



*Vampyroteuthis infernalis.*  
From Carl Chun,  
*Die Cephalopoden*, 1910.

# Vampire Squid Media

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*What fascinates the photographer is not the photographic paper, the object, but the information transmitted. The photographic paper is for the photographer what the skin is for Vampyroteuthis: a medium for colorful messages.*

—Vilém Flusser, *Vampyroteuthis Infernalis*

Vampire squids are useful to think with. Combining the figure of the vampire—which Friedrich Kittler has already connected to media systems—with the tentacular body of a mollusk that lives in the underwater abyss, the vampire squid provides a potent form for imagining configurations of power, communication, and the opening or closure of freedom.<sup>1</sup> We might look to Matt Taibbi's *Rolling Stone* article that calls the investment bank Goldman Sachs a “great vampire squid wrapped around the face of humanity, relentlessly jamming its blood funnel into anything that smells like money,” conjuring an image of the vampire-as-rapist, one associated with Bram Stoker's nefarious Count Dracula.<sup>2</sup> Critiques of imperial, colonial, and corporate entities find easy analogy in cephalopod bodies, which are often used in political cartoons to depict unchecked power, greed, or libidinal energy.<sup>3</sup> The vampire squid body seems a ready-made villain, transporting mundane forms of power and control into the realm of fantasy and horror.

Figurations of the cephalopod body also speak to the ability of individual people to connect with one another in terms of movement, communication, and the erotics of touch.<sup>4</sup> For example, the prepaid card in Hong Kong that enables one to ride public transportation (metro, ferry, bus, minibus) or to make purchases at grocery and convenience stores is called an “octopus card” (八達通), where rail lines radiate from the center of the transit map like tentacles.<sup>5</sup> Tentacles also suggest the flows of interspecies sexuality, from the Japanese woodcut *Dream of the Fisherman's Wife* (1814) by Katsushika Hokusai to the anime/manga genre of hentai.<sup>6</sup> Hsuan Hsu points out that both Occupiers and hipsters have claimed the octopus to connote the values of interconnectivity and flexibility in social media.<sup>7</sup> Then again, so has the U.S. National Reconnaissance Office (NRO), which adopted an octopus logo with the motto, “Nothing is beyond our reach.”<sup>8</sup> In these varied examples, the figure of the cephalopod drifts between opening and closing channels of material interconnection, navigating the space between utopia and dystopia that is perhaps more akin to Michel Foucault's “heterotopia,” a multilayered site of cultural resonance.<sup>9</sup>

I now turn to the story of one particular cephalopod, the protagonist of Vilém Flusser's philosophical fable *Vampyroteuthis*

*Infernalis* (1987) or “the vampire squid from hell.”<sup>10</sup> Flusser’s fable broadly imagines the abyssal world of the vampire squid as a pretext for considering photography as a medium that marks a transition in society from valuing objects (like individual photographs) to the information transmitted (the film negative). The abyss dramatizes this condition, where inscription on paper or even stone tablets is eventually eroded by seawater or encrusted with growth. Flusser imagines that the recording of history will have to occur via inscription on subjects, or other vampire squid, rather than on external objects, through ephemeral media such as the squid’s skin (like photographic paper, “a medium for colorful messages”).<sup>11</sup> The deep sea models both the primordial past through the ancient *Vampyroteuthis* and an emerging future, or what Flusser calls “post-history,” where photographers create images that inform the behavior of future viewers such that “society is in a feedback relationship to the camera.”<sup>12</sup>

As fable and speculative fiction, *Vampyroteuthis Infernalis* is an oddity within Flusser’s broader oeuvre.<sup>13</sup> His writings typically appear as short, philosophical meditations on technology, communication, language, design, and the existential effects of migration. Flusser’s most well-known work, *Towards a Philosophy of Photography* (1983), approaches photography as such within a broader historical context of technologies; it presents a clear framework for how to think about photography not in terms of mimesis or capture but rather as the actualization of possibilities within the camera apparatus. Through its consideration of ideological function in relation to technological form, *Towards a Philosophy of Photography* adds to scholarly conversations around the materiality of media objects and what Katherine Hayles calls “media specific analysis” (MSA), analysis that attends to the specificity of form, user interactions, and the interpretive strategies the user develops.<sup>14</sup>

*Vampyroteuthis Infernalis* breaks from *Photography* in terms of genre and form (and also from MSA) by taking the abyss as a *literary environment* for media theory. Instead of delivering a tightly argued message or theory of how to think about photography, *Vampyroteuthis Infernalis* invents a creature and environment in which to gain critical distance. The “molluscan point of view” asks that we speculate how an intelligent aquatic organism would develop different concepts to orient itself to its world than those familiar to the dry landscapes of human thought.<sup>15</sup> *Vampyroteuthis Infernalis* thus offers a comparative epistemology between human and vampire squid, a creature providing “enough distance from the human condition to be able to observe it,” whose point of view is “not transcendent.”<sup>16</sup> Flusser describes his fable as both “scientifically exact and mad fantasy (*fantasia essata*),” musing that such a “philosophy of fantasy” could become a “discipline as rigorous as phenomenology.”<sup>17</sup> If fantasy is always a scene, we might say that the deep sea is a kind of darkroom where Flusser develops his thoughts on photography through the negative image of the vampire squid.

Yet the richness of the abyss as a diegetic world exceeds Flusser's prescribed intentions to talk about photography, spilling over into the wider terrain of philosophy. Flusser's ocean abyss serves as an epistemic medium for thought, bringing into relief what I diagnose as the *terrestrial bias of philosophy and critical theory*. Through a consideration of the vampire squid's liquid media in the benthic environment of the deep sea, I consider how the ocean environment changes the conditions of knowledge production. Beyond Clement Greenberg's medium specificity, or the relation of art to the unique nature of its medium, thinking with the ocean requires a philosophy that focuses on both the materiality of the environment and the perceiver attuned to it as conditions for thought.<sup>18</sup> What I term *milieu-specific philosophy* proceeds from the technique of critical displacement: *how would the conditions of knowledge about (x) change if you were to displace or transport it to a different environmental context?* Such a practice evolves from and goes beyond the media-specific analysis we see in *Towards a Philosophy of Photography*, stepping back from the technology itself and instead turning to the epistemological consideration of how thought emerges in relation to both body and environment. Instead of taking "inscription" as the primal scene of media theory as Flusser does in *Vampyroteuthis Infernalis*, I consider a more aquatic vocabulary of material historicity—washing, spilling, warping, residue—the qualities of what photographer Jeff Wall calls "liquid intelligence."<sup>19</sup> The question we should be asking ourselves after reading *Vampyroteuthis* is this: under what conditions have terrestrial knowledge structures evolved, and how would they appear radically different in an aqueous environment from the perspective of the vampire squid?

### **Situating *Vampyroteuthis***

While the vampire squid may seem an unusual vessel for media and cultural theory, Flusser's biographical history sheds some light on the key issues informing its genesis.<sup>20</sup> Vilém Flusser was born in Prague in 1920 into a family of Jewish intellectuals. He studied philosophy at the Charles University in Prague and in 1939 emigrated with his wife Edith to London to continue his studies on communication and language. Within the next year, his remaining family in Prague was deported to concentration camps, and in Buchenwald, Auschwitz, and Theresienstadt they were murdered. In 1941, Flusser and his wife left London and moved (migrated, escaped) to São Paulo, Brazil, where they stayed for the next few decades. The violence of the Holocaust, the abrupt loss of his family, sudden need to learn Portuguese, and process of adapting to Brazilian culture would inform his later writings. These challenges appear explicitly in *Freedom of the Migrant*, which explores the simultaneous suffering and positive openness to change available to the emigrant: "to be unsettled, one first has to be settled."<sup>21</sup>

The questions that arise in Flusser's media theory—technology and possibilities of freedom, the historical shift between writing and technical images (or history and what he calls posthistory)—respond to some of the worst events of the twentieth century, as they are deeply concerned with fascism, genocide, and the power of early communications systems such as radio and film. Sensitive to future changes in the global possibilities of communication, Flusser's writings on photography consider how technological shifts in communication might change the possibilities for human relationships: in the best possible world, media would cease to be a one-way, totalitarian system, emanating from a single source to a silent receiving audience, and would instead facilitate dialogue between receivers and senders. Flusser imagines modifications of television as something like a proto-Internet: if only television viewers could also send messages (or images) to one another. This is early media theory; as Alexander Galloway and Eugene Thacker argue, interconnection is not an automatic guarantor of freedom because it makes both networked entities vulnerable, and, quoting Gilles Deleuze, "the quest for 'universals of communication' ought to make us shudder."<sup>22</sup>

Flusser argues that historical consciousness shifts with the emergence of two specific technologies of communication: the invention of writing (a shift from prehistoric to historic) and the invention of photography (a shift from historic to posthistoric). In this schema, prehistoric consciousness assumes a one-to-one relation between world and image. The function of the image is to refer to reality: "Prehistoric images (from cave paintings to proto-historical wall paintings) are maps that enable their addressees to orient themselves in their environment."<sup>23</sup> Historic consciousness emerges with the advent of writing, a linear technology that does not simply refer to a pre-existing reality but shows how things came into being: "Linear texts explain images, they roll out their scenes into processes, and they order things into irreversible chains of causality. The environment can be causally explained and progressively manipulated."<sup>24</sup> Images like "church windows, columns, or oil paintings," also have an explanatory function but are on the decline because "all models of perception and behavior can be found in texts."<sup>25</sup>

If prehistoric consciousness is static and historical consciousness is linear, then posthistoric consciousness is the fragmentation of the line into a designed image. Flusser writes that photographs are "only the first of these posthistorical images," not surfaces but rather "mosaics" composed of "dot elements" like the molecules in silver compounds. Visualization refers to the ability to "turn a swarm of possibilities into an image."<sup>26</sup> For Flusser, creating photographic images involves a process of calculation rather than imagination, because the photographer must consider settings and adjustments of the apparatus. Thus photographs (or "technical images") are not Platonic copies of reality but structurally "projects."<sup>27</sup>

Although photographs are popularly considered as part of an archive of the past, Flusser argues that photographs are future-oriented because they are images (“models of perception”) yet to be seen by viewers. In this way, photographers act science-fictionally upon the present to “project a potentially alternative future.”<sup>28</sup> This is similar to the argument that Jacques Derrida makes in *Archive Fever*, where the archive is not about recording the past but always already directed toward its future use: “the question of the archive is not, we repeat, a question of the past. It is not the question of a concept of dealing with the past that might *already* be at our disposal or not at our disposal, *an archivable concept of the archive.*”<sup>29</sup> Extending Derrida’s argument further, we might say that something “posthistoric” about earlier archives (curiosity cabinets, libraries) cybernetically feeds forward to future viewers and that Flusser positions posthistorical thinking within a schema that is itself historical because of the way it periodizes prehistoric, historic, and posthistoric thinking according to a logic of sequentiality (pre-, post-).

Yet, more compelling than his schema of historical periods, Flusser’s discussions of posthistory address the cultural practices emerging with cybernetics—a question of media and photography but also of biotechnology. In a series of letters exchanged with his close friend Milton Vargas in 1981, Flusser writes that whereas evolution suggests a linear perspective on the emergence of species, genetic engineering “leaps over phylogenetic barriers and exchanges information from distant ‘branches,’” and “it will end up creating organs and organisms” turning the phenomenon of life informatic and cybernetic.<sup>30</sup> Here, “the challenge is not biological but epistemological; to rethink evolution not in ‘causal’ terms or ‘finalistic’ terms, but in ‘programmatic’ terms.”<sup>31</sup> Genetic engineering means rethinking evolution not as a line but in programmatic terms of splicing and reordering genes; “program” is a “a combination game with clear and distinct elements,” a definition that allows Flusser to consider genetics, photography, and posthistory writ broadly in commensurable terms.<sup>32</sup>

The vampire squid embodies such a relation between genetics and media technology. Flusser views genetics as a kind of combinatorial program, where human and cephalopod are both “variations of the same game played with the calculi of genetic information that programmes all terrestrial life.”<sup>33</sup> The underlying metaphor treats genetics as computation, where each individual is an actualization of one possibility of evolution. This is similar to Flusser’s writings on photography: each photograph is not the product of an artistic genius but merely one actualization of possible images configurable within the camera apparatus.<sup>34</sup> One criticism we should make is that, unlike the camera apparatus, the “genetic program” of organisms is not part of a closed system. For example, the entire field of epigenetics studies how extragenetic or environmental factors influence the development of an organism. Even given identical

DNA, individuals develop differently over a lifetime.<sup>35</sup>

However, the vampire squid fable requires that we consider evolution to be an apparatus that realizes itself along different trajectories, the human one on land, the vampyroteuthic in the abyss: structurally parallel but in an exaggerated fictional dialectic. Flusser writes, “Their conches are our fish, their snails are our birds, their cephalopods are our mammals, and the several octopi, edible or not, are our Neanderthals and Heidelbergenses.”<sup>36</sup> In a move both serious and surreal, Flusser asks us to consider the evolution of intelligence in the moluskan phylum as parallel to that of *Homo sapiens* as the former moves from the conch to the snail, cephalopod, octopi, and finally—at the pinnacle or nadir, however you have it—*Vampyroteuthis*. In this way, the biological and technological are both kinds of “apparatus,” which Flusser defines as “a play-thing or game that simulates thought” or an “organization or system that enables something to function.”<sup>37</sup> His translator Anthony Mathews defines Flusser’s understanding of an apparatus as an “overarching term for a non-human agency, e.g. the camera, the computer and the ‘apparatus’ of the State or the market.”<sup>38</sup>

Against photography, the vampire squid is a kind of “anti-apparatus.” The term comes from Flusser’s essay “Criteria—Crisis—Criticism” (1984), in which he discusses the possibility of a new kind of photography criticism that does not focus solely on selecting which photographs are good or beautiful. Rather, a new photography criticism is needed that critiques the criteria by which we judge photographs, a criticism that also critiques the apparatus’ functions. Flusser writes, “Therefore, it is first necessary to invent an anti-apparatus” that has to “critique the entire apparatus of culture and all its totalitarian tendencies, including the apparatuses that program us.”<sup>39</sup> The vampire squid in *Vampyroteuthis Infernalis* is precisely such an anti-apparatus, used to make the cultural contexts of photography visible.<sup>40</sup>

### ***Vampyroteuthis Infernalis* as Photographic Fable**

In *Vampyroteuthis Infernalis*, taxonomy serves as a storytelling structure for the vampire squid’s fictional relationship to the human. Although this is a fable, it has no traditional plot with rising action and a climax: the text reads like a scientific report about the vampire squid, which the reader can recognize as fictional mainly through oblique self-reference and hyperbolic content. Instead we could say the climax(es) of the fable are the moments when *Vampyroteuthis* breaks through as the refracted image of (1) humanity, (2) photography and the photographic apparatus, or (3) posthistory broadly.

The abyssal environment offers a compelling structural parallel with the photographic darkroom. Consider the similarities: the darkroom and the abyss are places of sensorial estrangement (for humans) where our visual modes of perception are compromised. In the darkroom, only a red/red-orange

light illuminates space to avoid disturbing the sensitive photographic paper. From the shallow pools of chemicals rise the hellish smells of sulfur and vinegar. To these pools we bring our negatives, miniature scenes captured from the camera's world, that we then project and affix to photographic paper. After bathing the paper in the pools of chemicals, images slowly reappear. There is something primordial about the dark-room and also something vampyroteuthic about the way in which light and liquid chemicals combine to produce images—images that are themselves entirely structured by the apparatus of the camera and all of its “glandular appendages”: the lens; the chromatophore-like shutter, opening and closing to change how light and color reflect; the enlarger that flickers light onto chemically-sensitized paper; the liquid baths that secrete photographs.<sup>41</sup> Looking at photography vampyroteuthically means seeing photographs not only as inscriptions of light but as the “secretions” or “precipitate” of the liquid bath itself.

The abyss presents the cognitively estranging conditions that enable Flusser to develop a theory of information that depends not on the inscription of information on objects but on subjects. In a chapter on “Vampyroteuthan Art,” Flusser considers how inscription on stone tablets would not last underwater but be eroded away or used by other organisms as a surface on which to grow.<sup>42</sup>

This human trust in the permanence of the objective world seems derisory from the point of view of those who, like *Vampyroteuthis*, inhabit a liquid environment. From this point of view, the only material for information storage that is worthy of trust is the egg. Genetic information is *aere perennius* and will outlive not only all books, buildings, and paintings but also the species itself, although in mutated form.<sup>43</sup>

Think about what seawater does to objects: it rusts metal, dissolves paper, and carries barnacles and other organisms that adhere to hard surfaces like ships and stones.<sup>44</sup> The ocean is not a generic fluid but an environment of particular chemical composition, what Michel Serres (following Jules Michelet) calls “the soup” of life, full of microscopic organisms, larvae, detritus, and dissolved minerals.<sup>45</sup> The ocean erodes external objects like “books, buildings, and paintings,” countering trust in the “permanency of the objective world.” If information could last underwater, Flusser imagines, then the substrate or media would have to be genetic material—notably, imagining information storage at the level of the germ line rather than the brain.

Flusser describes the desires of the photographer and vampire squid in strikingly similar terms. Compare the following passages from *Philosophy of Photography* and *Vampyroteuthis Infernalis*:

[Photographers' intentions are] first, to encode their concepts of the world into images; second, to do this by using a camera; third, to show the images produced in this way



to others so that they can serve as models for their experience, knowledge, judgment and actions; fourth, to make these models as permanent as possible. In short: Photographers' intentions are to inform others and through their photographs to immortalize themselves in the memory of others.<sup>46</sup>

With this artistic creation [i.e. the squid's modulation of its skin pigmentation] we are able to distinguish between several phases. (1) *Vampyroteuthis* goes through a particular experience. (2) He searches in his memory for a suitable model in order to capture it. (3) He verifies the absence of this model: the experience is as yet unexpressed. (4) This arresting experience goes beyond his organism, is organised by the brain and then transmitted to the chromatophores. (5) The chromatophores transcode the experience into a "skin painting." (6) Such colouration never before seen provokes the curiosity of another *Vampyroteuthis*. (7) The sender uses the new colouration to seduce the receiver and copulate with it.<sup>47</sup>

The ways photographers and vampire squid deliver information to the "other" share a similar process of first having a concept/experience, then desiring to transmit it, then encoding it in an image, and then transmitting it so as to immortalize the image in the memory of others. Drawing this parallel between *Vampyroteuthis* and *Towards a Philosophy of Photography* suggests that the liquid "vampire squid media"—skin paintings and sepia ink clouds—stand in place of photographs, as both are nondurable images.

Flusser also draws a parallel between vampire squid skin and photographic paper. He writes, "What fascinates the photographer is not the photographic paper, the object, but the information transmitted. The photographic paper is for the photographer what the skin is for *Vampyroteuthis*: a medium for colorful messages."<sup>48</sup> The vampire squid itself is thus both photographer (inscriptor) and photograph (medium), using its bodily tissues and fluids to produce deceptive images that fascinate other vampire squid. Although Flusser claims (in his chapter on vampyroteuthan art) that the vampire squid models "directly on the other," not on objects, we quickly see that the squid's own body facilitates the communication of messages via chromatophores, or skin pigment cells, and ink clouds.<sup>49</sup> This reflects a shift from a society of subjects who "imprint information on objects" to subjects who become information programmers.

Flusser wrote *Vampyroteuthis* from 1981 to 1987, when not much was known about the vampire squid, and he makes several significant errors in its characterization.<sup>50</sup> For example, *Vampyroteuthis infernalis* grows to only about one foot in length, not (as Flusser erroneously writes) 20 meters.<sup>51</sup> The vampire squid has both black and reddish-brown chro-

matophores but cannot change its skin color like other cephalopods can.<sup>52</sup> It also does not secrete sepia ink to escape, as dark ink would be redundant in the abyss. Thus, instead of the two media Flusser assumes (skin paintings and ink clouds), the “real” vampire squid has light-producing organs called “photophores” on the tips of its webbed tentacles and produces a bioluminescent mucus (instead of an ink cloud), which it can excrete to distract predators. Had Flusser known of photophores, he might have considered these *photographic* media (playing with light) to have offered a more compelling analogy with the camera and photographic technologies.

These details aside, within Flusser’s fable the purpose of ephemeral media (ink clouds and skin paintings) is secondary when compared with the ultimate goal: copulation, the moment of contact where messages may be inscribed on the egg, “the only material for information storage that is worthy of trust.”<sup>53</sup> The vampire squid’s single objective is to trick another vampire squid into becoming fascinated with its ephemeral media, in order to have sex with it: “The sender uses the new colouration to seduce the receiver and copulate with it.”<sup>54</sup> Further, “Vampyroteuthis is fascinated by the effect that the modeled [sepia] cloud will have upon another Vampyroteuthis. . . . The aim is to inform the other, to alter him, to impose on him particular information, knowledge, behavior and sensations.”<sup>55</sup> That the vampire squid, the most intelligent animal in its phylum, would aim to “alter the other” and “impose” its own information on others of its kind should alarm us as a particularly violent form of depersonalization. Here it figures as a kind of “reverse” vampirism, of pumping a substance into others rather than sucking it from them. Especially disturbing, particularly because Flusser genders the squid as male, are the connotations of “raping the mind” that Joost Meerloo points to in his 1956 discussion of menticide and brainwashing: “[*Vampyroteuthis*] seeks to seduce and violate his mates so that these may store the information without critique.”<sup>56</sup> Further, “in order to be informed it is the other that has to be violated. The other’s memory is for Vampyroteuthis the same as stone and language are for us. . . . He hammers and composes the other.”<sup>57</sup> The sexual politics of imagining—even in fable—that “genetic memory as information storage” would be modifiable only through the vulnerable moment of sex between squid, and that the sex of the inscriber is male (Flusser calls the vampire squid “he”), should not be let off the hook as a simple reflection of reality. We should ask why this model of sexuality finds itself reinscribed in Flusser’s narrative rather than challenged and questioned.<sup>58</sup>

One response is to turn to the gendering of photography and the transition from a society that favors inscription on objects to inscription directly on subjects. Take, for example, Roland Barthes’s phallic theory of the “punctum” in *Camera Lucida* to describe the way a photograph strikes and fascinates the viewer. Distinguishing it from the “studium” (“of the order of

*liking*” a “vague, slippery, irresponsible interest one takes”), Barthes writes that “punctum” is the “sting, speck, cut, little hole—and also a cast of the dice. A photograph’s *punctum* is that accident which pricks me (but also bruises me, is poignant to me),” often a specific detail of the photograph.<sup>59</sup> This formulation, predicated on a kind of visual injury, reminds us of the way the vampire squid also seeks to strike and fascinate the viewers of his skin paintings. Flusser considers the camera as masculine agent in *Towards a Philosophy of Photography*:

If one observes the movements of a human being in possession of a camera (or of a camera in possession of a human being), the impression given is of someone lying in wait. This is the ancient act of stalking which goes back to the paleolithic hunter in the tundra.<sup>60</sup>

Flusser’s gendered depiction of the vampire squid engages an existing tradition of critical thought connecting the camera with a masculine, penetrative logic; for example, Susan Sontag’s and Donna Haraway’s extensive discussions of the gendered parallels between guns and cameras, their relation to capture through the “click” of a trigger.<sup>61</sup>

“Will then the vision of vampyroteuthian art necessarily be the vision of our own immediate future?”<sup>62</sup> Flusser’s question suggests both a recuperative and dystopic vision: becoming vampyroteuthic means gaining a kind of individual agency against the surrounding climate of media by programming others. Yet the recovery of our individual agency comes at a cost. Specifically, agency can be recovered only by belonging to a society where vampyroteuthic media are predicated on deception and lies. Is this future on the immediate horizon?

Our communicational structures are being fundamentally transformed, in the sense of becoming constituted by ephemeral and transient media that allow the other to be informed without the need for objects. It is as if humanity, after a multi-millennial turn through the objective world, had now reencountered the vampyroteuthian path.<sup>63</sup>

Society becomes vampyroteuthic as human-made media move into an aquatic paradigm of informatic “flow” programmed to influence human behavior: “the society of the immediate future shall be a society of information consumption, less and less interested in the consumption of ‘goods,’ of objects. The interest diverted from economy to sociology. Intersubjective society: a society of Vampyroteuthes.”<sup>64</sup> In this moment the “underwater media” specific to the vampire squid turn into a commentary about memory and an emerging information society. Flusser writes, “Vampyroteuthis is always a ‘total artist,’ that is, one who seeks to attain immortality through the epistemological, aesthetic and ethical modeling of the other.”<sup>65</sup> Through its concern with inscription on the other, Flusser’s “art of the vampire squid” is a fable about totalitarian media, of

being forced to carry someone else's memory or experience like a tattoo.

*Vampyroteuthis* thus embodies both a kind of totalitarian power (seeking to inscribe its memories on others) and resistance to this same power (taking the role of the inscriber/programmer instead of the inscribed). In a letter from 1988, Flusser's friend Vargas responds to *Vampyroteuthis* by comparing it to Nazi fantasies of a possible superman (here, "super-mollusc") and *Star Wars*: "The fact is that both you and [Louis] Bec, as well as the TV producers, are on the trail of the primitive Nazis on the fantastic search for 'new forms of being.' For now, thank God, this is fantasy, but gene technology threatens to turn it into reality (concrete)." Vargas writes that *Vampyroteuthis* is like the "Emperor" or "Darth Vader," urging Flusser to think of "the biography of an animal as powerful as Luke Skywalker or Obi-something-or-other that has the light side of the 'force.'"<sup>66</sup> Flusser defends his organism, arguing, "when fantasy loses its exactness it becomes banal (I don't know Skywalker, but I imagine him to be a lot less fantastic than, say, the pseudo-social organization of ants)."<sup>67</sup> Here I have to side with Flusser, given that the characters in the *Star Wars* universe are, with a few exceptions, hominoid or at least bipedal. Ant colonies and the vampire squid interest Flusser because of the (to borrow Darko Suvin's phrase) "cognitively estranging" forms of perception they offer—forms that participate in a broader epistemological project of deprivileging both human perspective and the "objectivity" of machines.<sup>68</sup>

### **Diving into *Vampyroteuthis*:**

#### **Speculative Fiction and Epistemic Practice**

As much as *Vampyroteuthis* is about photography and posthistory, it is also about the imagination and exploration of points of view—the same qualities Flusser finds redeeming about photography. Here, the possibilities of freedom relate to photography's ability to realize many points of view rather than one transcendent one: "The act of photography is that of 'phenomenological doubt,' to the extent that it attempts to approach phenomena from any number of view points."<sup>69</sup> In a way, Flusser takes the vampire squid as a kind of "camera" of the deep to realize as many phenomenological viewpoints as possible from the vampire squid's standpoint (floatpoint?).

Flusser imagines the perceptual world of the vampire squid with a generosity that is not at all vampyroteuthic. Opening the possibility of milieu-specific philosophy, he considers the epistemological influences of the deep sea and the vampire squid's uniquely evolved body in rigorous material and phenomenological detail. Thus, as much as *Vampyroteuthis Infernalis* is a fable about photography, it is simultaneously (and nonexclusively) speculative fiction that takes seriously the conditions of the ocean as a novel and cognitively estranged starting point for philosophy. That Flusser takes seriously the media (ink clouds, skin paintings) of the vampire squid suggests a theory

not focused on stable objects or ontology but on the comparative epistemology between human media and vampyroteuthic media. This requires us to move beyond *Vampyroteuthis* as photographic fable toward the beginning of a practice of milieu-specific philosophy, which considers how specific environmental conditions of alterity make visible the assumptions in our terrestrially born concepts and orientations to the world. The vampire squid opens a way for elaborating a theory of media that takes seriously the conditions of seawater as a space for communication and relation.

Early in *Vampyroteuthis*, Flusser offers a strong critique of the possibility of a transcendental point of view: “There is no ‘general world’ or ‘objective universe’ which is common to both [human and vampire squid]. Such an abstract world of science does not exist. If we find *Vampyroteuthis*, it is within our world that we find him. We do not find him as existence, but as object.”<sup>70</sup> Flusser positions his fable to “implicate” the reader in the world of the vampire squid, breaking the fourth wall (camera lens, aquarium glass) between viewer and viewed:

we shall not dive into the depths with the aim of explaining anything, but with the aim of implicating ourselves in the vampyroteuthian situation. As we cannot observe the depths through phenomenological methods (we do not know how to dive into the oceans), we shall aim to do it by an intuitive method (diving into *Vampyroteuthis*). And as we assume, therefore, his point of view upon his habitat that is planet Earth, at the end, we shall be surprised to observe that Earth becomes even stranger than Mars or Venus.<sup>71</sup>

“Diving into *Vampyroteuthis*” presents a methodology for estranging our view of earth and terrestrial habitation, a “philosophy of fantasy” that Flusser imagines might become a discipline “as rigorous as phenomenology.”<sup>72</sup> Part of Flusser’s methodology involves using metaphor to imagine the vampire squid’s phenomenological world from the complexity of its particularly evolved body, proprioceptive orientations, and the benthic conditions of its aquatic milieu (pressure, temperature, buoyancy). Recognizing that the vampire squid is “literally facing a different world” allows us to “see with his eyes and grasp with his tentacles.”<sup>73</sup> Metaphor, after all, is about transference from world to world: “We are leaping from a habitual world to a fabulous world. It is a world that is not apprehended and comprehended by hands, as is ours, but by eight tentacles.”<sup>74</sup> Differences in bodies (vertebrate, mollusk) would lead to different intuitions of the world.

Comparing the ocean with land, Flusser infers that the vampire squid would have a volumetric rather than planar experience of space. In humans, Flusser writes, “Bipedal stride, with both arms like pendulums, divided the world into past, present, and future.”<sup>75</sup> Spatial theorists like Yi-Fu Tuan have also commented on the way the human body provides a reference

point for spatial intuitions. Tuan draws detailed diagrams in his foundational work, *Space and Place*, which discusses types of space (sacred, profane) around a human body, dependent on its front, back, and sides.<sup>76</sup> Whereas our vertebrate physiology is like that of a “coat hanger,” with shoulders and spine standing up in response to gravity, “the spiral is the fundamental theme of the molluscan organism,” a position responsive to a buoyant liquid environment.<sup>77</sup> As vertebrates, “our dialectic is linear,” while the vampire squid’s “is coiled. We think ‘straight,’ and he thinks ‘in a circle.’ . . . That is because our world is a plane and his is a volume.”<sup>78</sup> Further, vampire squid are “whirlpool animals” with “coils that tend to uncoil. They are springs that tend to stretch, fists that tend to open up into flat palms. . . . As they uncoil, they release the accumulated energy of the spring. This may explain their extraordinary ferociousness.”<sup>79</sup> The vampire squid’s experience of space would thus not be Cartesian but “a twisted tension sustained by an external spiral shell.”<sup>80</sup> Thus “it would be a mistake to think that we exist on the ‘same Earth.’ We exist on an Earth that is a habitable surface. He exists on an Earth that is a habitable hole.”<sup>81</sup> Human senses of space proceed from surface-habitation, vampyroteuthic senses of space from life in a volume. Further, the vampire squid “perforates the third dimension just like a screw.”<sup>82</sup> Comparing the way “we think in a line” with how the vampire squid “thinks in a circle” or moves in a spiral should remind us of Flusser’s schema for history (line) and posthistory (broken line, programming). The “spiral” figure of the vampire squid presents a way for thinking the nonlinearity of posthistory of a variety of phenomena, including the camera apparatus and the temporality of genetic engineering.

Flusser also connects the vampire squid’s physiological posture (consider a bulbous body on top of a thin umbrella of skin) to different behavioral and cognitive tendencies, such as the predisposition for aggressive movement. Running through every chapter in *Vampyroteuthis Infernalis* is a deep fascination with psychoanalysis, of the vampire squid’s unconscious as the photographic and moral negative (Other) to ours. Take the following passage:

Our conscience is the vampyroteuthian unconscious, and vice versa. This is reflected in our respective postures: the position of our head corresponds to the position of his belly. If Vampyroteuthis analyses the world, he is doing “depth analysis,” and if he analyses his own being in the world, he is doing a “critique of reason.” His Newton is Freud and his Jung is Einstein.<sup>83</sup>

This surrealist image—that our heads are anatomically in the place of the squid’s belly—may remind us of the famous cover of Georges Bataille’s *Acéphale*, evoking the way in which the human subject of analysis thinks and/or acts according to the belly/libidinal zone.<sup>84</sup> Through inversions such as this, Flusser positions the vampire squid as not the simple “opposite” of the

human but as a kind of photographic negative of the human, the image that makes the human appear under the chemical fixing fluids of fiction.

By considering the relation between the vampire squid's physiological and cognitive orientations to the ocean, *Vampyroteuthis* evokes and extends George Lakoff and Mark Johnson's observations in *Metaphors We Live By* from humans to a speculative technique applicable to other animals and machines. Lakoff and Johnson use linguistic evidence to show that the way we ordinarily speak is highly metaphoric, and these metaphors both structure cognition and correspond to a broad range of physiological and environmental circumstances, such as gravity, bilateral symmetry, vertebrate posture. Lakoff and Johnson are keen to point out from their examples that metaphors often logically contradict one another. Thus there is no overarching system but rather meaning generated through use. One example of terrestrially based metaphor has to do with what Lakoff and Johnson call "orientational metaphors" and the values we attach to directions.<sup>85</sup> Consider the metaphor "happy is up" and "sad is down." For example, "I'm feeling up," "that boosted my spirits," or "my spirits rose," compared with, "I'm feeling down," "I fell into a depression," or "my spirits sank."<sup>86</sup> Here, standing up is a sign of health, activity, and well-being, and the human body lying down tends to be a sign of sleep, illness, lethargy, or death.<sup>87</sup> Part of Flusser's contribution to milieu-specific philosophy is to extend Lakoff and Johnson's theorizations about human cognition and metaphor to the vampire squid in its aquatic environment, providing the foundation for a comparative epistemology between human and vampire squid and speculative technique.

The speculative technique of considering embodiment, metaphor, and cognition reformulates Thomas Nagel's classic philosophical problem, "What is it like to be a bat?"<sup>88</sup> Nagel focuses on "qualia" and whether we can really know the world of the bat, which takes human-developed science as a transcendental point of view. In contrast, Flusser imagines the perceptual world of the vampire squid in order to develop an epistemic check on human objectivity, denatured "from the molluscan point of view."<sup>89</sup> The end goals are thus quite different: for Nagel, to try to know the experience of the animal from the disembodied I/eye of science; for Flusser, to take the aquatic animal as a kind of critique of the disembodied I/eye, making human and terrestrially developed concepts seem strange from the vampire squid's point of view. We might apply Flusser's own perverse reading technique of displacing "photography" with "vampire squid" to one of his own quotations: "The act of photography [the vampire squid's perspective] is that of 'phenomenological doubt,' to the extent that it attempts to approach phenomena [humanity] from any number of view points."<sup>90</sup>

The milieu-specific exercise of attending to the environmental and embodied conditions that have structured our cog-

dition implies that human categories of perception might not be the only ones, or the most adequate ones, with which to understand phenomena in the world. Flusser calls this skepticism “biological Kantianism,” or the idea that each sensing organism might have its own set of “categories” through which it perceives the world. This idea is strikingly similar to Jakob von Uexküll’s theory of *Umwelten*, or perception-worlds, that take individual animals as loci of perception-worlds that are qualitatively different from one another. Uexküll writes, for example, that the tick is really only sensitive to three “perception marks”: warmth, light, and the scent of butyric acid, a chemical present in animal sweat. The tick’s perceptual world is defined by the presence or absence of these three things, whereas another animal would notice a different range of sensations. Thus, “There is no space independent of subjects. If we still want to cling to the fiction of an all-encompassing world-space, that is only because we can get along with each other more easily with the help of this conventional fable.”<sup>91</sup> Rather than one World, we must now consider worlds. Although Uexküll argues that the animal’s environment is “only a piece cut out from its surroundings,” which are “our own human environment,” with Flusser our own human environment is not the container of all the other animal environments but one of many perspectives: “biology is itself a product of the human ‘web.’ It catches everything in the categories of theoretical reason, including reason itself, and not only the spider’s web. The biologically-biased Kantianism does not resolve the problem, it only transfers it to another level.”<sup>92</sup> That is, the study of biology (physiology, morphology, marine science) provides the means of intuiting an animal’s *Umwelt*, but biology itself is created from (and according to) human sensibilities of measure. Although Flusser sees no outside to this Kantian problem, the vampire squid imagined in the abyss opens toward questions of milieu-specificity: that is, how knowledge and concepts follow from particular embodied viewpoints that in turn respond to materially specific environments. The cognitively estranging point of view of the vampire squid in the abyss brings into relief the terrestrial conditions (gravity, planar space, reliance on vision) that inform specific concepts and points of view we take for granted. However, sometimes these concepts can be read back into the fable to show its own construction. As with Flusser’s Kantian problem, the fable shows us not alterity but a refracted view of ourselves.

*Vampyroteuthis Infernalis* both succumbs to and sets up the conditions for a critique of the terrestrial bias of media theory and philosophy. By imagining the medial conditions of the deep sea, it helps *pluralize* rather than supersede the points of view through which we might approach and develop concepts. Yet it also imagines media in dry terms rather than the messy, turbulent movement of fluids. In the final section of this article, I address one concept—inscription—to show how the dryness of terrestrial theory persists within Flusser’s vampire



squid fable and (following photographer Jeff Wall) the technology of photography as such. I suggest that *milieu-specific* means thinking with a concept of the “residue” to supplement inscription in media theory, not with the aim of establishing a higher degree of reality but of making tangible the epistemological consequences of the variable environments for thought.

### Liquid Intelligence

*Towards a Philosophy of Photography* entirely—and surprisingly—ignores the agency of the fluid in photographic development. Flusser’s most famous claim—that the program of the camera determines the possibilities of the photographs produced—looks only at the apparatus producing the photographic negative, not the development of actual photographs: “To every photograph there corresponds a clear and distinct element in the camera program.”<sup>93</sup> Yet in film photography, every individual photograph depends on development in liquid baths and the unpredictable vagaries of human error/artistry and chemical fluidity. Water notoriously does not obey prescribed instructions—its errant materiality wanders across designated borders (as rivers do), moves around the world turbulently through weather systems, and transforms sunken objects in the ocean with the force of the sea god Proteus.<sup>94</sup>

This errancy of water—or what Wall calls the “liquid intelligence” of natural forms—is what the camera apparatus has historically sought to control and canalize. In Wall’s provocative critical reading, the “liquid intelligence” of water opposes “the glassed-in and relatively ‘dry’ character of the institution of photography.”<sup>95</sup> Whereas liquids flow in turbulent and organic patterns, “the mechanical character of the action of opening and closing the shutter—the substratum of instantaneity which persists in all photography—is the concrete opposite kind of movement from, for example, the flow of a liquid.”<sup>96</sup> These elements (liquid and camera) play a role in the photograph *Milk*, where Wall contrasts the 90-degree angles of the urban environment (brick building, cement) with a man crushing a carton, causing milk to spray into the air.<sup>97</sup> In an otherwise intentionally ordered photograph, the liquid milk (and the man’s expression, turning away) constitutes the “incalculable” element in the photograph, compelling for the way it evades photographic prescription and control.<sup>98</sup> In contrast, water “plays an essential part in the making of photographs, but it has to be controlled exactly and cannot be permitted to spill over the spaces and moments mapped out for it in the process, or the picture is ruined.”<sup>99</sup> Thus water is “admitted to the process” of making photographs but also “excluded, contained, or channeled by its hydraulics.”<sup>100</sup> At the time he was writing in 1989, Wall speculated that digital photography would usher forth “a new displacement of water,” which will “disappear from the immediate production process” such that “the historical consciousness of the medium is altered,” por-

tending an increasingly dry technical consciousness—one perhaps echoed in science fiction film’s imagination of future cities and highly sanitized space stations, where water is invisible beyond decorative functions.<sup>101</sup>

This striking description of photography’s increasing hydrophobia finds resonance with Flusser’s writings. In *Towards a Philosophy of Photography*, Flusser describes posthistoric images in curiously “dry” terms: “Photographs are dams placed in the way of the stream of history, jamming historical happenings.”<sup>102</sup> This is similar to what Wall writes about the way the opening and closing of the camera shutter is the opposite kind of movement from that of the liquid. Flusser’s vampire squid also aims to control the flows of liquids, but for the purpose of making messages. The messy media of vampire squid (sepia ink clouds, chromatophores, salivary glands, gelatin-secreting glands, and seminal fluid) would seem to be ones not conducive to encoding clear messages, but this is precisely how Flusser imagines them. Consider the vampire squid’s skin paintings, which channel and control the glandular media of communication: an experience “is organised by the brain and then transmitted to the chromatophores” that “transcode the experience into a ‘skin painting.’”<sup>103</sup> Flusser’s imagination of ink clouds is also about recording a specific memory: “The experience that *Vampyroteuthis* has just gone through must be expressed in the cloud, no longer with the intention to divert a hypothetical aggressor, but to store this experience in the memory of another *Vampyroteuthis*.”<sup>104</sup> That the end goal is to “store” the experience “expressed in the cloud” in the memory of another *Vampyroteuthis* suggests precise control over the ink cloud, quite unlike Jackson Pollock’s interest in the mathematically unpredictable behavior of fluids. All liquid media are tightly channeled by the *Vampyroteuthis*; Flusser does not consider the potential for spillage, accident, leakage, bleeding out.

Although we might pause to consider whether chromatophore skin-paintings are more like ink or more like the opening and closing of small apertures, what is important is the question of agency. Flusser presupposes that a single agent (vampire squid or photographer) has an idea or concept and that it “encodes” or inscribes in a medium that then conveys the message to another subject. In this way, Flusser’s vampire squid artist suggests insemination over Derridean dissemination. Whereas “insemination” implies an originary moment of fertilization by a single agent, “dissemination” affirms the “nonorigin,” suggesting the failure of mastery; it also alludes to the impossibility of pre-scribing a message. But if such a thing were possible, “dissemination is precisely the impossibility of reducing a text as such to its effects of meaning, content, thesis or theme.”<sup>105</sup> In another context, Colin Milburn elaborates the fluid resonances of dissemination as the “movement and overflow of the semantic and seminal from within, the multiplication of essential meanings and vital fluids,” the spillage, overflow, flooding.<sup>106</sup> This is not the sense of media we see in

*Vampyroteuthis Infernalis*, which concerns itself with message delivery rather than a more radical materiality of water. The vampire squid's desire to tightly control water and glandular media reflects on the institution and apparatus of photography, chained to terrestrially informed media theory based on a concept of tightly controlled inscription rather than the errancy that more materially relates to fluid media. Flusser's vampire squid thus floats suspended between the "dry" technology of the camera and the "wet" technologies of ink clouds and skin paintings.

To develop a more radical milieu-specificity of fluids, we need a vocabulary beyond "inscription" in the sense of marking on objects, and we need to consider a more distributed sense of agency in communication, a kind of ambient, disseminative production of change and movement. One such moment arises in Wall's essay "Photography and Liquid Intelligence" when he writes that the liquid chemicals used in photography recall older technologies like "washing, bleaching, dissolving" and the separating of ores in primitive mining, figuring as a kind of "archaism" that "embodies a memory-trace of very ancient production-processes" that are "connected to the origin of techne."<sup>107</sup> Washing, bleaching, and dissolving all suggest chemically transformative processes that may warp, deform, fray, discolor, cleanse, stain, and saturate surfaces and volumes rather than simply inscribing them with a mark. Returning to this "archaism" of fluid techne and ancient production processes, what we have thought of as history and the material of memory move beyond terrestrial inscriptions, of marks made on objects. From a vampyroteuthic point of view—not a transcendent view but a strange view—history might be thought of in terms of the glandular and transfigurative washes of the residue.

## Notes

1. Friedrich Kittler, *Discourse Networks 1800/1900*, trans. Michael Metteer (Palo Alto, CA: Stanford University Press, 1992), 356.
2. Matt Taibbi, "The Great American Bubble Machine," *Rolling Stone*, 5 April 2010, <http://www.rollingstone.com/politics/news/the-great-american-bubble-machine-20100405>.
3. The blog *Vulgar Army: Octoprop to Octopop* presents a collection of images from Europe, America, and Japan dating back to the 1830s that show octopi, vampire squid, kraken, and other tentacular creatures. The blog exhibits these cartoons in order to "identify and criticise themes in the use of the octopus as a polemic metaphor, for example, its use as signifying 'action at a distance' or in dehumanizing a group." "About," *Vulgar Army: Octoprop to Octopop*, n.d., <http://octoprop.wordpress.com/>.
4. Vampire squid are a genus of the class Cephalopoda (the name means "head-foot") that includes octopi, squid, cuttlefish, and the nautilus.
5. This also translates as "eight arrival pass" or "go everywhere pass." See <http://www.octopus.com.hk/home/en/index.html>.
6. *Dream of the Fisherman's Wife* is an example of the Japanese erotic art *shunga*.
7. Hsuan Hsu, "Put an Octopus on It!" *Salon*, 5 July 2012, [http://www.salon.com/2012/07/05/put\\_an\\_octopus\\_on\\_it/](http://www.salon.com/2012/07/05/put_an_octopus_on_it/).
8. According to NRO spokesperson Karen Ferguson, "NROL-39 is represented by the octopus [in its logo], a versatile, adaptable, and highly intelligent creature. Emblematically, enemies of the United States can be reached no matter where they choose to hide. 'Nothing is beyond our reach' defines this mission and the value it brings to our nation." Paul Szoldra, "US Spy Agency Boasts 'Nothing Is beyond Our Reach' with New Logo," *Business Insider*, 7 December 2013, <http://www.businessinsider.com/nrol-39-logo-nothing-beyond-our-reach-2013-12>.
9. Michel Foucault, "Of Other Spaces," *Diacritics* 16 (Spring 1986): 22–27.
10. *Vampyroteuthis Infernalis* was originally published in German, but I refer to the English translation by Rodrigo Maltez Novaes.
11. Vilém Flusser, *Vampyroteuthis Infernalis*, trans. Rodrigo Maltez Novaes (New York: Atropos Press, 2011), 115.
12. Vilém Flusser, *Towards a Philosophy of Photography*, trans. Antony Mathews (London: Reaktion, 2000), 46.
13. One notable exception is his discussion of the perspective of dogs, where he practices a "gymnastics of perspective" and argues that "all animal life is seen in terms of humanization." Vilém Flusser, "Humanizations" (1990), in *Writings*, ed. Andreas Ströhl, trans. Erik Eisel (Minneapolis: University of Minnesota Press, 2002), 185.
14. "MSA attends both to the specificity of form . . . and to citations and imitations of one medium in another." Katherine Hayles, *Writing Machines* (Cambridge, MA: MIT Press, 2002), 30.
15. Flusser, *Vampyroteuthis Infernalis*, 27–28.
16. From a 1981 letter to Milton Vargas, as quoted in Flusser, *Vampyroteuthis Infernalis*, 142.
17. Flusser, *Vampyroteuthis Infernalis*, 142, 146.
18. See Clement Greenberg, "Modernist Painting," in *Art in Theory, 1900–2000: An Anthology of Changing Ideas* (Malden, MA: Blackwell, 2003), 773–779.
19. Jeff Wall, "Photography and Liquid Intelligence," in *Jeff Wall: Selected Essays and Interviews* (New York: Museum of Modern Art, 2007), 110.
20. For a more detailed biography, see Anke Finger, Rainer Guldin, and Gustavo Bernardo, *Vilém Flusser: An Introduction* (Minneapolis: University of Minnesota Press, 2011).
21. Vilém Flusser, *Freedom of the Migrant: Objections to Nationalism*, trans. Anke K. Finger and Kenneth Kronenberg (Chicago: University of Illinois Press, 2013).

22. Alexander R. Galloway and Eugene Thacker, *The Exploit* (Minneapolis: University of Minnesota Press, 2007), 23. Galloway and Thacker discuss communication-as-vulnerability in terms of technology, but the same logic could be analogized to agricultural monoculture, which enables single diseases to wipe out entire crops.

23. Flusser, *Vampyroteuthis Infernalis*, 126.

24. Flusser, *Vampyroteuthis Infernalis*, 127.

25. Flusser, *Vampyroteuthis Infernalis*, 127.

26. Flusser, *Vampyroteuthis Infernalis*, 129.

27. Flusser, *Vampyroteuthis Infernalis*, 129.

28. Flusser, *Vampyroteuthis Infernalis*, 130.

29. Jacques Derrida, *Archive Fever: A Freudian Impression*, trans. Eric Prenowitz (Chicago: University of Chicago Press, 1998), 36 (emphasis in original).

30. Flusser, *Vampyroteuthis Infernalis*, 141–142.

31. Flusser, *Vampyroteuthis Infernalis*, 136.

32. Flusser, *Towards a Philosophy of Photography*, 84.

33. Flusser, *Vampyroteuthis Infernalis*, 23.

34. Flusser, *Towards a Philosophy of Photography*, 26.

35. One artistic work that illustrates this is Natalie Jeremijenko's project *One Tree*, in which 1,000 fruitless walnut trees were cloned from one tree's tissue, then planted in pairs around the San Francisco Bay Area, each pair developing in response to its microclimate and locale. See Natalie Jeremijenko, "One Tree(s)," Inspiration Green, n.d., <http://www.inspirationgreen.com/natalie-jeremijenko.html>.

36. Flusser, *Vampyroteuthis Infernalis*, 46.

37. Flusser, *Towards a Philosophy of Photography*, 83.

38. Flusser, *Towards a Philosophy of Photography*, 83.

39. Flusser, "Criteria—Crisis—Criticism" (1984), in *Writings*, 49.

40. Flusser was researching and writing about the vampire squid two years before the publication of *Towards a Philosophy of Photography*, as evidenced by letters he wrote to Milton Vargas in 1981, excerpted in *Vampyroteuthis Infernalis*, 129–142.

41. Many thanks to Whitney Trettien for this colorful observation, which she offered in her response to my presentation "Vampire Squid Media" at a November 2013 graduate colloquium sponsored by the Duke University Program in Literature.

42. This question of how an underwater species would develop means of preserving history is not only science fictional but figures into many nature documentaries. "Aliens of the Deep Sea" (2010), for example, laments the fact that octopus mothers die before their young hatch, preventing members of an otherwise highly intelligent species from passing down the knowledge gained during their lifetimes. See "Aliens of the Deep Sea," *The Nature of Things*, season 49, episode 28, directed by Jérôme Julienne and John Jackson, 2010, <http://www.cbc.ca/natureofthings/episodes/aliens-of-the-deep-sea>.

43. Flusser, *Vampyroteuthis Infernalis*, 105.

44. Filmmaker David Gatten literalized a kind of water-writing in his work *What the Sea Said*, where he submerged 16 mm film for two weeks, taking the ocean as a coartist in the production of celluloid inscriptions.

45. Michel Serres, *Hermes: Literature, Science, Philosophy*, ed. Josué V. Harari and David F. Bell (Baltimore: Johns Hopkins Press, 1982), 29–38.

46. Flusser, *Towards a Philosophy of Photography*, 46.

47. Flusser, *Vampyroteuthis Infernalis*, 109.

48. Flusser, *Vampyroteuthis Infernalis*, 115.

49. This fascination with squid ink may also remind us of China Miéville's novel *Kraken* (London: Macmillan, 2010) and its fictional religion based around squid, with holy texts written in teuthic ink.

50. In characterizing *Vampyroteuthis*, Flusser likely drew from knowledge

of other cannibalistic cephalopods, such as the Humbolt squid (*Dosidicus gigas*), which swim in schools and have a reputation for being extremely violent.

51. Flusser, *Vampyroteuthis Infernalis*, 23. See Richard Ellis, “Introducing *Vampyroteuthis infernalis*, the Vampire Squid from Hell,” The Cephalopod Page, <http://www.thecephalopodpage.org/vsfh.php>.

52. See Brad Johnson, “*Vampyroteuthis Infernalis*,” Animal Diversity Web, University of Michigan Museum of Zoology, [http://animaldiversity.ummz.umich.edu/accounts/Vampyroteuthis\\_infernalis/](http://animaldiversity.ummz.umich.edu/accounts/Vampyroteuthis_infernalis/).

53. Flusser, *Vampyroteuthis Infernalis*, 105

54. Flusser, *Vampyroteuthis Infernalis*, 109.

55. Flusser, *Vampyroteuthis Infernalis*, 110–111.

56. Flusser, *Vampyroteuthis Infernalis*, 91–92. See, also, Joost Meerloo, *The Rape of the Mind: The Psychology of Thought Control, Menticide, and Brainwashing* (Ann Arbor: World Publishing Company, 1956).

57. Flusser, *Vampyroteuthis Infernalis*, 109.

58. Thinking photographic and sexual reproduction together might suggest Joel Snyder’s essay, “What Happens by Itself in Photography?” in *Pursuits of Reason: Essays in Honor of Stanley Cavell*, ed. Ted Cohen et al. (Lubbock: Texas Tech University Press, 1993), 364. While Snyder provocatively alludes to the womb-like dark of the camera’s interior as a matrix for creating photographs agentially directed by both the photographer and something else, my concern with Flusser’s discussion of photography and sexuality has more to do with the rapist and totalitarian connotations of the vampire squid transmitting memories on others through sex.

59. Roland Barthes, *Camera Lucida*, trans. Richard Howard (New York: Hill and Wang, 2010), 27.

60. Flusser, *Towards a Philosophy of Photography*, 33.

61. See Susan Sontag, *On Photography* (New York: Picador, 1973), 13–15; and Donna Haraway, *Primate Visions* (New York: Routledge, 1989), 26–58.

62. Flusser, *Vampyroteuthis Infernalis*, 115.

63. Flusser, *Vampyroteuthis Infernalis*, 113.

64. Flusser, *Vampyroteuthis Infernalis*, 114.

65. Flusser, *Vampyroteuthis Infernalis*, 111.

66. Flusser, *Vampyroteuthis Infernalis*, 145.

67. Flusser, *Vampyroteuthis Infernalis*, 146.

68. “I will argue for an understanding of SF as the literature of cognitive estrangement.” Darko Suvin, *Metamorphoses of Science Fiction* (New Haven, CT: Yale University Press, 1979), 4.

69. Flusser, *Towards a Philosophy of Photography*, 38.

70. Flusser, *Vampyroteuthis Infernalis*, 73.

71. Flusser, *Vampyroteuthis Infernalis*, 66.

72. Vilém Flusser to Milton Vargas, 1988, quoted in Flusser, *Vampyroteuthis Infernalis*, 146.

73. In modern Athens, public transportation vehicles are called *metaphorai*. “To go to work or come home, one takes a ‘metaphor’—a bus or a train. Stories could also take this noble name: every day, they traverse and organize places; they select and link them together; they make sentences and itineraries out of them.” Michel de Certeau, *The Practice of Everyday Life* (Los Angeles: University of California Press, 2002), 115.

74. Flusser, *Vampyroteuthis Infernalis*, 73–74.

75. Flusser, *Vampyroteuthis Infernalis*, 73.

76. Yi-Fu Tuan, *Space and Place: The Perspective of Experience* (Minneapolis: University of Minnesota Press, 2001), 34–50.

77. Flusser, *Vampyroteuthis Infernalis*, 43.

78. Flusser, *Vampyroteuthis Infernalis*, 78.

79. Flusser, *Vampyroteuthis Infernalis*, 40, 42.

80. Flusser, *Vampyroteuthis Infernalis*, 78.

81. Flusser, *Vampyroteuthis Infernalis*, 79.
82. Flusser, *Vampyroteuthis Infernalis*, 78.
83. Flusser, *Vampyroteuthis Infernalis*, 77.
84. Even in textbooks such as *Invertebrate Zoology: A Functional Evolutionary Approach*, ed. Edward E. Ruppert, Richard S. Fox, and Robert D. Barnes (Belmont, CA: Thomson-Brooks/Cole, 2004), the physiological axes have to be flipped for cephalopods. For example, what for vertebrates is the dorsal side becomes the “back” of the squid; what is ventral becomes the “front.”
85. For the cephalopods, “up” and “down,” because of water’s buoyancy, might not have the same values they do for human beings. Instead, cephalopods might attach value to differences in water pressure, water temperature (or a temperature border such as the thermocline), light, or scent.
86. George Lakoff and Mark Johnson, *Metaphors We Live By*, 2nd ed. (Chicago: University of Chicago Press, 2003), 14.
87. Although one could think of other examples, such as “put my name down for that” or “let’s get down to business,” these simply derive from different situations—that of writing a name on a list or a metaphor for commitment and work.
88. Thomas Nagel, “What Is It Like to Be a Bat?” *Philosophical Review* 83, no. 4 (1974), 435–450.
89. Flusser, *Vampyroteuthis Infernalis*, 27.
90. Flusser, *Towards a Philosophy of Photography*, 38.
91. Jakob von Uexküll, *A Foray into the Worlds of Animals and Humans: With a Theory of Meaning*, trans. Joseph D. O’Neil (Minneapolis: Minnesota Press, 2010), 70.
92. Flusser, *Vampyroteuthis Infernalis*, 63.
93. Flusser, *Towards a Philosophy of Photography*, 68.
94. I choose the term *errancy* intentionally to evoke its older meaning of wandering and to echo Edouard Glissant’s preference for errancy over nomadism in *The Poetics of Relation*, trans. Betsy Wing (Ann Arbor: University of Michigan Press, 1997).
95. Wall, “Photography and Liquid Intelligence,” 109.
96. Wall, “Photography and Liquid Intelligence,” 109.
97. Not all fluids are the same. Consider Stefan Helmreich’s call for a form of theory specific to seawater in “Nature/Culture/Seawater,” *American Anthropologist* 13, no. 1 (2011), 132–144; or Gaston Bachelard’s discussion of different kinds of fluids (blood, milk, sweet or fresh water) in poetry in *Water and Dreams: An Essay on the Imagination of Matter*, trans. Edith R. Farrell (1942; Dallas: Dallas Institute of Humanities and Culture, 1999).
98. Wall, “Photography and Liquid Intelligence,” 109.
99. Wall, “Photography and Liquid Intelligence,” 109.
100. Wall, “Photography and Liquid Intelligence,” 109.
101. Wall, “Photography and Liquid Intelligence,” 110. Water is involved in all of the major ways that we produce energy; for example, it cools nuclear reactors, powers dams, and is required for hydraulic fracturing. An exception to the general treatment of water in science fiction films is Andrei Tarkovsky’s 1972 film adaptation of Stanislaw Lem’s novel *Solaris*, which takes place on a space station orbiting the (sentient) ocean planet Solaris, a looming presence outside the window portals.
102. Flusser, *Towards a Philosophy of Photography*, 128.
103. Flusser, *Vampyroteuthis Infernalis*, 109.
104. Flusser, *Vampyroteuthis Infernalis*, 110.
105. Jacques Derrida, *Dissemination*, trans. Barbara Johnson (London: Bloomsbury, 2004), 7.
106. Colin Milburn, *Nanovision: Engineering the Future* (Durham, NC: Duke University Press, 2008), 120. Here, Milburn describes the dissem-

inative science fiction horror of the world reduced to grey goo by nanotechnological accident.

107. Wall, "Photography and Liquid Intelligence," 109.