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A Foray into the Worlds of Imaginary Animals and Humans

The late-nineteenth and early-twentieth centuries were fertile for creativity in science. James Clerk Maxwell's demons helped rethink the second law of thermodynamics, while Albert Einstein's *annus mirabilis* (1905) papers speculated on the plausibility of Brownian motion. Poetic thought became a form of discourse in Nietzsche's *Gay Science* (1882) and Henri Bergson's *Creative Evolution* (1907). This time period saw a revival of the dream of perpetual motion machines and the discussion of the infinite monkey theorem in statistics gained popularity—the theorem Flusser would late discuss in several of his writings on writing. Whether in the hands of physics, biology, mathematics, philosophy, or other discipline, they brought poetic imagination to aid in reinventing modern scientific thought. On the other side, in the arts, the advances of technology and the use of poetic thinking to assist in experimental inquiry made literature itself consider how science affects both the present time and the future. With the backdrop of these advances, H. G. Wells and Jules Verne created science fiction, which uses biological speculation, technological extrapolation, and the figure of the tenacious scientist to question the tendencies in science at the time. Under the title of "scientific romance," their novels would fascinate readers with exaggerations in the realm of science to imagine future technological advances was about to bring to humanity. They brought science to bear on the literary and the artistic.

Vilém Flusser's short essays in *What if?* (2022), as well as his experiments with the Institut Scientifique de Recherche Paranaturaliste (Scientific Institute of Paranaturalist Research – I.S.R.P.), seem to conform to the general idea of Sci-Fi insofar that they are fictional and scientific. However, as Kenneth Goldsmith argues in his "Afterword" to the new translation of *What If?*, the book "flops as science fiction with each scenario presenting absurdly weird, improbable, and outrageous images" (Flusser 2022: 90). At the same time, Anke Finger proposes that the book "simply does not seem to fit, really, into any of the categories now more or less established in Flusser scholarship" (Flusser 2022: x). This is neither a book entirely about media and communication, it does not sit squarely in the camp of scientific writing, and neither can it be attributed to Flusser's thinking on writing and history. Even though his collaborations with Louis Bec and the I.S.R.P. fit within the framework of science writing, like *What if?*, these works share a certain strangeness that does not fit with how scholarship has approached Flusser's oeuvre.

To understand Flusser's engagement with the bizarre world of the absurdly weird, improbable, and the outrageous, to use Goldsmith's apt descriptions, I suggest we go back to the origins of science fiction, to that time in the end of the nineteenth century when creativity infiltrated science, and consider a different tradition that brought together science and literature. The artistic re-imaginings of fake, imaginary projects of "fictional science." Instead of using elements of science to substantiate fiction, "fictional science" used elements of fiction to create, develop, and critique scientific knowledge. These works played on hoaxes and sometimes bordered on pseduosciences, but always with a playful tone. Mark Twain's "How I Edited an Agricultural Paper (Once)" (1870) passes for a realist narrative about scientific writing. Raymond Roussel invented the gentleman scientist, Martial Cantarel (1914), while Francis Picabia creatively engineered purposeless machines, and Marcel Duchamp designed original mechanical devices. Guillaume Apollinaire and Paul Eluard both populated separate bestiaries in the modes of Medieval archives, and Roger Caillois wrote essays on the biological aspects of the Praying Mantis. The most influential of these types of fake science was probably the early Avant-Gardist, Alfred Jarry, who invented, in the waning years of the nineteenth century, the science of imaginary solutions, or 'pataphysics.

Flusser's relationship with 'pataphysics is not direct nor overt, but some of the similarities between the work of "paranaturalism" and "pataphysics," especially in Flusser's collaboration with Joan Fontcuberta may shed some light on the strange scientific practices of *What if?*. Alfred Jarry's 'pataphysical explorations help frame Flusser's work with the I.S.R.P., his *Vampyrotheutis infernalis* (1987), and Joan Fontcuberta's photographic work in *Fauna* (1985-89), all of which display a characteristic playfulness of the pataphysical. Unlike mainstream science-fiction, the connections between the science of imaginary solutions, the paranaturalist exploits, and the fantastic bestiary bring art to bear on the scientific. They explore, ridicule, and refine the logic of Cartesian investigations, in a way to reconsider the process of scientific knowledge production. By appropriating the language of zoology—verbal and visual language—they subvert objectivity and expose the human point of view inherent in any science.

From Père Ubu to Père Formiguera

While Flusser was writing, translating, and revising *Vampyroteuthis infernalis* in collaboration and friendship with Louis Bec, Joan Fontcuberta prepared to stage his strange and comic work *Fauna: the incredible bestiary of professor Ameisenhaufen*, exhibited between 1985 and 1989. Flusser and Fontcuberta maintained

a brief collaboration, through letters between 1984 and 1988 (Calderon and Guldin, 2013). The works they produce during this time seem to share some of the goals of the I.S.R.P., which Flusser, as philosophical counselor, articulated in an unpublished reflection on the Institut: "(a.) to criticize nature as it was proposed by the creator, (for example, to show the flaws and inconsistencies in the construction of galaxies or the ears of mammals), and (b.) to propose the construction of different natures than that of the creator, that is: propose the construction of paranatures" (Flusser, n.d.a.: 1). But who exactly does Flusser mean by the creator, a figure who, he claims, has become of an "unbearable academicism"? He answers, "this creator and inventor, in the old days identified as 'God,' is the Renaissance bourgeois man. Before him there was no nature in the sense employed by us" (Flusser, n.d.a.: 2). Following this line, the Institute understands that nature is a product of culture, and not the opposite. If culture produces nature, then a change in culture could produce different forms of nature. Flusser further suggests that we push forward one more step, and that criticizing nature in itself is not as interesting as proposing new natures. As he urges: "It is absolutely ridiculous today to try and orient ourselves through only one nature when (a.) we know how this nature was created; (b.) we don't feel well in it; (c.) we're starting to pollute it, both materially and epistemologically; and (d.) we are capable of producing better natures" (Flusser, n.d.a: 3).

Fontcuberta's *Fauna* answers Flusser's call to explore alternate possibilities for the natural world, as the exhibit claims to have found an archive of new, never-before-seen creatures, which the photographic archive of a Peter Ameisenhaufen has preserved for the viewer. Both works also share the attempt to never break with the serious treatment of a topic obviously outlandish. Even though Flusser has argued that a "paranature needs to be underpinned by irony, a dangerous but questioning attitude" (Flusser 1972: 11), the output of the I.S.R.P. never breaks with the aura of authenticity they produce. The Institute was successful in their paranaturalist endeavors to the point that they became a recognized scientific institute by the French National Center for Scientific Research. Also, through his work with the Institute, in 1984, Flusser organized and lectured at a conference "Le vivant et l'artificiel" in Avignon, which Joan Fontcuberta also attended. Similarly, Fontcuberta's Fauna uses several layers of legitimization, or documents and texts that attest to the veracity of the object exhibited. Fontcuberta shares the authorship of the exhibit with Père Formiguera, an equally invented researcher, even though their labor is merely to find and display the archive of yet another researcher, Peter Ameisenhaufen, who worked on photographing, describing, and providing models for these new animals. These mechanisms of legitimization give the exhibit and the ISRP an aura of a reality—even though the fictional produces such aura.

These practices are very much in line with the work of Jarry and his 'pataphysics. Jarry wrote

the *Exploits and Opinions of Dr. Faustroll* (1898), which presented itself as a novel. However, within the narrative, the text presents legal documents, catalogues of books, and correspondence from the narrator with authorities in Paris, only to build an air of truth and authority that is not there. As the narrator of *Exploits and Opinions* outlines, Dr. Faustroll practiced "the science of that which is superinduced on metaphysics, whether within or beyond the latter's limitations" (Jarry 1996: 21). 'Pataphysics does to metaphysics what metaphysics has done to physics: namely, question the very basis of metaphysical interrogation by appropriating, exaggerating, and reversing its own method. In a series of essays published in such literary magazines as *La Plume* and *La Revue Blanche*, Jarry played with a new methodology for thinking about scientific discourse on the one hand, and artistic representation on the other. His essays ranged from commentary on political events, to philosophical reflections on the nature of life, to analyses of natural phenomena, among other themes. These brief pieces had in common the playfulness of what Jarry would later call 'pataphysics; they embodied the pataphysical method.

Similarly in tone, the I.S.R.P.'s inversion of the logic of creation (culture makes nature) also questions the basis of metaphysics, using appropriation and exaggeration, classic caracteristics of satire. As Rainer Guldin demonstrates in this volume, Flusser's writing enacts satire, drawing strong parallels with Jonathan Swift's deadpan take on the genre with "A Modest Proposal" (1729). In the essay, Swift established a form of realist satire, through which the diegesis of the work does not in any way give away the playfulness of the endeavor. A reader needs to understand the context of the work, to understand the play: that proposing to eat children as a solution for homelessness is a generally objectionable idea, hardly modest at all. Likewise, Flusser, Fontcuberta, and Jarry take on satire in a very serious tone—neither ever let on that any of their writings are comic, even though they certainly are.

Other similarities between Flusser, Fontcuberta, and Jarry emerge. For one, Fontcuberta's imaginary coauthor, Père Formiguera, seems to be a nod to Jarry's famous character Père Ubu. Another possible connection would be that the I.S.R.P. and *Fauna* seem to follow Jorge Luis Borges' *Manual de Zoología Fantastica* (1957). Borges himself displays echoes of 'pataphysics, especially in his most mysterious and famous story, Pierre Menard. Menard describes in great length his library, a practice that the narrator of *Exploits and Opinions* does to the library of Dr. Faustroll. Most importantly is the striking closeness between the meaning of "pata-" in Jarry's science and the "para-" in Flusser's philosophy with the I.S.R.P. The science of imaginary solutions delved into the very abyss between words and the ideas that the words represent. The term 'pataphysics comes from a contraction of "epi (meta ta physica) and the actual orthography 'pataphysics, preceded by an apostrophe so as to avoid a simple pun" (Jarry 1996: 21). Along with the etymological play, an apostrophe helps avoid (as well as imply) a simple pun: the homophonic play of *pas ta physique* (not your physics) and *patte à physique* (physical paw), which

both sound like *'pataphysique* in French. Hence, Jarry's endeavor in the imaginary science focuses on how the linguistic apparatus, which presumably brings humans closer to the world—or helps them "grasp" the world—actually interferes between the world and representation, as ideas get lost in the infinite play of language. The pun with *patte à physique* (physical paw) evokes the animalizing effect of science, as humans suddenly fail to grasp the world and their hands become like paws.

Jarry also used extensively the Flusserian practice of writing brief and comic essays. Some of Jarry's 'pataphysical essays selected highly specific scientific themes and, in a twisted representation, turned these topics into an alternative reality. For instance, "Anthropophagy" suggests that anthropology needs to begin cannibalizing other cultures effectively and literally if it sincerely desires to learn about the Other. Several essays selected seemingly irrelevant and mundane objects and reinterpreted them using a non-orthodox discursive apparatus to transform them within a different context. This practice finds its strongest echoes in *What if?* and *Natural:Mind*, where Flusser chooses seemingly mundane objects only to playfully reinterpret them. In his essay on the mechanical cow, Flusser uses the practice of factory farming to discuss the larger, and outlandish implications of the cow on nature—as if the cow was an all-powerful machine.

Most importantly, the similarity between Flusser, Fontcuberta, and Jarry lies in their approach of the scientific method, and how their comedy re-imagines scientific knowledge in creative ways. As Judith Roof analyzes the similarity of Flusser and Jarry, "Flusser's re-envisioning of the relations among apparatus, psyche, and the cultural imaginary reverberates 'pataphysics' fanciful re-envisioning of phenomena as well as the dynamics that operate among physics and metaphysics, succession and reversion, generation and feedback, and apparatus and psyche." (Roof 2021: 142)

Such re-envisioning, reverses the logical order of Cartesian assumptions to, in a humorous and inventive way, demonstrate "the complexities, scale, and operational matrices of machines, apparatuses, and media" (Ibid.). Both Flusser and Fontcuberta inherit from the pataphysical method a certain way of thinking: satirical, certainly, but beyond satire, their serious comedic uses of scientific models have a particular attitude toward the method of thinking. As Roof suggests, they reverse the order of logic, they make us look back into the apparatus of representation.

A Foray into Fauna (1985-89)

In a framing essay for the exhibit of *Fauna* at the Museum of Contemporary art of Seville, the museum director explained how the photographs Fontcuberta and his collaborator Formiguera put forth are proof of the truth of the exhibit: "Photography, as everybody knows and as these investigators postulate, always tells the truth" (Fontcuberta 1989: 4). Because of the automated nature of photography, the medium creates the illusion that the hand of the photographer is not present and that the final product is a manifestation of nature. In fact, in "Ontology of the Photographic Image" (1960), André Bazin argues that photography satisfies our "obsession with realism" (Bazin 1960: 7). Because it "affects us like a phenomenon in nature, like a flower or a snowflake whose vegetable or earthly origins are an inseparable part of their beauty" (Ibid). For Bazin, photography tricks the viewer into believing the final product duplicates nature, as if reality bloomed on paper like a flower.

Bazin's metaphor emphasizes the representation of nature and insinuates that photography works as scientific proof because it takes artifice away from the work of representation. The scientist would not need to rely on an artist to depict natural objects, but could rather use an apparatus that mechanically "captured" the natural world—a pure mimesis of nature. *Fauna* challenges this very idea by following the suggestion that "photography always tells the truth" with images of flying elephants, multi-legged snakes, and unicorn monkeys. The exhibit appropriates the visual language of taxidermy to frame the human point of view inherent in any science. Ultimately, his photographic bestiary operates in the same way that a novel, a short-story, or a poem work: an artist may plan and craft a work of art, but language always evades the speaker. A photograph of an animal in nature may function as a visual reference for a study on the specific animal, but, as an image, the photograph becomes text. Fontcuberta's animals remind us that both writing and images are textual material—and not an outside reality.

The exhibit begins with the life story of Peter Ameisenhaufen narrating the story of his life: he was born in Munich and was raised by his aunt in Dortmund—his mother had passed during childbirth and his father lived in Tanzania as an explorer, hunter, and safari guide. His father remarried a nurse named Else, but both died while Peter was still young: his step-mother was devoured by a lion she was trying to domesticate; his father died from cerebral hemorrhage resulting from a violent strike by an elephant trunk. Within the satirical, comedic framing of this unfortunate series of events, *Fauna* plays with the urge in scientific discourse to turn nature into narrative.

The exhibit then displays a photographic archive of the animals, annotations, and writings by Peter Ameisenhaufen. Through the display of photographs as copies, registers of a lost archive, the exhibit sets up a dialectic between original (the archive now lost) and the copies (the photographs).

The copies now give us a snapshot of what the totality of the archive was, but also imply that there is something missing here: the skins. In Walter Benjamin's terms, the visitor to the exhibit can see a mechanical reproduction of the (original) work of art (or science), which now lacks the aura of its original. By extension then, the actual skins of dead animals become synonymous with the aura of the object and, with such status, the skins represent a score of assumptions about scientific presentation within a natural history scenario—namely, the *presence* of the animal, the *reality effect* of Realism, and an epistemological *claim to truth* of the scientific (positivistic) discourse.

For example, the display of the animal *Solenoglypha Polipodida*, the snake with legs, appears as four photographs, all black and white and dated 30 April 1941. The first shows the animal in a position of attack—erect on its six pairs of legs; the second shows it in a position of "Whistling" to attract its prey and feed; the third as it is captured by Ameisenhaufen; and the last in the laboratory, segmented and in front of a plate to be analyzed. This series of photographs creates a narrative of capture and death. Coupled with the scientific description that understands this animal as an "extremely aggressive being" who kills to eat but also for the "pleasure of killing," the overall narrative presents the zoologist as doing us a favor in capturing, killing, and analyzing this dangerous animal. Its name also reinforces the narrative aspect of the display: Solenoglypha polipodida comes from the Greek for many-legged (polipod-) image (-glypha) of seriousness (soleno-). The scientist naming this animal sees it as a serious threat, imposing his interpretation of nature onto the animal through the layered name.

The same narrative apparatus appears in the flying unicorn monkey (*Cercopithecus icarocornus*). When describing the place where the specimen was seen, Ameisenhaufen's notes describe his exploration of the depths of the Amazon in Brazil and his encounter with an indigenous tribe who introduced him to this animal. When describing the "Manners" of the animal, he goes into a long analysis of the Cercopithecus's function in the indigenous tribe that holds it as a sacred being. The first photograph, then, presents the animal sitting on a sacrificial totem. The following images are mostly blurry and attempt to represent the animal's movements—taking off, searching for prey, hunting, and flying. The only analysis possible of this animal is done on drawings in paper, which work as a retrofitted narrative. Fontcuberta's animals appear in the exhibition as photographic remains of an archive now lost—an archive that only narrative and human framing can restore.

In that sense, the Spanish photographer shows us how much "aura" is an artificially created and heavily manipulated effect, even on objects of science or pre-mechanical reproduction works of art. The aura effect of a mounted polar bear is not that we get to experience the skin of the animal, or have any direct relationship with nature, but rather the illusion that we do—the illusion that we are in the presence of an animal, a nature, an Other. The same applies for art: the aura of the *Mona Lisa* today

does not depend so much on the painting's ontological presence at the Louvre, but instead on the illusion created by the museum apparatus, the architecture and interior design of the building, the spotlights, the presence of security guards who threaten those who linger too long, the barriers that keep viewers at bay, and other props that tell us "that's the one"—something viewers can never verify on their own accord. The experience of an art museum relies on these illusions. They attract thousands of viewers every day to snap a photograph of the *Monalisa*, a photograph that proves "I have been there," I have experienced the aura. In *Towards a Philosophy of Photography*, Flusser argues that photos are another layer of mediation that separates human beings and the world. As he suggests, "They are supposed to be maps but they turn into screens: instead of representing the world, they obscure it until human beings' lives finally become a function of the images they create" (Flusser 2000: 10). Fontcuberta's photographic animals create an effect of aura to expose how even the other objects in the museum (mounted animals in a natural history museum or a painting at the Louvre, for example) are all just images with the illusion of a natural narrative.

Fontcuberta's bestiary reflects on the *process* of imitation, making it not about the subject matter per se, but rather, about how each discipline or field talks about each topic. Alfred Jarry's pataphysical essays, Flusser's weird writings and Fontcuberta's photographic archive understand the paradox of mediation: at the same time, they connect subject and object all the while *mediating* between them, that is, always keeping each entity separate. This media self-awareness is ubiquitous to the "waning years of the Guttenberg galaxy," as Marshall McLuhan put it. Flusser himself interpreted this period—from the rise of photogrpahs to the present—as the universe of technical images. In modernist scholarship, these new forms of periodization of the twentieth century rewrite modernism's most iconic characteristic: the modernist self-awareness is an awareness of the status of art as a media object, involved in capturing, processing, and reproducing data. Julian Murphet has described this as "a concerted becoming-media of the arts" (Murphet 2009: 5). The wealth of media machines such as the typewriter, camera, and telephone, appear as central concerns in the products they create, such as newspapers, scientific journals, taxidermy mounts, films, and photographs. Through play with the convoluted levels of apparatuses, Flusser, Fontcuberta, and Jarry demonstrate how these media machines and their systems constantly *produce* the very data they claim to capture.

The Exploits and Opinions of Vilem Flusser, 'pataphysician

Several of Flusser's essays in *What if?*, as well as his engagement with the I.S.R.P., share a very similar feature with Fontcuberta and 'pataphysics. They present "found documents" or imitate the genre of scientific writing. Flusser's *Vampyroteuthis infernalis* presents itself as a biological treatise on a squid that, at the time, was impossible to be studied—hence had to be imagined. The fourth and seventh scenarios in *What if?* appropriate the language of a scientific report. The eleventh scenario tries to pass for a piece of news. In fact, the original publication of the latter, as "A Vaca" in the newspaper Folha de São Paulo, merged the playful narrative of Flusser's text with other serious pieces of news—visually, the essay looked and sounded like a news article. *What if?* owes its strangeness to the uncanny imitation of previous genres.

In the fourth scenario, titled "Great Uncle," an anthropological expedition ventures into the "Valley of the Neanderthals" to "examine the economic significance of the apparently humanoid mammals living along the Neander" (Flusser 2022, 14). The expedition was split in their decision of whether these animals could be hunted or not. The majority group decided that "each individual bone is clearly distinct from its human equivalent" and despite the proximity with humans, they lack the ability to manipulate *concepts*" and thus are to be declared "fair game for economic and ecological reasons" (Flusser 2022: 15). The second group, the minority, focuses on the cultural expressions of these creatures and interprets them as "another form of humanity" (ibid.), which can offer value to humans. Of course, in the apocalyptic scenario of *What if?*, the government accepts the majority opinion and declares this creature fair game for hunting.

This report playfully highlights the traditional encounter of Europeans with other cultures in past centuries. The analysis of the bones evokes the nineteenth century medical discourse on race, and especially the field of phrenology, which created parameters for analyzing other cultures through the shape of their skull. Despite following the scientific method, the discourse of race determined that European skulls were superior and more conducive to thinking, whereas African, Indigenous, and Asian skulls were more akin to the animal. This scientific narrative framed much of the violence against Otherness in European encounters through ethnographic expeditions, which saw the Other as an object of study and devoid of human characteristics. This racist science emboldened the grotesque displays of otherness in the European and North American imaginary: Human zoos, Hottentots, freakshows, and more. These displays of race also based much of the Nazi thinking behind the final solution and the determination of racial superiority.

Flusser's *Vampyroteuthis infernalis* has become the most popular of his weird experimentations with science, with scholars analyzing the project from a variety of perspectives on technology, media, philosophy, and history, to name but a few. The project also features the same thinking about race and

species, all the while following the 'pataphysical method of imitation and satire. Each of its five parts addresses a specific topic about the animal: genus, genealogy, world, culture, and so on. As he moves through these aspects, Flusser constantly compares this animal with humans. For him, both are part of the Eucoelomata category, within which animals with ectoderm, mesoderm, and endoderm are inscribed. He notes, "Eucoelomata were disposed to one of two evolutionary possibilities: to refine either the endoderm (the digestive system) or the ectoderm (the nervous system)." Finally, he suggests that "as ignoble as this may be, we have followed the first path, that of digestion, and vampyroteuthes the second" (Flusser 2012: 8). These statements create a satirical irony in first separating humans into a special category that refined its endoderm in evolution. Using the scientific descriptions "endoderm" and "digestive system" creates an illusion of a polished, privileged position in the chain of evolution, even though the literal meaning is that humans have developed digestion in lieu of intellectual capabilities.

Aside from the quirky, funny, and thought-provoking content of Flusser's collaboration with Louis Bec, their paranatural system brings to the center the question of point of view and, by extension, of subjectivity. As Flusser notes at the end of his *Orthonature Paranature* "every paranature needs to be underpinned by irony, a dangerous but questioning attitude." The main task in *Vampyroteuthis infernalis* is to displace the human point-of-view as the only form of viewing evolution. The book further creates a satirical commentary on evolutionary biology. By tracing a taxonomic comparison between humans and vampyroteuthes, the treatise puts the human perspective to test and reminds the reader of how much scientific writing relies on an illusion of a disembodied observer—even though the observer is always present.

The second chapter in this treatise is highly concerned with the vampyroteuthic position within the chain of evolution that constitutes the animal kingdom. He describes the genealogy of the phylum *Mollusca* and compares it constantly to humans only to denounce how the taxonomic division we employ in the study of species is actually a human creation that privileges the position of humans. He starts by tying our popular perception of animals to the phylogenetic tree: "The more disgusting something is, the further removed it is from humans on the phylogenetic tree" (Flusser 2012: 11). The humor is created by making a statement that is exaggerated and untrue—that taxonomy is based on how much we think animals look good—but which calls attention to the somewhat biased depiction of the phylogenetic tree. As the commentary finally concludes, "As far as we are concerned, life—the slimy flood that envelops the earth (the 'biosphere')—is a stream that leads to us: We are its goal" (Flusser 2012: 12). The satirical project of *Vampyroteuthis* reminds the reader that humans are in fact

not the goal of life—we just think we are. By making such an exaggeratedly self-centered statement, Flusser reveals the hubris of scientific language.

This position of superiority needs to be renounced, even though thinking outside the human might pose challenges: "For the remainder of this fable, then, the stream of life will not flow in our direction but rather in [the vampyroteuthic's]" (Flusser 2012: 12). The book facetiously attempts to shift the view to that of the animal and to develop a theory of evolution, which, unlike the ones in place, does not culminate in the human as the apex of evolution. As he states, "According to human taxonomy, they occupy the fourteenth of the twenty-three phyla that constitute the animal kingdom. From a vampyroteuthic perspective, however, there are many reasons to regard Mollusca as the most developed of all phyla" (Flusser 2012: 12). This new theory is going to privilege the aspects of the phylum Mollusca that are supposed to be their most advanced features, and will then judge other in this light. Likewise, humans have done this for ages in constructing a theory that puts the use of reason and language as the most evolved—an echo from the Fourth scenario, where the expeditions consider the humanoids to be animals based on their inability to manipulate concepts.

Conclusion

As part of a tradition of literary experimentation that tries to pass art for science as a way to game the system of scientific knowledge production, Flusser's satirical scientific essays, along the tradition of 'pataphysics and imaginary animals, reconfigures the discourse of science and offer different solutions to methodological concerns. These essays shed light on possible blind spots the "perspectiveless perspective" of science might produce (Roof 2021: 142). In this endeavor, or in this gesture of critique and exploration, Flusser's writing might help expand the realm of possibilities in scientific investigations.

The history and philosophy of science often feature thinkers who step outside the confines of the scientific method to offer compelling analyses of biases and blind spots in scientific writing.
Michel Serres has written extensively about alternative traditions of science and the narrative element in all representations of nature. In *Parasite* (2007 [1982]), he explains how these alternative sciences influence the mainstream ones. Using the figure of parasitism in communication, where every system receives the interference of a parasite, or static, that refuses to keep quiet, Serres saw the other as an inherent part of the main discourse. Just like the relation between parasite and animal, the static signal disrupts the main message with confusing information, predating on the main channel. As Serres

defines it, the interruption comes from a "parasite, physical, acoustic, informational, belonging to order and disorder, a new voice, an important one, in the contrapuntal matrix" (Serres 2007: 6). Despite being suppressed by the main message, the parasite interrupts the signal with another signal, bringing about a different voice. The symbol of the parasite also emphasizes the importance in considering the human, animal, machine relations in scientific discourse.

For instance, commenting on the inseparability between animal and technological in his lecture "Machine and Organism" (1952), Georges Canguilhem famously criticized nineteenth century vitalism for interpreting organic structures via comparisons to the mechanical, a move that Jarry does facetiously. As he suggests, "relations between machine and organism have generally been studied only in one direction: almost always, the attempt has been to explain the structure and function of the organism on the basis of the structure and function of an already-constructed machine" (Canguilhem 1952: 76). For nineteenth century biological thought, organisms functioned very similarly to machines, almost as if the organisms mimicked the mechanical. Canguilhem's point emphasizes the inversion that the organic needs an artificial structure to be explained. Only through recourse to an already artificial structure can biology explain the natural world. Notably, Canguilhem's word choice "structure and function" already point to an underlying narrative about how biology saw the nonhuman world: as mechanisms serving a certain purpose. Evolutionary biology focused the "survival of the fittest" on the grounds of mechanical efficiency, since only the organism that *functions* better will persevere.[1]

To avoid this causal logic of the organic/mechanic metaphor, the method of thinking and analysis must be reversed. When Jakob von Uexküll theorized "Umwelt" in *A Foray Into the World of Animals and Humans* (1934), the Estonian biologist suggested that animals (and humans) not only perceived the world around them, but created this world as they perceived it: "the environments … are as diverse as the animals themselves" (Uexküll 2010: 42). Unlike most zoologists at the time, who saw animals as organisms that function like machine Uexküll debunked the mechanical metaphor by interpreting animals as active agents in forming their own reality. He broke with the biological models previously established and brought together in his study a unique narrative form, which understood the human presence in making the scientific discourse.

At the time when Flusser and Fontcuberta collaborated, Flusser published his famous essay on photography, where he warned about the misguiding nature of photographs. "They are supposed to be maps but they turn into screens: Instead of representing the world, they obscure it until human

[1] This position echoes works in the nineteenth century that thought of technology as extensions of human function. See Kapp 2018. Siegfried Zielinski's afterword maps Kapp's contribution to the ideas about machine and organism in the late nineteenth century.

beings' lives finally become a function of the images they create" (Flusser 2000: 10). Like the scientific method, photographs point from subject to object, which highlights the object all the while obscuring the position of the subject. Instead, the focus of artistic inquiry may help in understand the importance of "method" as an invisible part of science. In his postscript to *Gestures*, Louis Bec noticed the role artistic productions have in the history of art: "They encourage us to consider art as a 'method' developed by the living to preserve its physical and imaginary viability by exploring the artificial environment that it itself creates" (Bec 2007: 11).[2] Bec speaks of the realm of art, but his use of scientific language of biology reverses the direction of the metaphor. Not only does art help the artist preserve its "viability," but artistic production can also assist in exploring the realm of possibilities it creates.

Flusser's collaboration with Fontcuberta, which never materialized in its entirety, yielded an essay by Flusser on the notion of a "counter-vision" (Flusser n.d.b.). Since the world of images creates a "vision" of the object, then we need a counter-vision: to turn the camera inside out like a glove revealing its inside. The counter vision would thus not be "a vision of the world, but a vision of vision" (Flusser n.d.b.: 1). This vision of vision seems to be the image we have whenever nonhuman animals stalk our fiction and theory. A vision of vision is the 'pataphysical method: whenever we imagine the *umwelt* of other animals, we actually find our own.

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[2] "Elles nous incitent à considérer l'art comme une 'méthode' élaborée par le vivant pour preserver sa viabilité physique et imaginaire en explorant le milieu artificiel qu'il crée lui-même"

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