmann calls this 'bipolar stability' (Luhmann 2000a; 188). The system is impelled to constantly oscillate between the two values – a negative and positive one of the code, and it refuses to settle for either. Systemic oscillation between codes is a continuous process, and it is an important aspect of system's dynamism and complexity.

The binary code is a basic filter via which a system can observe which operations belong to it and which do not. Observation, and more specifically self-observation, is essential if the system is to distinguish itself from its environment, and so reproduce itself. This is the case for non-living systems, just as it is for systems based on life. What is so innovative about Luhmann's theory of observation is that his notion of observation does not presuppose life – which differs from Maturana and Varela's account – and neither is observation generally tied to consciousness, apart from the case of psychic systems. Here observations actually generate the consciousness of a system. The observer him/herself is only understood as a self-referential system (Luhmann 1995; 9).

Self-observation refers to a system's ability to observe itself using its own schema of distinction to trace what belongs to the environment/external and what is systemic/internal. In this context, observation 'means nothing more than handling distinctions' (Luhmann 1995; 36). Since the system's observations of itself and its environment are determined by its own particular perspective, which is restricted by the system's selectivity, there is a constitutive blindness present in any observation that can only be seen by another observer. This blindness is paradoxically what makes the observation possible. This notion of the 'blind spot' – referring to the limits in observation that make observation possible – was developed in Maturana and Varela's work on cognitive blind spots. The authors argue:

> every world brought forth necessarily hides its origins. By existing, we generate cognitive 'blind

spots' that can be cleared only through generating new blind spots in another domain. We do not see what we do not see, and what we do not see does not exist. (Maturana and Varela 1992; 242)

And this not-being-able-to-see is unavoidable.

Luhmann's account of observation theory, however, is more detailed and refined in relating observation to contingency. As Cary Wolfe argues, Luhmann's emphasis is on the distinction between operation (as the reproduction of the system) and observation (making distinctions to create meaningful information), and he also introduces the third category of self-observation (Wolfe 1998; 65–66). According to Luhmann, self-observing and self-referential systems can never fully grasp their environments or their outside, which exceed them in complexity; something remains perpetually outside of any system's operation, as this operation always takes place in the system rather than in its environment (Luhmann 2000b; 38). While a system needs to reduce the complexity of its environment in order to observe, its self-observation is also based on a simplified model of oneself. At the same time, however, due to the contingency of observation and the possibility of alternative descriptions, systems retain an irreducible element of complexity.

While systems observe by means of a binary code, they remain blind to the fact that both sides of these codes are a product of one code (e.g. legal/illegal). They must remain blind to this paradox, however, so that a system can carry

on the reduction of complexity by using these codes. The fact that this paradoxical distinction (i.e. this binary code) leads to tautologies (such as 'legal is legal') – is only recognisable to another observer, to the second-order observer who uses a different code, with its own respective blind spots (Wolfe 1998; 129). The focus on blindness in observation is in keeping with Luhmann's assertion that for any system the world remains fundamentally unobservable as a unity. Luhmann's take emphasises that all observations are partial, contingent, selective constructions and reductions of an environment, and self-referential. This, of course, also extends to the field of epistemology, rendering all and any knowledge contingent, as reality cannot be observed directly as a unity by any observer. There is an undecidability and intransparency of the outside world for a system: 'The question whether it is the world as it is or the world as observed by the system remains for the system itself undecidable. Reality, then, may be an illusion, but the illusion itself is real' (Luhmann 2000b; 36–37). Luhmann deontologises reality, which is not the same as simply saying that we do not or cannot know reality – this would mean that somewhere there is an unknowable world, or a secret essence of nature. Rather, for Luhmann reality is 'devoid of meaning' (Luhmann 2002; 145).

Whereas a first-order observer directly observes an object, a second-order observer is observing observation of the first-order and indicating it as such.[10] Second-order observa-

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10   Here we should briefly distinguish first- from second-order observation. First-order observation refers to a direct observation of an object, it is 'an indication of something in opposition to

tion renders contingent something that appears given or self-evident to the first-order observer. In Luhmann's non-hierarchical conception of observation, however, there are no superior or inferior observers; there are only different observers. What is more important here is that second-order observation – one system observing another's blind spot by means of introducing another code – is described by Luhmann as a 'guarantor of reality': 'the connection with the reality of the external world is established by the blind spot of the cognitive operation. Reality is what one does not perceive when one perceives it' (Luhmann 2002; 145). As Cary Wolfe notes, 'reality' on this schema is '*produced* by difference' (Wolfe 2009; 130).

To be sure, compared to a system, an observer has a special role in Luhmann's theory: she/he raises questions about objects, as she/he can 'distinguish between object and process when selecting this distinction as the form of observation', unlike a system which simply begins its operation (Luhmann 2000a; 31). Also, only an observer can be exposed to the paradox of the blind spot:

> Only an observer can run into paradox and be forced to admit that paradox is always presupposed […] as the blind spot that makes distinction, and thus observation, possible in the first place. Operations, on the other hand, including observing operations, simply happen. A distinction discriminates; its mere occurrence creates a difference. (Luhmann 2000a; 32)

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everything that is not indicated' (Luhmann 2000a; 61). This kind of observer is focused on the things he observes and experiences, and acts accordingly; he can be puzzled and search for explanations, but he remains within 'a world that seems both probable and true' (Luhmann 2000a; 61). In second-order observation, the observer is observed, and his observing activity is indicated as an observation that uses a distinction. The second-order observer 'encounters the distinction between distinction and indication', and the 'unobservability of first-order observation thus becomes observable in an observation of the second order – on the condition that the second-order observer, considered as first-order observer, can now observe neither his own observing nor himself as observer' (Luhmann 2000a; 61). For this observer, the world as observed by the first-order observer, and the operations and acts accompanying it, all seem improbable, and the fact of the first observer's observation becomes evident. Luhmann also introduces a third-order observer who can observe his own observation 'and draw the autological conclusion that all this applies to himself as well' (Luhmann 2000a; 61). This complex figure is only mentioned a few times in his text. This observer, however, as with the other two types, has no access to a unified view of the world, since there is no remedy or cure for any observer's blindness: 'Focusing one's observation on the means of observation – on artistic means (such as [Schoenberg's] twelve-tone technique) – excludes a total view of the world. No further reflection can get around that. Nor is there a dialectical *Aufhebung* that would elevate the blindness of distinguishing into a form of "Spirit" for which the world, including Spirit, becomes fully transparent. Rather, second- and third-order observations explicate the world's unobservability as an unmarked space carried along in all observations. Transparency is paid for with opacity, and this is what ensures the (autopoietic) continuation of the operations […]' (Luhmann 2000a; 61). An observation regarding the partiality of one's own observation is an example of third-order observation, which, however, still implies additional blind spots. Salem in his essay on Luhmann discusses these issues and their implications for social criticism. See Salem (2014; especially 24–33).

This is why observation has a central place in Luhmann's theory, and where its own critical potential is to be found – namely in how his theory of observation poses the importance, or rather necessity, of the co-presence of multiple observers, or of observations of others. This is because the blind spot is an unavoidable aspect of observation, but, at the same time, an observer that observes other systems has additional possibilities, as their respective blind spots are different.

Only the second-order observer can recognise the paradoxical identity of difference. With for instance the binary code of the art system – art/non-art – a distinction is made within the system of art, i.e. on one side of the distinction. This, however, cannot be acknowledged within the system itself, and so critical observation has to occur from the vantage point of another system. As Wolfe points out, 'Self-critical reflection is thus, strictly speaking, impossible, and must instead be distributed in the social field among what Luhmann calls a "plurality" of observers' (Wolfe 1998; xviii).

In an act of observation, an observer cannot see everything, but this blind spot enables one 'to see something'; what is certain about the world, on the other hand, is its inaccessibility, its unobservability, as the informational richness of the world cannot be contained to allow a bird's eye view (Luhmann 2000a; 32, 57). The second-order observer can observe this condition of inaccessibility, she/he can recognise the reduction of complexity and the existence of contingencies, which the first-order observer believes to be necessary or a natural act. This is why 'the world of possibility is an invention of the second-order observer which, for the first-order observer, remains necessarily latent' (Luhmann 2000a; 62).

Unlike Maturana and Varela's focus on biological processes, Luhmann's concern is with the functioning of social systems exhibiting qualities which have traditionally been linked with human subjectivity, and with social interaction beyond humans. His vital contribution to systems theory is that he offers one of the most sustained and nuanced critiques of the humanist anthropocentric view of society. He severs the link between consciousness and human subjectivity, and fundamentally questions the importance of human agency for social and psychic systems.

In Luhmann's posthumanist vision, humans do not and cannot communicate (only communication communicates),[11] as all communication and even thinking are structured by codes. Elements of the social systems on the basis of which a system's autonomous formation takes place are communications, whereas 'psychic processes' or 'the processes of consciousness' are not such elements (Luhmann 1995; 255). Psychic systems as well as humans are not elements of social systems, psychic systems are part of the social systems' environment, however. When Luhmann talks about psychic systems he does not mean living systems. For him psychic systems are

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[11]   Salem focuses on Luhmann's posthumanist notion of communication in his essay 'Action and Communication in Niklas Luhmann's Social Theory' (see Salem 2013; 76).

based on consciousness rather than life (they self-referentially 'reproduce consciousness by consciousness') (Luhmann 1995; 262). By 'consciousness' Luhmann does not mean a substance, only a mode of operation.[12]

Observation does not presuppose life, as both nonliving social and psychic systems observe, and it is not generally tied to consciousness. Instead, observations generate the consciousness of a system. In this framework, importantly, the external world is not directly accessible to any observing system, whether human or nonhuman – their blindness, in short, is a shared, radically non-hierarchical condition. In this context it is important to add that Luhmann rejects the human self-attribution of cognition to itself:

the traditional attribution of cognition to 'man' has been done away with […] 'constructivism' is a completely new theory of knowledge, a post-humanistic one. This is not intended maliciously but only to make clear that the concept 'man' (in the singular!), as a designation for the bearer and guarantor of the unity of knowledge, must be renounced. (Luhmann 2002; 78)

Instead cognition for Luhmann is a product of operations by various systems. Again, unlike Luhmann, von Foerster as well as Maturana and Varela considered only living organisms to qualify as observers; this could be due to a residual humanist bias in their thinking.[13] For instance, in von Foerster's constructivist ethics human agents (and agency) play an important role, and he constantly emphasises their autonomy, responsibility and choice (Foerster

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[12] 'By "consciousness" we do not mean something that exists substantially (as language constantly suggests), but only the specific operational mode of psychic systems' (Luhmann 1995; 262).

[13] As already noted, for Maturana and Varela the observer is necessarily a human, and reality is the product of the dynamic interaction between an observer and the system of which he or she is a part. Additionally, Wolfe points out that while Maturana and Varela's theory has far-reaching posthumanist implications for humans and nonhumans alike, the authors supported findings that used very invasive tests on animals, causing unnecessary suffering. Wolfe's example of their 'quintessentially humanist "blind spot"' is their praise for an experiment where cats were raised in the dark, and once they were exposed to light, they acted as if they were blind and were disorientated (Wolfe 1998; 84, italics in original). Maturana and Varela's humanist tendencies and persistent speciesism in their ethics are further expressions of their blind spot, as Wolfe notes: 'it is clear that the most quintessentially humanist "leftover" in their discourse, as in humanism generally, is the *animal other* as articulated by the discourse of speciesism, with the subject of humanism its precise correlative' (Wolfe 1998; 84, italics in original). Their engagement with the question of the animal – which refers to issues raised in Derrida's late writing on the topic – lacked sufficient conceptual rigour; it was diluted by the reduction of complex entanglements to the level of a slogan of love towards all living things (Derrida 2008; 25–27, 117, 135). Wolfe sharply criticizes this approach as a simplification of the existing power relations. The authors' call for an ethics based on the idea of universal human love and compassion towards other living beings amounts to little more than a fantasy, as it disregards material conditions and inequalities (Wolfe 1998; 80, 82). Saying that, Wolfe takes up Maturana and Varela's work on the evolutionary emergence of language and the relationship of animals to language – how some animals are capable of interacting with humans in linguistic domains – in his own posthumanist thought on nonhuman animals (Wolfe 2010; 37).

2003c; 282). Luhmann would find the application of these categories to human problematic.

Wolfe on Posthumanist Theory

More recently, Wolfe has been writing about posthumanism to a large extent in response to Maturana and Varela's work, as well as to Luhmann's own. Since the mid-1990s the topic of posthumanism has gained currency in both the social sciences and the humanities; however, in general it has not been approached consistently, and in no sense constitutes a unified field. Wolfe has been developing his theoretical framework by combining perspectives from systems theory and poststructuralism. To my mind, he offers one of the most rigorous articulations of posthumanism, systematically engaging both with the thinkers who have preceded and influenced his work, and also with current alternative and often conflicting articulations.

Poststructuralist thinkers such as Foucault and Derrida have paved the way for the posthumanist attack on the humanist myth of 'Man', who through exercise of reason transcends his animality and embodiment. Wolfe in turn is critical of approaches that define posthumanism as something that comes after the human, or after a transcendence of embodiment (Wolfe 2010; xiv–xv). Such approaches are exemplified by 'transhumanism', a philosophy of human perfectibility through technology, such as human body enhancement through prosthetics and other innovations, or freeing the mind of material constraints by means of virtual reality or artificial intelligence. Essentially transhumanism strives to overcome human embeddedness in embodiment and biological constraints with the help of science and reason.

Wolfe is also critical of the celebration of the 'posthuman', a figure that has permeated the social sciences and the humanities alike, and that is often seen as a symptom of historical succession (Wolfe 2010; xi). The term 'posthuman' has often been used interchangeably with posthumanism. However, it is important to draw a distinction between the two, as the posthuman often implies an interest in the posthuman condition, a new stage in human development or a historical transformation of the idea of human.[14] If the posthuman is a reconstruction of a new disembodied subjectivity, then it essentially continues the liberal humanist tradition. For Wolfe, however, posthumanism can be situated both before and after humanism (Wolfe 2010; xv–xvi). Importantly, it is not a figure, as in the posthuman; rather it is a theoretical direction, a way of rethinking humanist anthropocentric assumptions. Posthumanism is not anti-human, as it does not pose the human as something that needs to disappear or be transcended; instead it calls for an attentive reconsideration of the historically specific construct 'the human', and is deeply engaged with the issue of embodiment and materiality (Wolfe 2010; xiv–xvi).

Thus, in my usage of the term 'posthumanism', I refer to a critical discourse set against anthropocentric philosophical and ethical frameworks of humanism. In Wolfe's definition,

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[14] See, for instance, Halberstam and Livingston (1995; 3–4); Hayles (1999; 2–3); Pepperell (1995; 1, 166, 176).

posthumanism – as distinct from 'transhumanism' and the figure of the 'posthuman' – is not about 'surpassing or rejecting the human', but rather is premissed on a rethinking of 'the human and its characteristic modes of communication, interaction, meaning, social significations, [etc…] by recontextualizing them in terms of the entire sensorium of other living beings'; at the same time, posthumanism acknowledges that the human 'is fundamentally a prosthetic creature that has coevolved with various forms of technicity and materiality, forms that are radically "not-human" and yet have nevertheless made the human what it is' (Wolfe 2010; xxv). Posthumanism is focused on the decentering of the human subject, and on challenging the ontology of the human based on animal-human distinctions underlying the discrimination and subjugation of nonhuman as well as human beings. Wolfe argues that 'the question of the animal is embedded within the larger context of posthumanist theory generally, in which the ethical and theoretical problems of nonhuman subjectivities need not be limited to the form of the animal alone'; this may include cyborg subjectivities, for instance (Wolfe 2003; 6).

Wolfe's writing has been significantly influenced by Luhmann's not-human-centered understanding of communication, as his systems theory does not rely on the human/nonhuman dichotomy. Luhmann challenges the idea that language is an inherent human property separating humans from other living beings. He, according to Wolfe, reconceptualises communication 'as an essentially non- or ahuman emergence from an evolutionary process', one tied to 'the social interaction and communication among animals including but not limited to' the human (Wolfe 2010; 120).[15] Luhmann also rejects 'the assertion that consciousness is the subject. It is the subject only for itself' (Luhmann 1995; 221). For Wolfe, Luhmann is an exemplary posthumanist theorist as he refuses 'to locate meaning in the realm of either the human or […] the biological' (Wolfe 2010; xxvi). A consequence of this theoretical framework is a different approach to ethics, when compared with one based on rational moral agents versus patients, or a humanist subject. As already discussed, observation is not specific to humans, nor is it dependent on human agency, consciousness, or intentionality. Blindness is a condition shared by humans and nonhumans in

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[15] Based on both Luhmann's and Derrida's writing, Wolfe, discusses the radically ahuman aspect of language. First, communication has a prosthetic quality and exteriority that 'is shared by humans and nonhumans the moment they begin to respond to each other by means of any semiotic system' and, secondly, 'problems of autopoietic self-reference do not apply to humans, or to consciousness, or even to biological or organic systems, alone' (Wolfe 2010; 119). For Wolfe it is Derrida and Luhmann who 'go beyond Foucault's genealogical method, and beyond dialectical and historical accounts of the sort we find in Hayles, by suggesting that 'Enlightenment rationality is not, as it were, rational enough, because it stops short of applying its own protocols and commitments to *itself*' (Wolfe 2010; xx). Luhmann demonstrates that since modernity 'functional differentiation itself determines the posthumanist *form* of meaning, reason, and communication by untethering it from its moorings in the individual, subjectivity, and consciousness' (Wolfe 2010; xx).

the nonhierarchical opacity of the world. Thus, Luhmann's theory of observation is nonanthropomorphic and nonanthropocentric.

Observation from the Viewpoint of a Fish

To return to *Leviathan*, I would argue that the film offers a radically non-anthropocentric perspective on the topic of industrial fishing, presented via an innovative use of camera placements and point of view. In this context, I want to emphasise the significance of the scene depicting caught fish being loaded onto the trawler with the camera placed amidst the catch. For about two and a half minutes the audience's gaze floats along with the camera, gliding along with the gasping, slippery, dying marine bodies, dumped from the nets and flopping about on the wet deck. (See figures 9–11.) Shooting from a very low angle, from a marine animal's point of view, further unsettles the ordinariness of the setting, and forces the viewer to assume an unexpected perspective, inviting them to identify with it. These visceral close-ups of beings ripped out of their natural habitat, bring suffering of the hopelessly struggling fish into immediate, unsettling proximity to the human observer. What is more, with this unusual depiction where the camera disregards species hierarchy and resists any adoption of a primarily human perspective, the animals' objectification as foodstuff is disrupted, as they are no longer confined to the position of what is observed.

For the viewer the fish become an important reference point; their observation alters as they are impelled to acknowledge what the fishermen

Figs. 13 and 14: **Film stills from *Leviathan*, dir. Castaing-Taylor and Paravel, 2012.**

do not see. The scale of animal suffering, and by extension the blind spot of the fishermen and of speciesism emerge out of audience's second-order observation – their observing from the perspective of marine creatures, or indeed their observing of the fishes' observations. The fish are silent, dying, but remain palpably present in the film even after death. (See figures 13 and 14.) Their vacant dead stares elicit a powerful call; the returned stares are oddly lively and forceful, making the viewer feel the piscine gaze on themselves. We also become aware of our own act of looking. By means of camera perspective, we are forced to see through the marine animals' viewpoint, and this is not about seeing something particular, but about observation as such. Moreover, the fishes' observation defamiliarises the 'human world' before our eyes: seeing becomes nonanthropomorphic, and is resolutely

embodied. Finally, this observation opens up possibilities for the audience to acknowledge humanism's blindness – a blindness to the condition of nonhuman others.[16]

It is interesting to note that fish and other marine creatures are subject to far fewer anthropomorphising identifications than, say, many species of mammals. Human beings have been describing fish as cold-blooded and, compared with warm-blooded vertebrates, a good deal less compassion and concern for their welfare have been shown. Their status as non-sentient beings that do not feel pain, however, has been disproved by science. Recent studies in animal cognition have proven that fish are sentient beings with emotional lives, and that their cognitive abilities, behavioral sophistication

and pain perception is similar to or exceeds that of other vertebrates.[17] As if to attest to this in some way, the deep red colour of piscine blood is ever-present in the film, perhaps to challenge the popular image of the creature as cold-blooded, i.e. having blood that is essentially different to that of humans. In several scenes, the ocean itself turns red from discarded blood and severed animal body parts.

Leviathan's critical potential lies in how it brings the nonhuman animal into focus – not as a mere metaphor standing for something else, but as a central presence; in this the film exemplifies a distinctive kind of observation – a posthumanist mode of observation.[18] Within this framework, the duality of the human viewer and the nonhuman viewed is dislodged.

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[16]   While posthumanism has been referred to in passing by one or two critics discussing *Leviathan* – usually in relation to the general focus of projects produced by Harvard's Sensory Ethnography Lab (see for instance Leimbacher 2014; 38–39; Westmoreland and Luvaas 2015; 1–3) – a rigorous linking of the film to posthumanist theory is lacking. A notable exception is Michael Metzger's article discussing the posthumanist trope of *Leviathan* with brief reference to Ursula Heise and Rosi Braidotti. He argues that the film forges 'new relationships between humans, machines and other forms of life', by introducing a new mode of cinematic identification that redirects the 'focus away from the human towards other entities' (Metzger 2015; 39–40). While in his article, Metzger discusses 'the assumption of perspectives alien to the human eye', and how the film encourages the viewer 'to "see with" and "see as" multiple human and non-human entities', his goal is to contrast *Leviathan's* exclusion of returned gazes and linguistic self-expression among the human workers with its demands for empathy with the animal and the technological (Metzger 2015; 39–40, 42). He writes: 'the camera's fluid traversal of human and non-human perspectives can only be bought at the price of a willful exclusion, the consignment of the laboring subject's self-expression to the perpetually out-of-field' (Metzger 2015; 47). This approach, I would argue, relies heavily on a humanist understanding of communication and agency, as Luhmann would no doubt point out. It also disregards the full implications of anti-speciesist ethics for both nonhuman and human actors. In contrast to seeing the film's exclusion of human expression through language as a shortcoming or a form of silencing, I emphasise the potentiality of the animal and human observation in the film.

[17]   See Culum Brown's paper 'Fish Intelligence, Sentience and Ethics' (2015).

[18]   I discuss this concept in my doctoral thesis (see Chkhaidze 2015; 198–202). Notably, in his theoretical writing about art, Luhmann distinguished between the viewer and artist's observations, in that there are blind spots that may become evident only through the particular coupling

Here it is important to stress that Luhmann's theory of observation goes beyond a metaphor of seeing, vision, and ocularcentrism in general. Observation is not merely an act of looking, but a fundamental operation of distinction crucial to the functioning of any system, especially given the operational function of all systems which is precisely to make a difference. Again, the subject of observation is simultaneously an object, and the viewer/viewed duality is displaced by a non-hierarchical multiplicity of observing observers, with no single privileged bird's eye view, the existence of a blind spot being something shared by all observers.

Yet this is the point where Wolfe's approach differs significantly from that of Luhmann's as he attempts to reframe Maturana and Varela's second-order systems theory as well as that of Luhmann in the service of a posthumanist ethics and politics. This is a focus that Luhmann's work definitely lacks. While in Luhmann's writing there is a suggested equivalence between different kinds of observers, in Wolfe's work observation theory transforms itself yet again to engage with hierarchies existing within the social sphere, not least between animals and humans. Wolfe addresses asymmetries in observation and power relations omitted in Luhmann's articulation, a critical position pointing towards Luhmann's own blind spot.

Wolfe emphasises the importance of Luhmann's intervention that introduced 'the constitutive blindness of all observations, a blindness that does not separate or alienate us from the world but, paradoxically, guarantees our connection with it' (Wolfe 1998; 69). This is linked to Luhmann's claims about how reality is not perceived when it is perceived, such that cognitive and perceptive blind spots relate us to the world. What derives from this contingency of observation – that a system can only see what it can see, and cannot see its blind spot, or its own blindness – is, as Wolfe argues, 'the *necessity* of the observations of others: it is only in the mutual observations of *different* observers that a critical view of any observed system can be formulated' (Wolfe 1998; 70). This is where Wolfe sees the greatest potential for Luhmann's observation theory.

So, the blind spot is an unavoidable aspect of observation, but at the same time an observer that observes other systems has additional possibilities, as their respective blind spots are different. This joining of observers to one another and to the world, Wolfe argues, is neither a politics nor an ethics in a strict sense, however:

> it *does* provide a rigorous and persuasive theorization of the compelling necessity of *sociality as such*. It offers an epistemologically coherent and compelling model of necessary reciprocal

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of their respective observations: the artwork 'leaves open how artist and beholder are coupled by the work, while at the same time it guarantees that this coupling is not entirely arbitrary – this is what makes art a medium of communication' (Luhmann 2000a; 44). These 'nonlinear structures of coupling', as Luhmann puts it, is where the potentiality of art as a medium of communication lies. One could add that the potentiality of artworks more generally precisely involves a second-order observation, and the viewer and artist's coupled observations.

and yet asymmetrical relations between self and other, observer and observed, relations that can no longer be characterized in terms of an identity principle (be it of class, race, or what have you) that would reduce the full complexity and contingency – the verticality, if you will – of the observer's position in the social space. (Wolfe 1998; 71)

While Luhmann questions the authority of any observation from any single perspective, he simultaneously proposes a posthumanistic view of knowledge, where humans can no longer be considered as bearers or guarantors of unified knowledge, or as having a total view. As Wolfe argues, the politically promising aspect of Luhmann's theory lies exactly in demonstrating the full complexity of sociality, so that 'the social is always virtual, partial, and perspectival, mutually constituted by observers who can and must expose the aporias of one another's position' (Wolfe 1998; 75). This need for mutual observation by different observers holds out some substantive critical potential for observing, analysing or writing about theory and works of art, and more generally, for a critique from different perspectives.

At the same time, one of the biggest shortcomings of Luhmann's theory (and I would add, its blind spot) is that within it he does not address asymmetries, or the place of power relations. Luhmann levels the social field

> by refusing to complicate his epistemological pluralism – that we are all alike in the formal homology of our observational differences – with an account of how in the material, social world in which those observations take place some observers enjoy more resources of observation than others. (Wolfe 1998; 77)[19]

Wolfe recognises systems theory's 'inability or unwillingness' as he puts it 'to confront the problems of *power* and social inequality that belie its theory of the formal equivalence and contingency of all observation' (Wolfe 1998; xx). One could argue that this ethical task omitted in Luhmann's account is taken up by the posthumanist theory as articulated by Wolfe. His posthumanist orientation brings Luhmann's meta-hierarchical 'super-theory' to bear on the issue of lived hierarchies. Wolfe discusses discourse of species as a discourse that is continuously used as a basis for a hierarchical relationship to nonhuman animals and for their exploitation on an industrial scale (Wolfe 2003; 2). For him, speciesist structures and the discourse itself are the first targets for deconstruction by posthumanist theory. In relation to the political importance of the attack on the discourse of speciesism, he argues that it

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[19] Wolfe argues that asymmetries of power always benefit some systems more than others, and this is the point where Luhmann perhaps inadvertently reproduces problems or inability within liberal thinking: 'But the problem with Luhmann's account, of course, is precisely that it purports to be describing what is actually the case, not only what ought to be, and as such it imagines that in our society systems can engage in their own differential autopoiesis and the development of systemic complexity more freely than in fact they do. […] Luhmann's account reproduces all the problems of a liberal technocratic functionalism that has no way to address the sharp asymmetries of power in the social field, asymmetries that make the autopoiesis of social systems work better for some than for others' (Wolfe 1998; 148).

Figs. 15 and 16: **Film stills from *Leviathan*, dir. Castaing-Taylor and Paravel, 2012.**

can be used to mark any social other, [so] we need to understand that the ethical and philosophical urgency of confronting the institution of speciesism and crafting a posthumanist theory of the subject has nothing to do with whether you like animals. We all, human and nonhuman alike, have a stake in the discourse. (Wolfe 2003; 7)[20]

Readers/viewers/second-order observers of these theoretical constructs and of *Leviathan* can all share in the urgent political task of observing these asymmetries as humanism's blind spot.

Posthumanist observation then is the kind of observation that brings asymmetrical relations into focus. Complex relations of power between *Leviathan's* different subjects become evident in spite of the film's often-nonhierarchical depiction of humans and nonhumans. For instance, the body of the ship and the organic bodies of human and nonhuman animals are presented in a non-anthropocentric way, where the dynamic, resolute ship seems endowed with volition, while humans are often literally overpowered in their struggles with the rough sea. The camera lingers as much on the trawler as it does on any organic body.[21] Yet, undoubtedly, there is an underlining asymmetry disproportionately affecting the sea creatures whose bodies are sliced and tossed to one side without hesitation. (See figures 15 and 16.)

At the same time, the condition of workers on the trawler is portrayed as oppressive. The

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[20] In outlining his definition of the discourse of speciesism, Wolfe notes that: 'The effective power of the discourse of species when applied to social others of whatever sort relies, then, on a prior taking for granted of the institution of speciesism – that is, of the ethical acceptability of the systematic "noncriminal putting to death" of animals based solely on their species. And because the discourse of speciesism, once anchored in this material, institutional base, can be used to mark any social other, we need to understand that the ethical and philosophical urgency of confronting the institution of speciesism and crafting a posthumanist theory of the subject has nothing to do with whether you like animals. We all, human and nonhuman alike, have a stake in the discourse and institution of speciesism; it is by no means limited to its overwhelmingly direct and disproportionate effects on animals' (Wolfe 2003; 7).

[21] Thain argues that in *Leviathan* the GoPros function as 'ambiguous observers [...] suspended between subject and matter', activating 'observation without distance' and enacting 'a creative and common embodied potential of animals, humans, and technology' (Thain 2015; 46). The author does not however cover the issue, which is important for my argument, of asymmetrical relations in the film.

fishermen are depicted carrying out arduous, monotonous, highly repetitive tasks such as gutting the fish or handling scallops, often working in harsh weather conditions. In one scene the fatigued, distanced expression of the ship's captain becomes the camera's main focus for over two minutes, especially his somewhat melancholic eyes. Later he is filmed operating the machine that lowers the net onto the deck, and in another scene, mindlessly watching television, gradually falling asleep to the advert tunes. (See figures 17 and 18.) The workers' alienation from the end product of their labour is evident in their detached or at times bored expressions even as they deftly and swiftly handle their catch. (See figures 19 and 20.) These scenes are punctuated with images conveying the captured marine creatures' bleak prospect, while the cruelty of their isolation from their habitat is relayed through close-ups of their desperately contorting bodies. The documentary thereby reminds us that the exploitation of human and nonhuman 'resources' goes hand-in-hand. While fishermen are on the trawler, their everyday lives are circumscribed to serve as a means to ends set within the system of industrial fishing.[22] In this context, a visual analogy that can be drawn between two close-ups – one of a fisherman's eyes, the other of the eye of a fish – gains particular significance, as a vivid example of the lived hierarchies within the social sphere.

Figs. 17 and 18: **Film stills from *Leviathan*, dir. Castaing-Taylor and Paravel, 2012.**

Another scene dwells on workers cutting and gutting sea creatures with sharp, fast movements. The men barely look at the fish, working with rapid, instrumental, matter-of-fact gestures; they do not see the animal itself. It is more importantly the viewer who can observe this blindness, and who can testify to the vulnerability of the dying bodies. Here a possibility arises: that of acknowledging the singular, material presence of the fish being prepared to become mere foodstuff, as well as of recognising the asymmetry as the blind spot of the first-order observer – the fisherman.

[22]   As Paul Dallas has pointed out, the workers on this particular fishing vessel work long 16-hour shifts in quite hazardous conditions. This so-called 'ground fish dragger' employs 'giant multicolored nets fixed with rubber wheels, which allow it to be dragged over rocks, scooping up fish'; the trawler 'is physically and psychologically gruelling – from the constant engine and machine noises to the very real threat of serious physical danger, especially during the dredge, when the massive nets are swung over the deck by hydraulic arms and the contents unleashed' (Dallas 2013; 85–86).

Figs. 19 and 20: **Film stills from *Leviathan*, dir. Castaing-Taylor and Paravel, 2012.**

On this occasion, as in the instances when the viewer is brought down to flounder with caught animals on the deck, *Leviathan* draws out asymmetries of power within observation visibly, so putting pressure on Luhmann's nonhierarchical

theoretical vision. At the same time, the work poses questions about the present condition of marine life.

Notably, within humanism's speciesist structures, animals have always had a special significance, and they have always also been in a particularly disadvantaged position.[23] These structures reproduce the normative human subject through the dichotomy of humanity/animality. Posthumanist anti-speciesism is a critique of this unqualified privileging based on species-membership, but it is also a form of critique of anthropocentrism. The powerful hold of speciesism (and racism, in fact) will remain for as long as the human/animal distinction is assumed to coincide with subject/object distinction. A hierarchical division of living beings into human and nonhuman has served and continues to serve as a justification for discrimination, exploitation, violence and subjugation, committed not only by humans against animals, but also by humans against each other.[24] Such repression, of course, is not

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[23] As Wolfe argues, 'the animal possesses a specificity as the object of both discursive and institutional practices, one that gives it particular power and durability in relation to other discourses of otherness. For the figure of the "animal" in the West (unlike, say, the robot or the cyborg) is part of a cultural and literary history stretching back at least to Plato and the Old Testament, reminding us that the animal has always been […] at the very heart of the constitutive disavowals and self-constructing narratives enacted by that fantasy figure called "the human". It is this pervasiveness of the discourse of species that has made the institution of speciesism fundamental […] to the formation of Western subjectivity and sociality as such, an institution that relies on the tacit agreement that the full transcendence of the "human" requires the sacrifice of the "animal" and the animalistic, which in turn makes possible a symbolic economy in which we can engage in what Derrida will call a "noncriminal putting to death" of other humans as well by marking them as animal' (Wolfe 2003; 6).

[24] According to Wolfe, 'as long as this humanist and speciesist *structure* of subjectivization remains intact, and as long as it is institutionally taken for granted that it is all right to systematically exploit and kill nonhuman animals simply because of their species, then the humanist discourse of species will always be available for use by some humans against other humans as well, to countenance violence against the social other of *whatever species* – or gender, or race, or class, or sexual difference' (Wolfe 2003; 8).

only discursive, thus it is equally important to draw attention to the material conditions of the hierarchical relationship, with its asymmetrical consequences for different groups of humans and nonhumans, with nonhuman animals being most affected.

When thinking about this critique's political and social relevance, issues that come to mind include imminent global mass extinction including the consequences of overfishing, along with the rise of unprecedented violence against nonhuman animals in high-tech industrial capitalist societies, with their contradictory treatment of different species (namely, the cultural fetishisation of pets versus the utilisation of factory animals). Unsurprisingly, the question of the animal, as an important posthumanist imperative, is intertwined with that of ecology, and with the political and ethical challenges of technoscience (see Wolfe 1998; 83).[25]

Likewise, the question of ecology and sustainability is intrinsically linked to the topics explored in *Leviathan*.[26] The camera often focuses on how the masses of marine animals are dumped on board from the nets and how, after being gutted, their heads and other 'inedible' parts are thrown back into the ocean as in, for instance, the bodies of skates, since only their fins are deemed suitable for consumption. Similarly, the clams' empty shells submerge back into the blood-coloured sea. And while nature itself is a powerful, unruly existence in the documentary, human hubris is ultimately reflected in the methodical, matter-of-fact way in which the trawler's workers treat the inhabitants of the deep as mere resources, leaving behind tons of waste and contributing to the grim consequences of overfishing.

In this film's unconventional representation of the fishing industry's seemingly mundane workings, humans and their ship – the prosthetic extension of their will to conquer the seas – emerge as the cause of disruption, which has in reality taken an unprecedented scale. *Leviathan* ties back the viewer to the fishing routines, radically removed from average

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[25] Wolfe has recently described the 'disjunctive and uneven quality of our own political moment [of] the mechanized killing of billions of animals each year, in factory farming, in aquaculture, in the fishing of the seas to the point of collapse, in the sixth largest extinction event in the history of the planet that we are now experiencing' (Wolfe 2013; 104–105).

[26] Importantly, the film credits included the names of the species of the marine animals, the sea, the moon, the fishermen. The filmmakers have described how they want to relativise the human through a multiplicity of perspectives, hoping that these perspectives 'would make the spectator rethink humanity's relationship to nature, in relationship to a plethora of other beings, of other animals, of other kind of inanimate objects – the elements, the earth, the sky, the sea, the boat, mechanization, fish, crustaceans, starfish – everything that is involved in the ecology of what's going on in industrial fishing today' (quoted in Dowell 2013; unpaginated). Thain has described *Leviathan* as a work of ecological activism, referring to Felix Guattari's notion of ecology (Thain 2015; 41). Focusing on the role of seagulls as 'witnesses within the film's ecology', she argues that: 'the film operates through intensive and corporeal sensations that are ambiguously embodied, producing a subjectivity that does not simply mimetically operate from a human point of view' (Thain, 2015; 42).

consumers' lives, implicating them in the narrative of overconsumption of living beings on an industrial scale, and in the imminent ecological disasters we are facing.

<p align="center">✳✳✳</p>

The innovative filming strategies deployed in *Leviathan* explore the potentiality present in any observation, by pointing to its partiality and contingency. Through the unique depiction of nonhuman animals in conjunction with humans, through their mode of presentation via defamiliarising perspectives – shooting from the level of the fish floating on board with the camera floating along – *Leviathan* develops a non-anthropocentric approach to film-making, and to thinking about and engaging with the question of the animal. In placing marine animals' suffering front and centre, in the exaggerated detail of many close-ups, and through

the stubborn immediacy of dying piscine bodies, the documentary opens a forum for experiential engagement with the concerns raised in the theoretical texts discussed in this article, eliciting a strong visceral response. It is not just that the human is confronted with the muted call of silent suffering, but that the prevalence of the nonhuman perspective in filming, rather than the routine dominance of human one, invites the audience to practice a posthumanist mode of observation themselves.

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Figure 19: Castaing-Taylor, Lucien; Paravel, Véréna. 2012. *Leviathan*. (Film still, 30:52).

Figure 20: Castaing-Taylor, Lucien; Paravel, Véréna. 2012. *Leviathan*. (Film still, 30:42).

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SANTRAUKA

ŽVELGIANT ŽUVIES AKIMI: POSTHUMANISTINĖ PERSPEKTYVA LUCIENO CASTAING-TAYLORO IR VÉRÉNAʼOS PARAVELOS FILME *LEVIATANAS*

Straipsnyje konceptualiai analizuojamas Lucieno Castaing-Tayloro ir Vérénaʼos Paravelos sukurtas eksperimentinės dokumentikos filmas *Leviatanas* (2012), kuriame atsiskleidžia savita vizualiosios kultūros perspektyva, leidžianti naujai permąstyti hierarchinę humanistinę etiką ir plėtoti posthumanistinį kritinį diskursą. Filmo analizė grindžiama Niklaso Luhmanno suformuluota socialinių teorijų antropocentrizmo kritika ir stebėjimo teorija bei Caryʼo Wolfeʼo darbais apie posthumanizmą, kurie kvestionuoja žmogaus veiklos svarbą socialinėse ir psichinėse sistemose.

Leviatanas pasiūlo radikalų neantropocentrinį požiūrį į pramoninę žvejybą. Jis atsiranda dėl neįprasto kinematografinio žvilgsnio ir filmavimo kameros pozicionavimo – nenuspėjamas kameros judėjimas, atsitiktinis kadravimas ir filmavimo kampai sukuria atvirą vaizdinių seką, nepriklausančią nuo valingo žmogaus žvilgsnio. Filmavimas iš sužvejoto jūros gyvio regos taško priverčia žiūrovą užimti neįprastą stebėtojo poziciją. Geriausiai suprasti šį požiūrį leidžia Luhmanno stebėjimo teorija, eliminuojanti žmogiškojo subjektyvumo veiksnį. Joje stebintis subjektas sykiu yra ir stebėjimo objektas, o išorinis pasaulis vienodai nepažinus nei žmogiškosioms, nei kitokioms būtybėms. Tokioje aplinkos stebėjimo struktūroje, kuri būdinga bet kokiam stebėjimo veiksmui, glūdi ir tam tikras aklumas, neleidžiantis matyti kai kurių stebimo pasaulio daiktų. Aplinkos stebėjimui būdingą aklumą gali nustatyti tik kitas stebėtojas.

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