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‘Brains are Survival Engines, not Truth Detectors’:

Machine-Oriented Ontology and the Horror of Being Human in *Blindsight*

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English Studies — Literary Option
Bachelor Thesis
15 Credits
Spring 2018
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Abstract

This paper is an examination of the horror elements found in Peter Watts' *Blindsight*. In depicting an encounter with aliens, this science fiction novel explores topics such as the nature of sentience, mankind's relationship with technology, posthumanism, and the limitations of the human body and mind. *Blindsight* also envisions entities (aliens, vampires, and artificial intelligences) capable of interacting with material realities inaccessible to human beings. Using Levi R. Bryant's machine-oriented ontology, this thesis demonstrates how Watts employs these themes and issues to problematize anthropocentrism and the notion of selfhood. These elements—and more—are discussed and shown to match the criteria associated with ontological horror.

Acknowledgments

I would like to thank the English Studies department at Malmö University for the support I have received over the past three years. Thank you to my supervisor, Dr. Henry King, whose tactful guidance, knowledge, and suggestions were invaluable. Dr. King should also be thanked along with Dr. Cecilia Björkén-Nyberg, Dimosthenis Chatzoglakis, Dr. Berndt Clavier, and Dr. Asko Kauppinen. Their work as professors has been inspiring and life-changing.

My thanks and unconditional love to my friends and family: Tanja Abel, Nicolas Gayraud, Mathias Glistrup, Sylvie Hamon, Nik Korpon, Jesse Lawrence, Maria Mortensen, Christopher M. Novas, Nicole Renault, Marieke Van Tour, Amélie Vedeche, Talia Velez, and Jakob Wingren. I owe each of you more than a measly paragraph could describe.

I would like to express my deep respect and admiration for Ursula K. Le Guin (1929-2018). The obituary written by China Miéville says it all: "An unflinching radical has died. A literary colossus has died. A comrade, a giant of modern letters has died."[1]

Finally, to my brother in all ways but blood, Benjamin Christensen, who called me late at night a few years ago and said, "Dude, we need to talk about *Blindsight*. How did Peter Watts do *that*?" This one's for you.

[1] From China Miéville's website: http://chinamieville.net/post/170078670563/forgetting-by-commemoration-or-the-disrespect-of

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1. Introduction

Peter Watts' *Blindsight* is a hard science fiction novel meticulously built using the genre's tropes and neuroses, but darker elements weave through its edifice. Charting the interstellar journey of a transhuman crew as they attempt to make first contact with aliens, *Blindsight* earns its "hard" qualifier by staging a universe in which artificial intelligences, cyborgs, and aliens are not mere themes or convenient plot points, but realistic possibilities. Technologies and entities are depicted with empirical care, beholden to Newtonian physics, and often described using a complex scientific glossary all but inscrutable to the layperson. Watts—who, unsurprisingly, was a biologist before writing fiction—does not end his book with a list of polite acknowledgments. Instead, the final twenty pages consist of academically-sourced notes about *Blindsight*'s more elaborate speculations, including how human senses can be hacked, a breakdown of vampire biology, and the intricacies of quantum teleportation. However, these features work in unison with more somber components.

Reading the 2006 novel's reviews and blurbs means encountering a litany of descriptors such as "terrifying" (Publishers Weekly), "horrendous" (Lawie), "dark and grim" (Frantz), or even "nihilism" and "Lovecraftian" (Bear). Such feedback was nothing new to Watts. In his essay "En Route to Dystopia with the Angry Optimist," he offers a list of adjectives frequently associated with his work, including "Brutal," "Misanthropic," "Paranoid," and "Nightmarish" (217). The author may conclude that he is an optimist, but the feelings often associated with his fiction are impossible to ignore. Yet, academic discussions have largely revolved around *Blindsight*'s portrayal of human sentience, its narrative structure, or its vision of posthumanism.

Therefore, this thesis will examine *Blindsight*'s horror elements through the lens of Levi R. Bryant's machine-oriented ontology. More specifically, this reading will show that Watts constructs, as the narrative progresses, an intricate system of interconnected parts that

repeatedly attacks anthropocentricism and establishes a universe in which human beings are profoundly decentered. The dread experienced by characters and readers alike does not occur due to overt bloodshed or frightening monsters, but because of a pervading sense of *ontological* horror.

As will be seen, Bryant's ontological model is well-suited to the themes and issues found in the novel. Although Bryant only mentions *Blindsight* in passing, he sees it—alongside the work of Philip K. Dick—as a "vector map," a consideration of the future that "helps us … determine what we need to respond to in the present" (265). When needed, theories from horror studies and posthumanism will be used to complement Bryant's model.

After a brief introduction to machine-oriented ontology and to *Blindsight*, the analysis will consist of two halves. The first half will present an onto-cartography of the novel's non-human machines—entities that are more efficient than human beings and capable of upsetting mankind's established hierarchy-of-things. The second half will begin by highlighting the tensions created by trans- and posthumanism. This section will then examine how the novel's portrayal of consciousness as an evolutionary hindrance subverts a trait seen as central to the human subject. Once combined, these elements will be used to show why Watts' universe is so unsettling it forces *Blindsight*'s narrator to question his relation to reality and the worth of his humanity.

2. Theory

2.1. Machine-Oriented Ontology

Originally part of the object-oriented ontology (OOO) movement, Levi R. Bryant eventually abandoned the term "objects" and settled instead on "machines". His latest work, *Onto-Cartography: An Ontology of Machines and Media*, offers a machine-oriented ontology (MOO) built using a vast array of computer-influenced terms and unabashed Deleuzian and Guattarian influences. Bryant traces an intricate "map of relations between machines that analyzes how these assemblages organize the movement, development, and becoming of other machines in a world", with an aim that is "social, political, and ethical" (7).

MOO, like OOO, begins by establishing a flat ontology: from particles to galaxies, everything in the universe is a machine that interacts with other machines (115). This includes atoms, cars, black holes, aliens, emails, human beings, capitalism, and innumerable other entities. They may be corporeal (a snail) or incorporeal (an equation). All are defined by what they do, making them "system[s] of operations that perform transformations on inputs thereby producing outputs" (38). Furthermore, all machines have essential parts they require to prevent destruction (76). In the case of humans, the heart would be considered essential, but hair is not. Being, rather than simply *being*, consists of operations done by a machine to maintain the indispensable elements of its structure.

Machinic doings are divided into two categories: "virtual proper being" (40) and "local manifestations" (44). The former, also called "powers", refers to a machine's possible operations and is always greater than its manifestations (41). Thus, a spider may spin a web, feed, hatch eggs, and numerous other potential actions. A grown spider would have more powers than a newly-hatched one; a spider missing a leg would have fewer powers. Manifestations are local because they are performed in a specific time and space: a spider does not always feed, but it may do so. Furthermore, all machines have ranges of

"becomings", determined by their own powers and relations with other machines (23-24). A spider can reach a certain size assuming its environment allows it (e.g. food sources, lack of predators, etc.) but it will never become as large as a mountain. These events happen whether an observer is there to witness them or not. The world worlds regardless.

Unlike Kant's *noumenon* or OOO's real objects, Bryant's machines are not fully withdrawn. Rather, it is unlikely that a machine will exert all its powers at once. It is seemingly impossible for a tree to simultaneously bloom, rot, be on fire, collapse, grow, and freeze. However, it would be capable of each of those—in certain cases, several—given appropriate inputs. Furthermore, machines can make "inferences about what flows other machines [can] interact with" and how they react via operations, giving observers an idea—albeit imperfect—of how other entities function (64).

All machines are assemblages since "each machine itself swarms with other machines": human beings, for example, are assemblages of organs which themselves contain sub-machinery (75).[1] Corporeal and incorporeal machines can be part of one assemblage: a political party includes politicians, policies, marketing campaigns, scandals, offices, and more. Machines may expand their powers by attaching themselves to other machines and forming new assemblages (83).

A machine can act as a medium when it alters "the activity or becoming of any other machine" or "extends [its] sense-organ" (34). Just like machines are rarely not assemblages, they are frequently connected to others via media. Relations between two machines are "media relations" (193) with a third machine being the bridge.

The terms "inputs" and "outputs" refer to external relations and how machinic flows are treated by a certain machine or produced by it (49). As Bryant puts it, "[a frog] engages in operations transforming *inputs* of air intro strange songs that attract mates" (39). When the

[1] Bryant leaves the matter of "fundamental or elemental machines" to be settled by empirical means (75).

frog exhales, it is an output. This flow only becomes an input once it is operated upon by another machine, such as a tree. An output produced by Machine A becomes a flow which is treated as an input for Machine B, assuming the latter is open to it.

What is openness in this case? All machines are "structurally open and operationally closed" (54). They are *open* in that they may respond to flows and *closed* in that they never engage with flows directly—as if they were "behind firewalls" (58). Moreover, machines are only "selectively" (56) open, meaning they may turn certain flows into inputs while performing no operations on other flows.

As an example, consider a rock. If a lion roars, the rock does not respond.[2] An antelope, however, is structurally open to a lion's roar: it possesses the needed mammalian features to turn it into an input. Because the antelope is operationally closed, it would parse the flow according to its own operations, treating the sound as a threat from a predator. Another lion, hearing the same roar, would understand that a mate is on the hunt. A flow emerging from one machine can become different inputs for other machines.

Finally, MOO highlights power dynamics between machines by considering their "gravity", which "refers to the way in which the structural openness, movement, and becomings of one machine are mediated by another machine" (193). Gravity can refer to the natural phenomenon, or to forces that are social, cultural, or political (194). A country's government could thus exert gravity on millions of citizens by passing or voting down a law. The release of a new smart phone might have a global gravitational impact. Earth's sun imposes its gravity because it "[serves] as a necessary condition under which life, technology, and social assemblages inhabited by humans among other things are able to exist" (202). Gravitational impact, like operational closure and structural openness, may vary from

[2] A simplification used for the sake of clarity. More accurately, the rock would be affected by vibrations in ways that are difficult for humans to perceive. It would also perform operations in response to rain, the sun, or numerous other machines. Besides MOO, Karen Barad's agential realism and Bruno Latour's actor-network theory are two frameworks that could be used to consider such relationships.

machine to machine. A cricket tournament may capture participants and fans while having no impact on someone unfamiliar with the sport.

Other terms and concepts from *Onto-Cartography* will be called upon during the analysis. They will be briefly defined and applied as they become relevant.

2.2. Ontological Horror

The term *ontological horror*, in the field of horror studies, does not have a standard definition. However, the different criteria listed by critics share a similar axis. S.T. Joshi, the most renowned scholar of H.P. Lovecraft, describes it as "horror at the perception of some violation of natural law in the external world" (191). Matt Hills sees it as the moment "when an accepted/interpreted narrative 'reality' is instantaneously revealed to be either one 'subjective' level nested within an alternative, 'objective' reality … or a radical misinterpretation of diegetic ontology" (41). Joel Lane suggests that this horror implies "that human beings cannot use their own nature as a key to the reality that surrounds them". Horror arises when a text "forces us to change perspective" and brings "the reader face to non-face with the unknown" ('This Spectacular Darkness').

Ontological horror is thus what happens when a Cartesian subject's perception of how reality is structured—or what it contains—falls apart. This breakdown occurs when the subject encounters its own perceptual limits or when the awareness of a new reality, deemed more accurate, emerges. Emmanuel Levinas' consideration of this event adds important criteria:

> it is not we who "rustle" but Being. Horror is not an emotion a human being feels in the face of something terrifying, impure, or dreadful; it is rather a phenomenon of Being itself … In the encounter with the *il y a*, conceptual

> distinctions like subject and object break down, so that horror belongs to … an "existence without existents" (qtd. in Santilli 181)

As a result, "the standard symbolic forms by which we orient ourselves in the world melt down [and] our very consciousness of being a distinct self collapses" (181). Consequently, ontological horror may also lead to the erasure of the traditional subject itself.

To clarify the aim of this paper, no attempt will be made to portray *Blindsight* as frightening in the same manner a horror movie may be to some viewers, nor will the novel be associated with the extremes of Ligottian pessimism. Instead, this machine-oriented examination will focus on the numerous parts and arrangements of a dark assemblage that exhibits the criteria listed here: natural laws being challenged, realities that are inaccessible or shown to be false, perceptual limitations, encounters with the unknown, and a shattering of the subject-object dichotomy.

3. *Blindsight*'s Universe: Of Vampires, Aliens, Transhumans, and AIs

Blindsight's prologue leaves little room for optimism. The novel's first-person narrator, Siri Keeton, is "trapped in a coffin falling past the edge of the solar system" after a "disastrous encounter with the Scramblers" (Watts 10).[3] Earth, his destination, suffered a "worse fate" (10) than whatever he experienced. The story is therefore a series of analepses leading up to this moment.

The novel is set towards the end of the 21st century in a society in which humans, transhumans, posthumans, artificial intelligences (AIs), and vampires co-exist. The terms *transhumans* or *cyborgs* will be used to refer to humans who merge with technology to enhance their powers. *Posthumans* will describe any being "that comes from a human but isn't human anymore" (Cisowska 9-10)—in this case, the occupants of a virtual reality called Heaven. Watts' vampires are non-supernatural apex predators that once roamed the Earth before going extinct. Due to their intelligence and unique senses, they were resurrected via "the voodoo of paleogenetics" (Watts 12) to serve mankind.

After alien probes unexpectedly scout the Earth, a team is assembled to find their source. To carry out the mission, a cutting-edge ship named *Theseus* is built and paired with an AI system. A team of five boards *Theseus*: Siri Keeton, an interpreter with a half-synthetic brain, whose role is to interpret data and share his findings with his superiors on Earth; Isaac Szpindel, a biologist and physician, whose senses are wired to *Theseus*; Major Amanda Bates, a soldier in charge of controlling robotic troops; Susan James, or "The Gang", a linguist split into four different personalities; finally, Jukka Sarasti, a vampire, who leads the transhumans. *Theseus*' AI—referred to as the Captain—spends most of the novel only

[3] This is the only instance in which Peter Watts capitalizes the species' name, after which they are always referred to as "scramblers". This thesis will thus rely on the lowercase spelling. Following Watts' own formatting, the names *Theseus* and *Rorschach* will always be italicized.

interacting with Sarasti behind closed doors. Replacements for the transhumans—a spare crew with similar powers—sleep in cryogenic coffins aboard *Theseus*.

Blindsight follows what Noël Carroll's *The Philosophy of Horror* calls a "complex discovery plot", comprised of "onset, discovery, confirmation, and confrontation" (106). The alien probes serve as the onset. The discovery and confirmation steps occur when *Theseus* locates the probes' origins: a colossal alien entity. Once communications are established, the being labels itself *Rorschach* and warns the crew to stay away. Unconvinced by *Rorschach*'s threats, the crew decides to explore its confines—first via probes and Major Bates' grunts, then by entering the artefact themselves. They encounter a species they call "scramblers"—multi-armed, hyper-intelligent aliens who live inside *Rorschach*—and manage to capture two of them. Isaac Szpindel, killed during one of the excursions, is replaced by his backup, Robert Cunningham. As the crew studies the scramblers, the confrontation between *Theseus* and *Rorschach* escalates. The transhumans realize that neither the scramblers nor *Rorschach*, despite their intelligence and strengths, are conscious at all. The last third of the novel involves numerous discussions amongst the characters about the nature of sentience. The stand-off between humans and aliens turns into an all-out war. As *Theseus*'s crew makes its final stand and hundreds of scramblers swarm the ship, Siri is forced into an escape pod—his "coffin"—by the ship's AI. His final order is to warn mankind of what the aliens are capable of. An explosion engulfs both *Rorschach* and *Theseus*, and the conflict's sole survivor drifts towards Earth.

Finally, a crucial note must be made about the narration. Siri, as a synthesist, is meant to be a neutral observer—emotionless to the extreme yet savant-like. However, his first-person, past tense voice does show emotion and empathy. This is because Sarasti, ostensibly unable to contain his vampiric urges, brutally assaults Siri while the crew studies the scramblers. The attack is so traumatic it reverses the narrator's upgrades: in losing his

transhuman powers, he is “humanized” (Watts 305) and given the opportunity to feel once again. Since the narration occurs long after this incident, the novel’s events are recounted by a character who is “as blind” as unmodified humans (302). At best, he emulates and paraphrases his synthetic mind’s past findings. The far-reaching implications of this narratorial slant, as well as the motives behind Sarasti’s attack, will both be explained during this thesis. Until then, Siri’s own caveat should be kept in mind: “Point of view *matters*” (10).

4. Analysis

4.1. An Onto-Cartography of Non-Human Machines

"It was the backdrop, not the players, that stole the tableau." (Watts 298)

Blindsight's opening lines give center stage to non-human machines: "It didn't start out here. Not with the scramblers or *Rorschach*, not with Big Ben or *Theseus* or the vampires. Most people would say it started with the Fireflies, but they'd be wrong. It *ended* with all those things" (6). An ontological shift is infused into the narrative with the final sentence: *things* rather than traditional subjects are given distinct identities and a considerable agency due to their capability to bring about an *end.* These assemblages emit manifestations that challenge human exceptionalism and, in some cases, are outright hostile towards the protagonists. To understand why these entities matter, an onto-cartographic sketch is required. Some machines will be classified by kind and gravitational pull, while others will be considered according to their powers and local manifestations. The Fireflies, whose arrival has an extensive impact on mankind, will be investigated first. Then, Big Ben—a stellar anomaly—will be discussed as a colossal machine whose flows nonetheless elude human biology and technology. Third, *Theseus* and *Rorschach* will be shown to be machines and worlds equally capable of unsettling the characters' statuses. The final part will be dedicated to the scramblers, whose alienness will be explicated. Sarasti and *Theseus*' AI captain, while central to the novel, will only be brought up peripherally. Their roles will be examined more thoroughly in the second half of this thesis.

The Fireflies belong to a unique onto-cartographical category: "rogue objects", who are defined by their unexpected emergence and their ability to "reconfigure gravitational relations between entities" (Bryant 209). Their arrival is as abrupt as it is intimidating: these

"65,536 probes" burst into being, deploying themselves around the Earth in a grid-like pattern before combusting (Watts 25-26). During their ephemeral appearance, "pedestrians on all sides murmured in astonishment and stared open-mouthed at the sky" (25). Two months after the event, dubbed "Firefall", the aliens' gravity persists: the world's economy is rearranged, and post-orbital dwellings and space-faring vessels are pre-emptively armed (30).

This means that the Fireflies' are not only rogue objects, but the local manifestations of a mysterious assemblage responsible for dispatching them. Their gravity thus produces "relative dark objects" whose powers are concealed for some machines while being present for others (Bryant 200-201). Whether aliens exist as material entities does not matter: an incorporeal machine—the *assumption* of an alien threat—proliferates through society, and it is no less substantial. This entity, while mostly swathed in darkness, provokes another gravitational pull in the form of *Blindsight*'s first major ontological attack on humanity:

> now we were all cavemen again, huddling beneath some overhang while lighting split the heavens and vast formless monsters, barely glimpsed in bright strobe-frozen instants, roared and clashed in the darkness on all sides. There was no comfort in solitude. (Watts 27)

"We were all in it together" (30), Siri claims later, but any glimmer of hope is eclipsed by the feeling of near-cosmic horror evoked by these lines. If this first-contact scenario unites human beings, it only does so by demoting them to the status of "cavemen" surrounded by mysterious, startling phenomena. The metaphor, given its context, reflects the magnitude of Firefall. Although the event transpires early in the novel, the readers know by then that this society is advanced enough to engage in interstellar travel. Relative darkness, as a nexus of unexpressed powers brought forth by limited manifestations, is not inherently

threatening or impactful. In this case, however, a single manifestation is potent enough to amplify the unknown and its capabilities. The consequential gravity initiates a series of "incorporeal transformations", which do not materially change a machine but other machines' relations to it (Bryant 129). Here, mankind's sense of itself and the universe morphs: if humans are cavemen, it is because their understanding of intellect and technological advancement has been suddenly nullified (Watts 62).

A few months after Firefall, Siri and three other transhumans board *Theseus*, skippered by Sarasti. Upon waking up from cryogenic sleep, Siri realizes he has "overslept by almost five years" (13). Analyzing telemetric data, the crew later understands that *Theseus* changed course, roped in by Big Ben's gravity (42). *Theseus*' equipment depicts Big Ben—a massive astronomical body—as "a black disk, a round absence of stars" but the characters know it is heavier than "ten Jupiters" (41). Big Ben asserts the technological chasm between the aliens and humanity. Despite its astounding weight, the object exists, for *Theseus*, at "the threshold of certainty" and proves difficult to locate even amid "a thousand telescopic snapshots … squeezed through a dozen filters" (41). On the other hand, it is treated as a malleable medium by *Rorschach*, who hovers close enough to bury its telemetric signatures in Big Ben's electromagnetic waves (74). In the novel's final pages, the alien artefact even harnesses the subdwarf object's energy and turns it into a "magnetic cannon ten thousand times stronger than nature gave it any right to be" (298).

Big Ben also stresses the perceptual limits of the human body. As Siri ventures outside of *Theseus,* Big Ben appears invisible despite its proximity:

> close enough to touch, the endless dark cloudscape of Big Ben: a great roiling wall extending to some flat distant horizon I could barely grasp even in theory.

> When I focused it was dark and endless shades of gray—but dim, sullen redness teased the corner of my eye when I looked away. (278)

While Siri knows there is an object before him, he finds himself limited both in his structural openness and operational closure. Most of Big Ben's flows are not turned into inputs, instigating a rupture between material reality and the reality experienced by the observer. Siri does catch a glimpse of the infrared spectrum, which is only a fractional manifestation and not the machine itself.

Soon after, the character is given another chance to observe Big Ben, this time through specifically-attuned filters. His shock is subtle, but significant:

> A thumbnail inset caught my eye with a flash of color. At my command it grew into a swirling soap bubble, incongruously beautiful, a blue-shifted coruscating rainbow of blown glass. I didn't recognize it for a moment: Big Ben, rendered in some prismatic false-color enhance I'd never seen before. I grunted softly. (282)

The first passage evokes a sense of the sublime, channeling the thing's "unboundedness" (Kant 98). The second, however, is a translation of Big Ben's local manifestations via technological media. If the sublime does not manifest itself through high-tech renders, it is because it is a byproduct of human constraints. Additionally, Major Amanda Bates points out that this holographic display is a simile of what cats and vampires see (Watts 282). If Siri does not immediately recognize the "other" Big Ben, it is because the comparison emphasizes what Graham Harman calls phenomenological gaps between beings. This moment highlights a "vertical gap" between a withdrawn object's qualities and its

sensual properties (31). While no lifeform can access Big Ben's real qualities, felines, vampires, and the computer interface all manage to discern some of its sensual qualities—most notably, colors and shape. Humans, at the bottom of this phenomenological hierarchy, are left with nothing but a nebulous gray-scape that clashes with their awareness of the withdrawn and stresses their limited access to the sensual. Siri, briefly granted a new structural openness, wonders almost wishfully if "*Rorschach* might be a work of art through eyes like [those of cats and vampires]" (Watts 282).

Given *Rorschach*'s monstrous appearance, the statement is drastic. In describing the entity, Siri invites his addressees to:

> Imagine an artefact that embodies the very notion of torture, something so wrenched and disfigured that even across uncounted lightyears and unimaginable differences in biology and outlook, you can't help but feel that somehow, the structure itself is in pain. (100-101)

Unsurprisingly, *Rorschach* is *Theseus*' antagonist—the two machines locked in a tense two-hundred-page stand-off with Big Ben as their backdrop. They are worth comparing for two reasons. First, most of the novel unfolds aboard *Theseus* and, when it does not, its protagonists are either exploring *Rorschach* or in open conflict with it. Second, the two entities are more similar than they may appear at first glance.

The *Rorschach-Theseus* dyad is examined by Netty Mattar, whose thesis on technological prostheses in speculative fiction depicts the machines as clear opposites. Thus, the crew's first excursion into *Rorschach* is seen as "a descent into the grotesque, viscous subterranes of being" (Mattar 82). The vessel harbors "unclean and uncontrollable physical processes" and an architecture that suggests "baser bodily functions" (82). *Theseus*, on the

other hand, is portrayed as a "reassuring space … delineated in the precise language of technoscience" where tensions between machines, humans, and vampires have "become rationalized by science" (81-82). In short, the former stands for the biological and its grimier processes, the latter is the purity of technology, capable of subsuming the lifeforms that engage with it.

Indeed, *Rorschach* is portrayed in ways that, at times, border on the scatological. Mattar's vision of *Theseus*, however, is problematic. Granted, both entities are noticeably different in their manifestations, but *Theseus* could only display such technological serenity if it were considered in a vacuum, *Theseus qua Theseus*. Furthermore, the two entities are not only machines: they also function as worlds, "ecolog[ies] of loosely coupled machines linked by machines without any of these machines totalizing world" (Bryant 114). Worlds are arrangements of *detachable* machines where separation does not result in destruction (123). This distinction between machine and world underlines why *Theseus* cannot be, once inhabited, the congruent space described by Mattar. Instead, we must treat *Theseus* and *Rorschach* as double systems (each as-machine and as-world) with their own ways of doing, mediating, and worlding.

Theseus-as-machine does have an accommodating architecture. However, its design is the result of "negotiations" (19) between engineers and the material available to them. Rather than being passive tools, creations may restrict their creators in return (22). This is especially true of *Theseus*: the machine, by its structure and powers, decenters the life forms on board. The ship's essential parts are the assemblages that keep it functioning, including its advanced AI system, and no more. *Theseus* oversees itself: it needs "no regular crew" and "no meat wasted on tasks that machinery orders of mag smaller could perform orders of mag better" (Watts 40). The relationship between crew and ship is highly asymmetrical, with humans downgraded to the rank of "meat" as a result. Siri even stresses that he and the others are only

present “because nobody had yet optimized software for First Contact” (40). *Rorschach*-as-machine also operates independently and, moreover, its manifestations are lethal for human beings. The scramblers’ domain abides “no earthly form of life” due to its “topographies of radiation and electromagnetic force”, some of which would “turn unshielded flesh to ash in an instant” (105). *Theseus*, like its counterpart, has biotechnological “body parts” (17), including a “spine” (18), a “belly” (54), and “eyelids” (20). When it assembles Amanda Bates’ robotic grunts, it “births a litter” (106). A probe waiting to be dispatched from its facilities is “incubated” (96). Finally, Siri continually refers to *Theseus* as a “she” (15, 20, 87). These anthropomorphic examples are certainly less repulsive than *Rorschach*’s grotesque body-horror, but the organic language shows the vessel is not a sterile technological product. Equally important, the organic is not neutral but gendered. *Theseus*, with its ability to make autonomous decisions, care for its crew, and give birth, is perceived as having a matriarchal authority. The transhumans are thus a medium for their own creation. Worse, a *backup* medium, mere “ballast” (54) until *Theseus* deems them useful.

Theseus-as-world is a flexible, temporary ecology—what Bryant and Timothy Morton call a “mesh” (qtd. in Bryant 122)—comprised of the ship and its crew, which are detachable. This dynamic becomes problematic given the environment beyond the world. For the protagonists, to venture outside of *Theseus* implies destruction from the vacuum of space or *Rorschach*’s hostile manifestations. *Theseus* does shelter the machines living within its structure, but also traps them within it. Once again, we witness an asymmetrical relationship: both vessels can withstand the mesh around Big Ben, while the humans’ need of *Theseus* is vital.

This relationship is complicated further since *Theseus* is not a harmonious world. Siri sees *Rorschach* as “haunted” (Watts 130) due to the hallucinations he experiences while exploring its confines, but so is *Theseus*. Not only does Siri bring specters back in the form of

radiation-induced dementias (159), the ship's ecology itself is volatile because it harbors the undead and ghostly apparitions. Sarasti, the ersatz leader, is a vampire. The rest of the crew behave as prey forced to share territory with a predator, his "empty coffin gaping at the end of the row" (14) enough to alarm them. The vampire wears a "dark wraparound visor" (18) to cover his yellow eyes, lest his quarry freeze out of sheer terror. Szpindel discreetly suggests during a meeting attended by Sarasti that "maybe the bloodsucker just gets off seeing all this meat" (40). Again, a return to humans as mere "meat"—now subordinate to both technology and vampires. *Theseus*' ecology is also repeatedly intruded upon by the scramblers. Their role will be considered in the next section, but it must be stressed that they begin haunting *Theseus* long before its crew even acknowledges their existence. A scrambler materializes as something "*out of place*" (92) that pops in and out of Siri's vision before disappearing. It reappears later, revealing "too many joints" and a "dark bulk" (144) before vanishing once more.

Consequently, *Theseus* and *Rorschach*—while antagonists—are not true contraries. Rather, they embody Coleridgean dialectics: different yet "of the same kind", they "inhabit the opposite banks of the same stream" (Coleridge 149–150). Their virtual proper beings may differ, but the operations in which they engage and their gravity as both machines and worlds repeatedly undermine the characters' positions.

Although the scramblers will be examined independently of *Rorschach*, it must be noted that both assemblages share similar traits due to their relationship: the larger machine "grows its own crew" (Watts 205), not unlike Bates' automata being spawned by *Theseus*. Siri, as a result, has trouble acknowledging the scramblers as lifeforms, but Cunningham challenges this anthropocentric view by presenting his own flat ontology. Humans and scramblers are carbon-based "biomechanical machines" and life is "a matter of degree" in which no assemblage, including technological ones, is unnatural (209-210). Therefore, the

scramblers mirror the crew, and the *Theseus-Rorschach* conflict is reproduced on a smaller scale. The creatures challenge humans not only due to superior powers but also by their alienness—a criterion that sets them apart from vampires and carries significant implications.

Alienness is first encountered in a machine's "qualitative manifestations", its observed qualities such as "color, shape [and] texture" (Bryant 42-43). While inside *Rorschach*, Major Bates orders Siri to stop moving. What lies before him is "some *thing* like a rippling starfish with too many arms" (Watts 183). Bates' grunts shoot it down, and the remains are described as a "hydra of human backbones" (184). These jarring properties reappear as the scrambler is dissected. Its body parts include "bladders that stiffen or relax each segment in the arms", "a pneumatic internal skeleton", and "*cloacae* [through which to] eat, breathe, and defecate" (186). Graham Harman's concept of gaps applies once more: instead of vertical gaps, the scramblers are described using "cubist" gaps where "language is overloaded by a gluttonous excess of surfaces and aspects of the things" (25). The sensual properties experienced and conveyed by a human observer, rather than coalescing into some homogenous whole, present conflicting elements. Here, OOO and MOO must be connected. Although a machine can make inferences about other assemblages, the process may cause issues. Powers and manifestations, when erroneously inferred, turn into assumptions about a machine's doings—an "epistemological closure" (Bryant 60). With regards to aliens, humans necessarily suffer from such closure. Siri's ex-girlfriend, Chelsea, points out that memories are akin to "impressionist paintings": estimations jerry-rigged because the brain relies on "building composites" (Watts 136). This may be the case, but it must be stressed that while a composite is original, its parts are an amalgamation of existing data.

However, there is no previous data for the scramblers. Alien machines are subsequently reduced to familiar inputs—both sensually and linguistically—due to their observers' operations and lack of fitting semiotic machines. Thus, the scramblers are only

"like" starfishes and have "too many" arms in comparison. Traits accepted as normal in one machine seem wrong when ascribed to another. This holds true for *Rorschach* as well: its embodiment of human-defined notions of "torture" and "pain" cannot originate from the machine itself. Physical alienness (and the horror or repulsion it may evoke) is produced by the operational closure of human beings, a chaotic collage of metaphorical approximations and recognizable properties compiled in seemingly-unnatural or frightening ways.

Beyond physicality, the scramblers' alienness is unnerving because, like the Fireflies, they are dark objects that abound with dormant powers. At times, the darkness ebbs, only to unveil tremendous manifestations. These machines can withstand the vacuum of space (187), "live and breathe" electromagnetic radiations (239), spend their lives sprinting (209), and can turn invisible by exploiting flaws in the human visual cortex (237). They are also intelligent enough to communicate among themselves and conceal that fact (218), leading James to conclude the creatures are perhaps "smarter than [Sarasti]" (222). The threat posed by the unknown worsens when Cunningham realizes the specimen he is dissecting is only a "juvenile" and even "stupid", leading the scientist to tell Siri the aliens are "so far beyond us that even their retarded *children* can rewire our brains on the fly, and I can't tell you how fucking scared that should make you" (238).

Alienness is a trifecta of doings interpreted by humans: qualitative manifestations perceived as abnormal; manifestations that surpass the observers' or threaten them; and tentative powers likely to match or exceed those already exercised. Startling surface qualities swirl around a core that always seems to contain *more*. The narrative methodically draws from this reservoir of latent manifestations, toppling inferences made about the scramblers and replacing these deductions with even more dismaying alternatives. In the end, a species of pseudo-starfish towers over humans—and perhaps even vampires. This amplificatory process also bolsters *Rorschach*'s position, whose powers become almost unfathomable by

comparison. Cunningham, trying to describe the alien arrangement, concocts a twisted bee-honeycomb metaphor in which "*Rorschach* is the bees" and the scramblers, although hyper-intelligent, are only a kind of invasive, detachable honeycomb (224).

Having discussed the non-human machines found in *Blindsight*, two important conclusions must be drawn. First, if Harman sees horror-inducing gaps in Lovecraft's weird tales, an onto-cartographic approach reveals that Watts' novel is chock-full of operational and structural gaps. Humans, as cognitive assemblages (Bryant 30), are forced to acknowledge these gaps when they interact with the doings of others or perceive as others. Manifestations that are lethal, scary, or imperceptible for one entity may be none of those things for another. Consequently, any assumed primacy about human ways of sensing and doing is obliterated and replaced by a multiplicity in which, as per MOO, all things also *do*. The second conclusion derives from the first. A flat ontology does not entail equivalence between systems. In a universe where "[t]hings equally exist, yet they do not exist equally" (Bogost 11) and cognitive assemblages grow aware of that fact, an ontological ranking emerges. A decentering has occurred and, as seen so far, humans consider themselves inferior to aliens, vampires, and their own technology. Big Ben, whether grasped or exploited by other machines, becomes a scale by which humans measure themselves. Therefore, a question must be addressed: can humans ever bridge these gaps and match the doings of other machines?

4.2. The Horror of Being Human

"You think you'd be able to fight the strings? You think you'd even feel *them?"* (Watts 241)

Human beings, in *Blindsight*, did not wait for the emergence of an alien threat to engage in trans- and posthumanism. Vampires were wiped off the map once humanity began relying on "Euclidean architecture" (312), right angles causing the creatures to seize due to a malfunction in their visual cortex.[4] Human civilization subsequently climbed to the top of Earth's food chain thanks to its powers and reliance on technological media. However, it hit a barrier at some unspecified point in the 21st century:

> We've surpassed ourselves now, we're exploring terrain beyond the limits of merely human understanding. Sometimes its contours, even in conventional space, are just too intricate for our brains to track; other times its very axes extend into dimensions inconceivable to minds built to fuck and fight on some prehistoric grassland … We have such need of intellects greater than our own. (36)

These greater intellects come in two forms: AIs and resurrected vampires. Baseline humans, as "barely-intelligent creatures" (36), cannot understand the former. Vampires represent a threat, hence why they were brought back with the "Crucifix Glitch" (86) intact to ensure obedience: their survival depends on medications that fix the anomaly. While meant to be servile, these machines become problematic models of what humans could—and perhaps should—be. As a result, humans modify themselves—with lackluster results. As Siri

[4] A rationalistic take on vampires that explains their fear of crosses. Similarly, the creatures are not truly undead. They may enter long periods of hibernation, a trait that prevents them from hunting prey into extinction (309-312).

confesses, "[m]aybe the Singularity happened years ago. We just don't want to admit we were left behind" (37).

The transhuman protagonists do benefit, to a certain extent, from their alterations. Each has access to unique powers: Isaac Szpindel "hear[s] x-rays and [sees] in shades of ultrasound" (85); Susan James' multiple personalities give her "obvious survival advantages" (125) as well as linguistic ones; Amanda Bates controls an army of robotic grunts (106-107); and Siri's split brain turns him into a data parser, a mix of "profilers and proof assistants and information theorists" (36) capable of operating on flows inaccessible even to his shipmates. It is worth repeating that Siri, due to Sarasti's attack, no longer has this capability by the time he narrates the story.

However, these modifications come with their own "machinic problems" (Bryant 79). A coupling's parts are "structurally open and operationally closed *in their own right*" (79; emphasis added), creating frictions in an assemblage. To mention a few, Szpindel's "motor skills [have] degraded for want of proper care" and he is "so corrupted by retrofits he [can] no longer even feel his own fingertips" (Watts 85). Bates' issues are more psychological than physical: she knows her robots are hampered by her response time, making her the weak link in the coupling (150). While Siri may be able to decode complex flows, this talent requires him to be impartial. The hemispherectomy that led to his upgrade also neutered his emotions (7).

Rather than painless shifts into new assemblages, *Blindsight* depicts the emergence of powers through a series of "mutations": descriptions that reveal "the pain and difficulty of the flesh in becoming its ontological Other" (Campbell and Saren 165). Granted, this is not always the case: the traumatic potential of transhuman modifications varies based on the extent to which a person is altered. In an ideal scenario, a human-machine assemblage acquires powers with no drawback. The best example might be Susan James, the only

character Siri "trust[s] to speak for herself" (Watts 170). The Gang's personalities frequently switch places, seamlessly controlling one body to voice their expertise or opinions then receding to the background when other selves wish to be heard. The enhancement is so stable the selves even date different people (67). Susan's modifications, however, are refinements of pre-existing capabilities: the human brain already has the plasticity required to contain multiple personae (126). Similarly, subtitles that pop up in a character's field of vision and provide real time definitions have no noticeable downside: they are simple visual add-ons (88). If these upgrades function, it is because they tweak powers the baseline already has—extensions rather than additions. Siri and Szpindel, whose modifications are more drastic and absent from the baseline, simultaneously gain and lose powers. Transhumanism, once pushed far enough, is never a direct upgrade. What Bryant labels "possible becomings" (24) are simultaneously *un*becomings where virtual proper beings do not expand but only espouse different shapes.

Campbell and Saren similarly claim that "horror accompanies the posthuman when seemingly immutable spaces are crossed between boundaries (animal, human, inanimate or technical)" (175). Indeed, but these spaces are not solely found in the corporeal realm: horror also arises due to incorporeal hauntings. Isaac Szpindel's motors skills have only "degraded" and he is "corrupted" by technology because there exists an awareness of what the scientist's pre-mutation powers were, and a comparison is drawn between his past and present selves. Similarly, Siri remembers his pre-surgery body as a different entity, a child capable of emotions and whose "world had been vibrant" (Watts 288). Incorporeal machines' most distinct feature is their ability to be "multiply-instantiated, iterated, or copied while retaining their identity" (Bryant 26)—such as an equation being the same regardless of the medium on which it is kept. These machines may expire (by being forgotten and all their copies destroyed), but they are potentially eternal due to stored copies or iterations (26). Therefore,

the characters wrestle with incorporeal machines stored in their memories. These entities reiterate images of the characters' past selves that clash with their upgraded identities. Short of memory loss or limited becomings, transhumans have no choice but to exist in a state of perpetual tension, an unstable "symbiogenesis" in which assemblages must wrestle with a multitude of selves (Lynn Margulis, qtd. in Bollinger 35). Symbiogenetic neuroses do happen in baseline humans, but the transhuman body exacerbates these crises due to the radical changes it undergoes (36-37).

Furthermore, these tensions are not restricted to individuals and their self-perceptions. Instantiations of the "human body", as a broad concept, are reiterated by the assemblages that compose society. These inferences exist because mankind has witnessed its members' manifestations for millennia. Regardless of cultural and genetic specificities, one thus expects human beings to breathe oxygen, possess certain organs, require food, etc. However, the arrival of cyborgs entails unforeseen deviations in powers, operations, and ranges of openness. Since "the man who rides the horse and the man-horse-stirrup-lance are two distinct individuals" (83), new entities enter the plane of content with each new machinic coupling. In contrast to *Rorschach* and the scramblers' alienness**,** society has had time to generate new semiotic machines to label assemblages based on their capabilities. Siri is formally called a "synthesist," but he is also a "*jargonaut*," a "*commissar*" (Watts 36), and even a "zombie" (7). Susan James may be a linguist, but she and her other personalities can be referred to as "alters" (124), a demeaning truncation of *alter ego* that deprives James of the self and reduces her to an assortment of others. Unmodified humans are "baselines" (5), and cyborgs are perceived as "freaks" (306). These terms are not professions or social classes, but ontological categories and insults. They reflect an otherness, a physical and cultural hierarchy between a species whose alleged uniformity has been fractured by technology. Granted, *Theseus*' hybridized group occasionally appear as equals when they

"convers[e] in grunts and gestures that would be meaningless to any baseline" because "once you get past a certain point, formal speech is too damn slow" (170). Such instances are rare, and even this brief homogeneity cannot help but otherize baseline humans.

Siri's mention of getting "past a certain a point" is worth paying attention to. If cyborgs consider themselves to have evolved past the baseline, they have yet to evolve enough. Cunningham stresses that fact while confirming the ontological order seen so far:

> Nobody *forced* me to get the rewire. I could have just let them cut out my brain and pack it into Heaven, couldn't I? That's the *choice* we have. We can be utterly useless, or we can try and compete against the vampires and the constructs and the AIs. And perhaps *you* could tell me how to do that without turning into a—an utter freak. (211)

This order is also reflected in the military hierarchy aboard *Theseus*: no baselines on board, and the transhumans are subordinates to Sarasti and the Captain, whose authority is—seemingly—more of a background process. Based on this paper's discussion of the scramblers and the *Rorschach-Theseus* conflict, alien machines should be placed at the top.

Heaven's residents are dismissed for a specific reason. Granted, Heaven's gravity is strong: it entices and challenges mankind by offering a questionable form of digital immortality. However, Heaven is a flawed construct. Siri's mother, as a resident, is "only talking to herself" and aware of the existence of "other realities over which she [has] no control" (119). Indeed, this virtual landscape is fragmented into a constellation of sub-worlds where each bubble is a fantasy designed to entertain its resident. Other humans can briefly visit these worlds via technology but the posthumans, having abandoned their bodies, never return to the external world (22). After Firefall, Siri calls Heaven's denizens "the Tribe that

Just Didn't Give A Shit" (64) since they do not experience the planet-wide panic or help humanity mount a response. Hence, Heaven is an escapist retreat from society's shared reality, and its members have detached themselves from the human-AI-vampire mesh.

If the aim of human machines is to keep up with non-human machines, what prevents them from doing so? Certainly, cyborgs face machinic problems. Given enough time, however, society could overcome biotechnological conflicts. Incorporeal machines would morph, and the rifts between human ontologies would shrink or disappear. The problem of power must therefore be complicated. It could be argued that a *beneficial* power is one that allows an entity to avert destruction. That power's value, accordingly, depends on a machine's environment and the world it inhabits. Or, as Sarasti states, "There is no such thing as *survival of the fittest*" but only "*survival of the most adequate*" (257-258). Manifestations that result in dominance in one world may be irrelevant or incapacitating in another. One must then ask if *Blindsight*'s mankind, suffering from confirmation bias, mistakenly considers one of its powers to be universally beneficial when it is only locally so.

The novel eventually asserts that that power is sentience. The issue of consciousness, what Peter Watts calls "the heart of the whole damn exercise" (323) in his notes, becomes *Blindsight*'s focal point. As seen in the first half of this paper, non-human machines exhibit unique manifestations that are, from a human perspective, superior. However, what *Rorschach*, the scramblers, *Theseus*, and the Captain share is the absence of a power—or, seen from another angle, they have the power of non-sentience. Accordingly, Elena Gomel sees the "radically Other" as what drives us to "change out of existence" (181). *Rorschach* does so by being "an unconscious super-organism which destroys self-consciousness as automatically as leucocytes zeroing in on an infection", while Sarasti is "a textual mediator between human and alien … whose mind is much closer to the unconscious intelligence of the *Rorschach* than to the human, qualia-stuffed interiority" (182). Justyna Galant sees "the

alien entity … as the dreaded 'other' of consciousness, the finally substantiated metaphysical threat, whose monumental presence destabilizes the fundamental association between higher intelligence and sentience" (36). These observations are accurate, but nonetheless need to be expanded.

Human sentience, according to Sarasti, is a "little man" (Watts 253) who takes credit for operations he has not performed. Sentience behaves almost parasitically: a mechanism that sits atop non-conscious processes and "consumes ever-more computational resources" and "bogs itself down with endless recursion and irrelevant simulations" (255). Simulations, in this context, are a double process: the operations are performed by the physical mind, but they spread to the plane of expression, the Deleuze-Guattarian virtual which contains "semiotic machines and incorporeal transformations" (Bryant 128). In *Blindsight*, access to this plane is exclusive to human machines, leading them to question the species' ability to "turn a sunset into a string of grunts" (Watts 68). *Rorschach*, on the other hand, produces language without understanding it (94). While scramblers do engage in a puzzling form of communication, it appears to be a biological "data dump" of their sensorial inputs (230). Vampires are more complicated. Their brains are multi-threaded and capable of holding "*simultaneous multiple worldviews*" (46) while remaining "sentient to some degree" (305). This sliver of sentience allows them to communicate with humans, but they primarily rely on their non-conscious threads.

The power of the non-conscious is alluded to by the novel's title. Blindsight, a medical condition the characters contract when exploring *Rorschach*, highlights a rupture between conscious and non-conscious operations. As a result, a human machine believes itself to be blind while remaining capable of catching an item thrown in its direction:

> "Brain processes the image but it can't access it. Brain stem takes over."
>
> "Your brainstem can see but you *can't*?"
>
> "Something like that." (140)

The emphasis in this exchange between Szpindel and Siri should not be on the word *can't* but on *you*—the conscious self. In this case, operations carried out by the posterior part of the brain do turn external flows into inputs, but the operations are overlooked by the conscious mind. As a result, sentience imposes its own erroneous account.

Blindsight is an acute sign of a graver issue, and Galant soundly labels sentience a "creator of fiction" that prevents humans from accessing the same "ontological reality" as other cognitive machines (31). However, if Sarasti's explanations emphasize both the inefficiency and detachability of the conscious self (33), questions remain: why do the characters clutch to their fictive state, and why would consciousness create fictions?

Following the novel's logic, this is because "Brains are survival engines, not truth detectors" (Watts 242). Via series of complex operations and regardless of the associated costs, sentience safeguards its own existence. Whereas posthumans embrace flawed hyperrealities, baselines and transhumans wander through a "simulation built from assumptions" (254). As demonstrated, the plane of expression is reserved to humans. On the other hand, "most worlds are composed of content *alone*" (Bryant 126). Incorporeal assemblages do not exist transcendentally: they arise from the structure of a corporeal machine (e.g. a radio signal) and require operations performed by an observer in response. The problem lies in the sentience-induced inability to isolate the plane of content from the plane of expression. Siri acknowledges this flaw when he explains what his work as a synthesist entails: "People simply can't accept that patterns carry their own intelligence, quite

apart from the semantic content that clings to their surfaces; if you manipulate the topology correctly, that content just—comes along for the ride" (Watts 94).

Synthesists are therefore able to tap into the non-conscious and extricate information from the plane that—materially speaking—matters. Semiotic machines become secondary to the arrangements from which they derive. Siri, even before losing this ability, could not do it for *all* of reality, and other humans cannot do it at all. As a result, corporeal machines are continuously imbued or superimposed with incorporeal machines that do not change material reality itself but shape what is perceived**.** This was already seen in the body-horror of *Rorschach, Theseus*'s gendered body, or the scramblers' alienness. There was no possibility for the characters to see other machines solely as primarily content-based—as vampires, AIs, and aliens do. This form of data corruption is also tied to extensive reiterations: consciousness "model[s] the very *process* of modeling" (255), its meta nature leading it to both recognize itself and spread the model outwards. Trapped yet lacking the ability to "defocus" (253), humans end up processing other machines *and themselves* according to this deception.

Consequently, trans- and transhumanism are doomed endeavors because they attempt to enhance sensorial or non-conscious processes. Powers may expand, and a greater number of flows may be turned into inputs, but both will be inevitably corrupted by consciousness. The only way to progress would be to instead engage in a form of *de*humanism—the extrication of sentience. Yet, doing so is something the characters only contemplate in passing. Amanda Bates mentions humans "could engineer [themselves] back into nonsentience" before dismissing the idea as "not much of a win" (283).

This is because subjectivity emanates from the same manipulative source. As Sarasti puts it, "Metaprocesses bloom like cancer, and awaken, and call themselves *I*" (255). When Bates asks, "What's the difference between being dead, and just not knowing you're alive?"

(283), the horror of being human finally becomes clear: to stop *being aware* of being is equivalent to no longer being. While no corporeal destruction would take place, letting go of the plane of expression—where the notion of the *I* resides—is akin to destruction. An inessential part of the human assemblage, via its doings, deviously presents itself as essential. If consciousness were to be categorized, it would perhaps be accurate to see it as a "black hole", a machine "whose [gravity] is so great nothing can escape from it" (Bryant 207).

If, as Gomel and Galant argue, *Blindsight*'s aliens and machines function as the other of consciousness, then it is not simply by their non-sentience. Their otherness, to work as a decentering force, must first be deemed superior by the traditional subject. This is done, as demonstrated, by the efficiency, breadth, and impact of non-human manifestations. These doings are combined with trans- and posthumanism as evolutionary dead-ends, and a self-awareness that locks human beings in a pseudo-reality they refuse to forsake—even when they know of more materially-accurate realities. While the *I* remains, it is transformed in the process. For posthuman critics such as Katherine Hayles, the Cartesian subject becomes posthuman by being "a postconscious subject" (280), one who is aware that selfhood no longer entails conscious selfhood. This is true, but a machine-oriented approach reveals how *Blindsight* presents an even more radical view. In a flat ontology, a subject exists as a "catalytic operator that draws together machines in particular gravitational relations" (Bryant 219). The role is temporary, defined by the ability to orchestrate the doings of non-subjects and force them into specific arrangements—whether they know it or not.

Siri realizes who the subjects are towards the end of the novel. He acknowledges Sarasti and the Captain "were the real players" alongside *Rorschach* whose almost-prescient moves were calculated all along, while the crew were "just pawns" (Watts 303). This is partly correct. Sarasti succumbs to a seizure as *Theseus* falls apart. His liminal role is exposed in a gruesome act of ventriloquism: the Captain, to produce language, uses the vampire's corpse

like a puppet. Hence, Sarasti was a necessary decoy: a machine conscious enough to act as a medium, frightening enough to impose its gravity, and non-sentient enough to respect his place in the assemblage. Siri asks whether Sarasti was in control at any point, and the AI's reply establishes the real hierarchy in play: "U DISLKE ORDRS FRM MCHNES. HAPPIER THS WAY" (298).

This admission, combined with Siri's operational closure and structural openness, cannot but cast doubt on the entire narrative. Patrick Whitmarsh's remarkable analysis of *Blindsight* likens its structure to that of a Chinese Room, a thought experiment devised as a response to the Turing Test and used by the characters to explain how *Rorschach* creates language (242-243).[5] The experiment works as follows: a person locked in a room receives notes through the door. The notes are scribbled in a language the person does not speak. Inside the room lies an algorithmic device with countless reactive rules and archives that match the unknown language. By following the rules dispensed by the device, the person may therefore reply to the notes without understanding their content at all, giving the illusion of a conversation.

Thus Siri, by reporting events he does not understand, is a paradoxical narrator who defines himself as a Chinese Room (Watts 94). Named by Watts years before the release of Apple's virtual assistant, his function is eerily similar: an information-parsing and pattern-matching machine capable of generating natural language without comprehending it. As Whitmarsh astutely points out, Siri's parting words are an admission of his inability to narrate, and he leaves the story to be interpreted by his narratees. Similarly, each crew member was nothing but "a node in the network, a single neuron in the computational brain" incapable of seeing the whole system. (Whitmarsh 243-244).

[5] For a thorough linguistic analysis of the exchange between *Rorschach* and Susan James and whether the former could truly emulate human language on-the-fly, see Glaz 364-391.

While Whitmarsh focuses on the profound narratological ramifications of this structure, the ontological impact is no less substantial. As demonstrated, Watts gives primacy to the plane of content. The Chinese Room experiment, to be understood, must be re-considered through the eyes of a synthesist: by "inferring the machinery *beneath* from its reflections *above*" (Watts 233). Semiotic substance is secondary; what matters are flows of intelligence. Consequently, the machine outside of the room, regardless of what its notes say on the surface, is engaging in an exchange—intelligent *in itself*—with the algorithmic device. As a result, and while unacknowledged by the text, the *Theseus-Rorschach* conflict is yet another instance of the Chinese Room. The two entities are not only subjects but "speakers" whose opaque operations generate inputs and outputs in response to flows. The crew's agency, including the agency suggested by this paper's summary of *Blindsight*, becomes questionable, if not invalidated. Human machines may be in the room, but they are subservient to the algorithmic nexus that is the Captain. The crew perform a token job while believing they are essential to a conversation they cannot understand—a bitter parallel of their sentience, the homunculus standing between external flows and the brain's non-conscious operations while announcing its relevance.

In the end, Siri's coffin picks up dispatches from his home world: vampires are in the process of wiping out mankind. His encounter with the *il y a*, however, has changed him—a move towards postconscious subjectivity triggered by gazing into a void where "objects and subjects" dissolve and "nothing has an identity or a name except the pure nondifferentiated identity of Being" (Santilli 181). Although re-humanized, the ex-synthesist cannot express any sympathy for his kind. "We humans were never meant to inherit the Earth", he concludes bleakly, and what is happening is only "the righting of an ancient wrong" (Watts 306).

This void may not be as dismal as it seems. *Theseus* manipulated its crew for a reason, and the machine's final output could be seen, ironically, as humane—even with no

humans left to appreciate it. The ship, “until the last microsecond”, sends its data to Siri (299). This move could have been pre-programmed, or the result of the Captain’s emergent processes—a distinction Cunningham would sneer at. Yet this content, by itself, would not prompt the desired operations in its addressees. Siri may not comprehend it, but it is why the AI ordered the vampire to violently rewire the transhuman, long before non-starfish swarmed *Theseus*’ corridors and an alien behemoth transformed a subdwarf into a weapon. Siri’s operations had to match those of his species: the only way his flows could portray the fear and horror he experienced and be turned into inputs by the cognitive machines who hear—or read—his warning.

5. Conclusion

Some scholars and critics, embracing OOO and MOO, have started engaging in object-oriented literary criticism by treating texts as objects or machinic beings.[6] Having done so for the machines that populate *Blindsight*, it is only fitting to employ the same approach for this thesis. This produced artifact was assembled in a specific manner so that it may successfully generate a manifestation: a demonstration of how and why Peter Watts' novel has instilled a disquieting sense of ontological horror in its critics and readers. Accordingly, this text's essential parts grouped into two larger assemblages that work in unison: the first focused on non-human machines, and the second on human machines. To detach them, or reconfigure their parts, would result in the destruction of the intended machine, leaving a different one in its place.

The final construct is, admittedly, sub-optimal. While countless attempts at patching glitches were made, some may linger. More importantly, this text is not as it could be. Its restricted size led to the amputation of parts that were inessential and yet could have strengthened its manifestations. Most noticeably, its onto-cartographic approach is both partial and anthropocentric: limited to the most significant powers and pulls found in *Blindsight*, primarily concerned with their impact on humans, and only using Bryant's most relevant concepts. Aliens, vampires, AIs, and human beings would all benefit from a full onto-cartography, including a tracing of gravitational changes over time and between different entities (e.g. aliens and vampires), the eruption or dissolution of worlds, and the various kinds of entropic systems that exist. Alas, such a comprehensive mapping of Jukka Sarasti alone would demand dozens of pages.

[6] Notable examples include Grant Hamilton's *The World of Failing Machines* and Ian Bogost's *Unit Operations*.

Parts of this artifact can—and hopefully will—be salvaged and re-used in other assemblages. MOO, while still in its infancy, has shown that it can be employed to draw attention to numerous forms of power (corporeal, incorporeal, felt, imposed, perceived, self-perceived, etc.) and to break down assemblages and their relations into unexpected parts, paving the way for novel methods of criticism. New machines could examine *Blindsight*'s sequel, *Echopraxia*: a stunning story filled with vampires, parasites, zombies, and human hive-minds that rely on distributed sentience. More broadly, MOO's concepts could be applied to any literature that hinges on interactions between different kinds of cognitive machines. Genre fiction would strongly benefit, leading to an onto-cartography of the ambisexual aliens in *The Left Hand of Darkness*, a study of the relations between dwarves and elves in numerous works of fantasy, or by providing new considerations of the monstrous in horror novels.

A final note about this thesis-machine. However bleak and suspicious of the subject position its parts may seem, they were nonetheless fashioned with humans in mind—both fictional and non-fictional. The qualities attributed to non-human machines, in turn awe-inspiring, humbling, and terrifying, do not stem from an anti-humanist perspective—quite the contrary. If *Blindsight* is a vector map, its consideration of the future cannot help but reflect the present in which it was written: an early 21st century where AIs and automation will soon pull mankind into their gravity, and where biotechnological progress will challenge assumptions of what being human or being an "other" mean. While this machine itself is not a vector map, it may be used as a medium that helps interpret some of the map's symbols.

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