

Research Article



Xenophilosophy and the Knowledge of Ourselves

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Abstract | Extraterrestrials have been a common topic in some oral traditions but also in literature and philosophy. Epicurus, William of Ockham, Immanuel Kant or Michael Ruse, to name just a few examples, have used this kind of fictions to analyze and defend very different arguments. Currently, this interest has not diminished. On the contrary, it has spread to other disciplines, including the natural sciences. In fact, this interest does not entail just an expansive theoretical movement, but also the development of a practical dimension, i.e. the active pursuit of life and signs of intelligence in the outer space. My goal in this article is twofold. First, in a practical level, I will explore some arguments in favor of the scientific interest regarding the search of extraterrestrial life. Second, from a theoretical perspective, I will present some examples that show the philosophical value of the extraterrestrial intelligence fiction as a mental experiment of remarkable heuristic fertility.

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Introduction

Philosophy has often been accused of avoiding real problems. As if animated by a strange tendency, it usually seems to prefer the dream of distant skies rather than the immediacy of Earth. In this way, Plato narrates in the *Theaetetus* how the philosopher Thales, distracted by the sight of the stars, ends up falling into a hole (Plato 1993: 174 ab). Not quite a sublime experience, indeed, but to some extent just a trivial incident. The objection that holds that philosophy wastes time in nonsense is certainly more serious and painful. In Cicero's words: "Somehow or other no statement is too absurd for some philosophers to make" (Cicero 1923: II 58 119). Given these reasonable critiques and my interest in the extraterrestrial intelligence (ETI) issue, my aim in this article is to answer two possible objections: i) In the practical order: what sense does it make to spend money and time searching for ex-

traterrestrial beings, when strictly speaking we do not know whether they exist or not, and ii) In the theoretical order: isn't it pointless to speculate about the cognitive abilities or moral status of aliens when our own consciousness remains a mystery?

In order to answer these objections, I divided this paper in two sections. In the first, I will explain how extraterrestrial life (and particularly ETI) currently became an object of scientific inquiry. This scientific side of the question is crucial to set the entire issue in its current context and to offer a provisional response to objection i). In the second section, I will present some examples on how the philosophical speculation about extraterrestrial intelligence (which I call Xenophilosophy) may be a fertile mental experiment that raises interesting perspectives on classical problems, especially in anthropology and ethics. In this way, I will try to respond to objection ii).

Extraterrestrial Life: From Fiction to Sciences

Poets and storytellers have often been interested in extraterrestrial life, but occasionally this topic was also a debated issue among philosophers, scientists and theologians (Dick 1982; Crowe 1986, 2016). Over the last few decades, the topic has increased its presence in the arts and in the entertainment industry, generating a huge quantity of books, films and merchandising. Additionally, it has also gained prominence in the debate of ideas (Dick 2001; Dunér et al. 2013; Vakoch 2014; Losch and Krebs 2015). In fact, there is not merely a parallel growth of this topic both in fiction and philosophy, but a strongly interrelated development. This interrelation is not surprising, since it is not possible to conceive an interesting fictional universe, which is inhabited by intelligent beings, without compromising a large number of both scientific and philosophical assumptions. In a slightly broader context, some authors have explored this fruitful symbiosis between philosophy and science fiction (Sanders 2008: 1-18; Schneider 2009; Burton 2015). However, I think that the main originality of our time is that extraterrestrial life has become an object of direct scientific exploration.

Two events, one long awaited and the other one mostly unexpected, substantially contributed to the development of this scientific interest. The first event consists on the empirical confirmation of the existence of “Earth-like” *exoplanets*, i.e. planets of a similar size to the Earth orbiting within what is considered the “habitable zone” of stars other than the sun (Tarter 2011; Encrenaz 2013; Wilkinson 2016). The second event consists on the finding of *extremophile* microorganisms that are able to survive in highly aggressive geological or physical-chemical conditions. These extreme conditions entail dryness, temperature, radiation or pH, to name only four of the variables involved in the phenomenon of life (Rampelloto 2010; Canganella and Wiegel 2011). In short, during the second half of the twentieth century both the plausibility of Earth-like environments and the awareness of the extraordinary versatility and adaptability of life, contributed to the emergence of a scientific research program called Astrobiology or, less frequently, Bioastronomy or Exobiology (Holmberg 2013: 223).

Astrobiology is an essentially multidisciplinary research program which focuses on three fundamental questions: “(1) How does life begin and evolve? (2)

Does life exist elsewhere in the Universe? (3) What is the future of life on Earth and beyond?” (Cabrol 2016: 1). Astrobiology not only involves the search for evidence of life outside Earth, but also the theoretical speculation about alternative forms of biological development, for example non carbon-based. This program, almost fully recognized by the scientific community, has its own renowned specialists, journals, research centers, laboratories, international conferences and all the academic paraphernalia (Czyżewska 2013: 231-243; Domagal-Goldman and Wright 2016: 561-653).

However, within the initiatives actively searching for life in the universe, the most popular ones are those which fall under the umbrella of the SETI program (Search for Extraterrestrial Intelligence). This project, which was originally proposed by Cocconi and Morrison (1959), became real under the leadership of Frank Drake, who used the radio telescope of Green Bank in Virginia. Since then, and after a few years of sponsorship from NASA, it has been mostly developed by other institutions such as the SETI Institute, the University of Berkeley and the Medicina Radio Astronomical Station of Bologna (Dick 1993).

The SETI project has, basically, two different facets: a passive one and an active one. In its passive and systematically developed form, it focuses mainly, but not exclusively, on the tracking and identification of narrow-band electromagnetic waves that, as far as we know, do not occur naturally. This kind of modulated frequency waves could be thus interpreted as a sign of intelligent and technologically advanced life (Tarter 2001). A few radio and optical telescopes around the world provide the information that is processed and analyzed using specifically designed algorithms: the “Fourier Transform” for the narrow-band frequencies and, less frequently, the KLT (*Kabrunen-Loève Transform*) for the wide-band signals (Maccone 2010). The active dimension of the project, which is much less developed, consists on the sporadic emission of messages to the ETI, for example: the “Arecibo Message” (1974), the two “Cosmic Calls” (1999 and 2003), the “Teen-age Message” (2001) and a few messages sent into space by the astronomer Alexander Zaitsev from the Evpatoria radio telescope in Ukraine over the last fifteen years (Musso 2012: 43). Finally, Seti@home, which is the first and largest initiative of distributed computing resources hosted by the Space Sciences Laboratory at the University of California, Berkeley. Basically, this project receives the collaboration of

millions of volunteers who provide the spare capacity of their personal computers to increase the computing power of the program (Linde 2016: 294–298). The result is a high computing capacity at a very low cost.

At any rate, everything mentioned above simply confirms the human interest in the issue. The ubiquity and constancy of such interest and the contemporary irruption of sciences in the topic are not sufficient *per se* to answer objections i) and ii). “Interesting” is not a synonym of “reasonable” or “useful”, and science explores today a wide spectrum of phenomena, even curious phenomena such as “near-death experiences” (van Lommel et al. 2001; Parnia 2014) or the so-called “past-life memories” (White et al. 2016: 169–196). For better or worse, on a few occasions science seems not to hold some of its past rigid standards any more.

In order to answer the first objection, which points to what André Kukla calls the “Pursuitworthiness of extraterrestrial studies” (Kukla 2010: 25–43), is important to note that it is usually the case that a scientific search cannot be justified *a priori*, but that depends on a right balance between costs and foreseeable outcomes. In this case, the first problem that could arise is clear: there is nothing less useful than to look for something that does not exist.

Nevertheless, leaving aside the theoretical and practical difficulties involved in proving any negative existential statement (Cartwright 1960, Kukla 2010: 29), looking for something that does not exist is not equivalent, in principle, to looking for something we do not know whether it exists or not. The former is simply as absurd as chasing a Chimera, but the latter was often the initial condition of many truly novel findings. For example, there was no certainty, and many explicitly rejected, the existence of microscopic organisms, until Robert Hooke and Antoni van Leeuwenhoek empirically proved their existence (Gest 2004: 188). Something quite similar could be said of the discoveries of genetic inheritance, heliocentrism, or the city of Troy. In such cases, a reasonable suspicion of existence led scientists to very positive results.

In addition, even though Astrobiology and programs such as SETI have very specific goals, they could result in collateral discoveries and benefits both in theoretical and practical terms. As a minor example coming from research on extremophiles can be illustrative: “The powder that works in your washing machine at

high temperature functions because it contains proteins extracted from microbes that grow in volcanic hot springs” (Cockell 2012). This example would be a kind of oblique justification but perhaps not a less genuine one.

Whatever the case, it is also an undeniable fact that some human searches appear as ends in themselves, regardless (to some extent) of their costs and outcomes. Thus, it would be unreasonable to question the necessarily asymptotic search of wisdom and virtue or the dream of a just society. Nobody would deem reckless the pursuit of happiness, which the Spanish philosopher Julián Marías described with enviable subtlety as a “necessary impossible” (Marías 1995: 202). Perhaps, the curiosity of knowing whether we are alone in the universe involves a bit of the attraction or of the inevitability of those transcendent pursuits.

Direct justifications, however, are far more complex. If we apply the standard theory of rational decision—as André Kukla suggests—, many uncertainties arise. Indeed, although the costs of the search are available, it is not so simple to weigh other factors involved, such as the probability of success and the theoretical and practical outcomes derived from a potential success (Kukla 2010: 25–41).

In the case of the SETI program, these difficulties are particularly striking because although it represents a relatively small portion within Astrobiology (even in terms of economic cost), it still raises some opposition in academia. This resistance stems from a not entirely unjustified skepticism. In fact, uncertainty extends to almost all of SETI assumptions. There are no rational grounds to establish until now: i) whether there is extraterrestrial life or not (Mash 1993; Kukla 2010: 1–24), ii) whether this life form could be intelligent, iii) whether it could have a technological development compatible with ours, and iv) whether this technology could make surmountable the distance between civilizations (Shostak 2015: 227–240). Moreover, the detection of a biological intelligence could lead to a relevant contact if and only if: v) the time between the emission of a signal and the reception of the response lies within the life expectancy of the civilizations involved (Kukla 2010: 47; Chick 2015: 270–299), vi) we were able to identify a signal as a signal (Sonesson 2013: 185–190), and vii) their language was somehow commensurable with ours (Holmer 2013: 157–184). Finally, even if all these conditionals were satisfied,

and if we managed to make a real contact, still two new problems would arise. First, we could not anticipate exactly how humanity would react to the news (if it would cause panic or the enhancement of cooperation and altruism, for example). Second, we could not know what attitude the aliens would assume towards us, human beings (Musso 2012: 45-47).

When considering the possible outcomes of a search, it would not be the same to contact a powerful and beneficent civilization (Tough 1986) or one with little or no interest in lower life forms; not to mention the possibility of calling the attention of a potential predator or conqueror (Michaud 2007; Raybeck 2014). Regarding the last possibility, most scientists consider that it is highly unlikely that a civilization with access to the amount of energy needed to cover interstellar distances were forced to travel across the universe in search of resources. Nevertheless, strictly speaking, even these apocalyptic horizons cannot be dismissed (Musso 2012: 43). Finally, Adam Körbitz shows the true dimension of our uncertainty, arguing that we are not even able to assess whether the worst scenario depends on making contact with ETI or on avoiding it:

There are possible dangers to both engaging in Active SETI (in terms of attracting the attention of an egoistic, predatory ETI) and to not engaging in it (at least in the form of lost “opportunity benefits” of contact with an altruistic ETI that may help us save us from ourselves, or from an asteroid, or from a distant supernova—pick your poison). But since we currently have no means of knowing what the probabilities are of either outcome, or even determining which outcome is truly the worst-case scenario, “precaution” toward only one side of the risk balance sheet while ignoring the other is simply of no help whatsoever (...) (Körbitz 2014: 119).

That being said, I think that it is reasonable to adopt a mild and indirect optimism. Pessimism would be justified in case ETI would prove to be theoretically unconceivable, contrary to our present scientific knowledge of the universe, or unreachable in practice. Strong optimism would be justified if we had any positive reasons to think that ETI does exist and if our technological resources were much more advanced than they actually are. Mild optimism, instead, rests on the distinction between looking for something

that does not exist and looking for something we don't know whether it exists or not. In fact, this has been a condition for many valuable discoveries, as the history of science shows. My optimism is also indirect because it is not grounded on the positive outcome of the search itself, or the eventual benevolent nature of the civilization encountered, but on the collateral benefits which may result from the search.

On the contrary, the ETI issue has a relevant and direct role in the philosophical field, since it responds precisely to our second objection. As I will try to show, and is a *locus communis* among those who have addressed the issue from Kant to the present, speculation about ETI can be a valuable resource for human self-knowledge.

ETI as a Philosophical Thought Experiment

Until a space probe finds any truly convincing evidence or the SETI program detects an unmistakable sign or, why not, we receive the long-awaited or dreaded visit, all speculations about ETI will be nothing but a game of our imagination. Nevertheless, every interesting game requires some restrictions. Not even in imaginary games everything is allowed. We all have experience of those frustrating situations when, in spite of our dearest desires, a fictional pact becomes untenable. As when in the last years of childhood one realize that Santa Claus is just an illusion. Something similar happens with bad movies, in which, due to the low budget or the lack of imagination of the producer (or both), one can easily guess a human figure under the alien's body. Thus, the spell is broken. This is the case because a good fiction, according to Jorge Luis Borges, cannot be an “irresponsible and free invention”, but it shouldn't be “stalled by a thrive of credibility” either, which would paradoxically make the story incredible (Borges 1955).

Nevertheless, beyond literary recommendations that focus on the appealing of a story rather than on its truth, it is noteworthy that a thinker of proverbial seriousness as Immanuel Kant pointed out the same problem. The German philosopher who recurred several times to the ETI fiction within the context of his anthropology and ethics (Kant [1798] 2006: 237; Clark 2001; Szendy 2013: 45-79), knew that the greatest difficulty of this scenario was precisely to settle “the border where well-founded probability ends and arbitrary fictions begin” (Kant [1755] 2009: 144).

Thus, with the aid of rational analysis, a mere fantasy can become a thought experiment fraught with theoretical implications.

As many others did before me, I would like to propose a simple philosophical map of the ETI question, with anthropomorphism located as the fundamental theoretical core (Kracher 2006; Clark 2001: 256-261; Ruse 2005: 212; Antonites 2013: 71; Parthemore 2013; Rolston-III 2014: 211). A constellation of issues (ontological, ethical and religious) orbits around this anthropomorphic nucleus. Anthropomorphism is at the center, because any speculation about alternative forms of rationality, whether they are aliens, angels, non-biological entities or even God himself, always hides a reference to ourselves. Nevertheless, one particularity that distinguishes ETI from these other theoretical scenarios is that it would compel us to rethink the limits of anthropomorphism with respect to other species of rational animals. In this sense, Alfred Kracher clearly said that the whole question of ETI could be interpreted as a “metaphor for human self-reflexivity” (Kracher 2006: 39).

In fact, anthropomorphism is an inescapable theoretical obstacle, since a human bias is both a constitutive limitation and a condition of possibility of any relevant knowledge. Moreover, any attempt to transcend this limitation implies some circularity: a human being trying to discover and surpass the limits of his own human perspective. I would say, however, that inevitable does not necessarily mean invalidating. As Holmes Rolston III said from the fact that “we are always situated somewhere (...) does not follow that our knowledge is situational” (Rolston-III 2014: 113). Therefore, speculations about ETI become philosophically relevant because, even though they do not involve new information, they force an exercise of self-transcendence that puts into focus the tension between what is particular and what is potentially universal in our rational nature (Janović 2014: 176).

Thus, speculations about ETI can be used in philosophy as thought experiments. These thought experiments usually take two different forms, that I will call *direct fictions* and *resource to the gaze of others*.

Direct Fictions

Direct fictions emerge from human imagination in the effort of conceiving other possible worlds inhabited by intelligent creatures. These creatures would

expectably differ from us regarding their biological basis, their cognitive abilities and their social organization. Nevertheless, they would be, somehow, an image of ourselves. Thus, in a good fiction, these aliens emerge from a conscious or unconscious process that picks out the aspects of our rational nature that could be genuinely universal. Aliens express humanity, but in its non-exclusively human traits.

Immanuel Kant held this philosophical thesis and highlighted the most original contribution of the ETI scenario. He argued that our self-knowledge as a species could not be complete until we experience other non-human rational creatures:

In order to indicate a character of a certain being's species, it is necessary that it be grasped under one concept with other species known to us. But also, the characteristic property (*proprietas*) by which they differ from each other has to be stated and used as a basis for distinguishing them.—But if we are comparing a kind of being that we know (A) with another kind of being that we do not know (non-A), then how can one expect or demand to indicate a character of the former when the middle term of the comparison (*tertium comparationis*) is missing to us?—The highest species concept may be that of a terrestrial rational being; however, we shall not be able to name its character because we have no knowledge of non-terrestrial rational beings that would enable us to indicate their characteristic property and so to characterize this terrestrial being among rational beings in general. It seems, therefore, that the problem of indicating the character of the human species is absolutely insoluble, because the solution would have to be made through experience by means of the comparison of two species of rational being, but experience does not offer us this (Kant [1798] 2006: 225).

In a similar fashion, philosopher Joel Parthemore maintains that when it comes to self-knowledge, an encounter of intelligent civilizations would lead to equal profits for both species:

The aliens —be they little green men from New Mars or bug-eyed monsters from Alpha Centauri— will, presumably, be no better able to explain their own consciousness than (to date

at least) we have been able to explain ours. Here we can reasonably hope to help them, as they can help us, precisely because of those ways in which, inevitably, we will be unlike each other. For —by the very objective distance that our dissimilarities give us— we may give them insights into their nature, and they may give us insights into our nature, that neither we nor they could achieve on our own (Parthemore 2013: 86).

Both quotations rely on the assumption that we have some knowledge, albeit intuitive, of rationality as a genus. Without this knowledge, we would not be able to identify differences or similarities between species. If this universal knowledge were not possible, then contacting one, two or a thousand species would not represent any advantage, since we would not be able to recognize them as different kinds of rational beings. Following this idea, Parthemore concludes:

On an even much deeper level, recognition of extraterrestrial intelligence as intelligence presupposes seeing the human in the alien: recognizing the us in them (and, by implication, the them in us). That recognition could be based on many things: on the artefacts that they build, on the recognizably message-like communication that they use (...), on the emotions that they seem to display under conditions in which we would experience those emotions as well; but it must be based on something. The idea of confronting an alien intelligence with whom we have nothing in common is conceptually self-contradictory (Parthemore 2013: 83).

Based on this assumption, the whole issue of the ETI (either real or fictitious) makes sense, because it forces us to consider the possibility of alternative forms of life, or sociability or knowledge. It pushes us to a self-reflective movement that questions what we find obvious, exposing what is unconscious and problematizing what we take for granted. In this sense, Michael Ruse casts doubts on the potential trans-planetary validity of the prohibition of rape, a rule of high emotional significance in our species (Ruse 2005: 234–236). With this uncomfortable example, he urges us to reconsider to what extent a strong moral evidence is grounded on mere contingencies (for example the sexed condition of our species) or on practical reason itself. Finally, judging something we consider evident

or obvious is not necessarily equivalent to eroding its truth, but could lead to its restoration with an even stronger epistemic status.

I would now like to offer some examples of this particular use of fiction as a philosophical tool. My goal is to show the heuristic fertility of the mental experiment. My list is not exhaustive, and I'm not able, in this context, to fully develop all the philosophical implications of these issues nor my own views on each matter.

First, I will consider cognition. For most contemporary philosophers, it is indisputable that human knowledge (both ordinary and scientific) is essentially linked to our sensory activity. We can hardly deny that the way we see the world defines, to some extent, the world we see. Besides, we have to acknowledge that our senses are the result of specific adaptations to the planet in which we live. Therefore, it is not absurd to suppose that an ETI, whose sensory organs would expectably not be similar to ours, could understand reality in a very different manner.

John Traphagan has suggested that an ETI could have, unlike us, its primary source of knowledge in the sense of hearing. Due to this sensory bias, these creatures would be much more inclined to the perception of processes and totalities than to the identification of discrete units. This example is an extrapolation grounded on our own sensorial experience, but this experience is definitely the only one to which we have direct access. Thus, in the act of listening to a melody, we experience a whole that unfolds over time, and although we can identify the notes or the instruments involved, this is often a consequence of a subsequent reflective movement (Traphagan 2015: 57).

If we consider this example, it is not unreasonable to suppose that the *Weltanschauung* of our “listening” creatures would better fit a holistic philosophical framework rather than a substantialist one.

Nevertheless, even if the sensory systems of these creatures and ours were very dissimilar, it would be hard to believe that our world views had nothing in common. I agree with Paolo Musso that it is extremely difficult to conceive an intelligent being incapable of transcending sense data one way or other (Musso 2011: 491). Regardless the nature of their sensorial inputs, whether they are predominantly visual, audible

or tactile, our rational aliens should be able to recognize the differences between a process and its moments or between a whole and its parts, for example. Any conceivable intelligence requires some “cognitive flexibility” (Dunér 2014: 142), otherwise it would not reach the symbolic level, in which meaning and values emerge.

Thus, philosophers that propose the ETI fiction as a mental experiment usually hold all or some of these three disputed theses (Kukla 2010: 47–62): i) The universe is the same for all conceivable intelligence, ii) Life implies evolution in some sort of Darwinian-like fashion (Dawkins 1983), and iii) Intelligence (human or alien) requires some degree of abstraction. Leaning on these assumptions, many philosophers have proposed potential candidates for human-alien commonalities, both theoretical: causality (Ruse 2005: 223), logic (Antonites 2013: 85), math (Sagan 1983: 217–218; Freudenthal 1985; Musso 2011: 490–492), science (Lamb 2001: 48), metaphysical inquiries (Musso 2009: 212); and practical: sociability (Raybeck 2014: 56), altruism (Barkow 2014: 40–41; Lupisella 2014: 103; Vakoch 2014), empathy (Janović 2014: 178), the Greatest Happiness principle (Ruse 2005: 233), artistic capacity (Lemarchand and Lomberg 2009: 400).

Nonetheless, recognizing signs of intelligence in a living creature; does not necessarily imply the possibility of an immediate meaningful communication (Kukla 2010: 42–46). Indeed, perhaps we may not be able to anticipate the degree of factual difficulties that a coherent exchange of information with an ETI could involve. Still, however difficult it may be, it is hard to conceive *a priori* reasons to suspect that two intelligent entities, after enough interactions, could not finally generate a genuine communication. On the contrary, denying this possibility implies two conceptual rather than factual difficulties, namely conceiving an unintelligible intelligence or the possibility of two non “inter-translatable” languages.

In addition, the ETI fiction raises interesting questions on the moral realm. Once again, Kant offers one reference worth mentioning. In *General Natural History and Theory of Heaven* (Kant [1755] 2009: 172–180), he postulates that the plenitude of the universe suggests the existence of multiple rational creatures, whose degree of perfection depends on the distance to their respective suns. The farther apart from their suns, the more subtle the stuff they are composed of,

and therefore the lower the resistance which the body exerts against the spirit. Thus, the inhabitants of the most distant planets would have a lively and penetrating intelligence, and would suffer less the influence from the passions. Human beings, however, who live in a middle section of the solar system, also occupy an intermediate position in the moral sphere, equidistant from those who are “too refined and too wise to allow themselves to fall into the foolishness inherent in sin”, and from the others, that are tied too tightly to matter and “are provided with far too little capacity to have to drag the responsibility for their actions before the judgment seat of justice” (Kant [1755] 2009: 144).

In this scenario, it seems clear that the lower threshold, i.e. the exclusion of the ethical dimension, is given by the absence of consciousness, the inability to represent the idea of duty, or by the impossibility to act against the spontaneous tendencies. On the contrary, in the upper limit, we would find creatures whose rationality is not resisted by internal obstacles and thus the practice of moral good springs almost necessarily. At the midpoint, human beings hear the call of duty but experience an opposition coming from their own “flesh.” This opposition gives the moral dimension its dramatic significance.

In a similar way, Richard Swinburne argues that free will is “serious” only if it means choosing between good and evil, and that it is “very serious” when the bad alternative is really possible. He does not mean possible in a mere metaphysical sense, but really possible for a subject who, to some extent, is attracted to evil. Thus, the opposition of temptation makes the election of the good more serious and perfect (Swinburne 1998: 93). Obviously, this is a controversial thesis, but my aim here is to highlight the utility of Kant’s thought experiment in order to problematize the relationships between moral agency, defectivity and subjective merit. This mental experiment raises a few questions: Would moral responsibility make any sense without the opposition of truly appealing alternatives? If virtue gives ease in good-doing, doesn’t it decrease the merit of the agent? Is God a moral agent in the fullest sense? To what extent the link between effort and merit is not a mere anthropomorphism?

Finally, some direct fictions pose the issue of the moral status of aliens. In short, the problem consists on setting appropriate parameters to determine whether (and to what extent) these creatures would be subjects

of rights. The degree of responsibility that we should assume against the microorganisms we could find in the exploration and conquest of the space is under current debate, since they could be valuable links in a potential evolutionary chain.

Unsurprisingly, theoretical positions overlap, in this kind of debate, with those of the contemporary discussion about animal rights. The two discussions converge because what is ultimately at stake is the condition (or conditions) that settles the value of a living being. Whether it is the membership of a species, the genetic origin, the development of cognitive abilities, the capacity to suffer or, in an even stronger thesis, a sort of moral value inherent in the phenomenon of life (Persson 2012: 976-984). In any case, the fundamental contribution of ETI as a thought experiment is to prompt an open analysis. In a fictitious, unusual horizon, people are forced to think by themselves, rejecting ready-made answers and not limiting themselves to the consideration of reasons with which they have already theoretical or affective commitments.

Recourse to the Gaze of Others

Few things arise more curiosity than the opinion that others have of us. Nevertheless, this desire, which could be a mere consequence of human vanity, holds a significant dose of realism. Being interested in other people's perspective is quite reasonable, since our conscience is preferably directed outward, to the objects around us. Our cognitive abilities are intentional and, for that reason, most of the time they become invisible and they do not appear in the acts of knowledge. In this sense, the eye does not manifest itself in the act of seeing, and it is precisely for its transparency, that enables the capture of the object (Sanguineti 2007: 73, 107, 190). In short, the gaze of others is interesting to us because, as a mirror, it can make us aware of realities that otherwise would remain unnoticed.

Nevertheless, besides the constitutive limitation of being directed outward, human knowledge has certain psychological constraints as well. For example: the asymmetric tendency to underestimate the biases of our own perception and to overestimate the biases of others (Pronin et al. 2004). These limitations show how imperfect and needed of external correction our self-knowledge can be.

Identifying and counterbalancing our own biases always requires a conscious effort, but it is certain-

ly more difficult when biases belong to our human nature. Precisely with that purpose, I suggested the use of direct fictions, in order to transcend Earthly provincialism, the "epistemic prison" in which we are locked (Rolston-III 2014: 211). Nevertheless, we can also make a second movement, *i.e.* an explicitly reflective movement, and ask to ourselves not how an alien would look like, but what or who would *they* see if they could see *us*. In Alfred Kracher's word, we can improve our self-knowledge by "looking down from above" (Kracher 2006: 331).

Certainly, recurring to the gaze of others is not an original theoretical approach. On the contrary, many philosophers have suggested this external perspective in order to bring a breath of fresh air into classical discussions. In this section, I will analyze the proposals of Midgley (1996), Rowlands (2012) and Kupperman (1991) given that, although they come from very different philosophical perspectives, they offer interesting examples of the heuristic fertility of the ETI fiction.

In the first place, the English moral philosopher Mary Midgley brings into question the classic problem of determining the roots and origin of human aggression. Thus, she proposes to adopt the perspective that would have a potential ethologist from Alpha Centauri, and "proceed with man as he would with any other species, to look at its behavior impartially first and then search for causes and connections" (Midgley 1996: 59). This new standpoint, free from ideological commitments, would show the extreme complexity of the phenomenon of aggression.

In such a scenario, our ethologist would find a wide and contradictory range of empirical evidence. She (It?) would note an almost universal condemnation of unjustified violence—most of all of in-group unjustified violence—. A condemnation, however, that would not be consistent with the frequency and ubiquity of harmful behavior. Similarly, he would register the ambivalence of human attitude towards violence and cruelty. Humans recognize that, barring exceptional circumstances, they repulse any form of violence and cruelty as undesirable behaviors. Nevertheless, they accept that sometimes cruelty is something they feel attracted to (Baumeister 1997; Smith 2011). If human testimony were reliable, violence would be something that causes pain when it is suffered and that causes guilt when it is produced in others. None-

theless, at the same time violence would be something impossible to eradicate completely from their societies and from their hearts. Regarding these facts and testimonies, it would not be easy to convince our impartial observer that the origin of violence can be reduced to the form of a simple exclusive disjunction: nature or nurture. On the contrary, the problem seems to pose other difficulties, such as the moral under-determination of some spontaneous tendencies. This problem forces a philosopher to elucidate carefully the meaning of the term “natural” when applied to the ethical debate. In short, this external view could be a good antidote against the temptation of oversimplification.

In the second place, Welsh philosopher Mark Rowlands describes the case of a cognitive ethologist (coming from Mars) who decides to investigate whether or not earthlings are moral beings. Given that he is not human, our Martian ethologist faces two basic problems: first, the lack of direct access to human states of consciousness. Second, that Martians have not been able to decipher our languages so far (and some of them even doubt we have a language at all). The human’s behavior that he observes seems to be, as in Midgley’s case, highly ambivalent. He perceives, indeed, acts that are analogous to Martian cooperation and altruism, but he cannot be sure of the inner motivation of the subjects. Besides, there are so many examples of violence and irrationality in human societies. In such a situation, the certainty of our own ontological status as persons and our condition as moral agents which become problematic. Ultimately, the ethologist faces the complex task of analyzing and weighing facts in order to “locate the bald ape in the moral space” (Rowlands 2012: 248).

However, Mark Rowlands’ aim in narrating the ethologist’s story is not to force a reflective movement towards the human essence. He is not trying to put into question the nature or the value of humanity. His purpose is not strictly anthropological but ethical. Thus, Rowlands presents the Martian’s dilemma to problematize, from a moral standpoint, the relationship between human beings and the other animals. In short, Rowlands proposes a tripartite division between moral agents, patients, and subjects. According to this classification, superior animals belong to the third category *i.e.* they are moral subjects, and, therefore should be considered worthy of a specific moral respect (Rowlands 2012: 73-98).

Finally, there is Joel Kupperman’s “Ethics for Ex-

traterrestrials” (Kupperman 1991). He presents a thought experiment that has two undeniable merits: it not only points to the core of many essential meta-ethical issues, but it also gives them an unusual relevance from the first person’s perspective. Thus, the basic question of whether there are truly universal significant elements (principles, emotions, prohibitions or values) in the moral realm, ceases to be another endless philosophical discussion and becomes an urgent matter.

In Kupperman’s fiction, Earth is invaded by an alien civilization, the Throgs. Even though they are not more intelligent than us, they have a superior technological development. Due to this advantage, they rapidly take control of our planet leaving us without any capacity of resistance. After a time of pacific coexistence, the visitors discover a strange pleasure. They really enjoy flaying “alive a randomly selected human being: they are amused by the spectacle of a human being’s shedding his or her skin” (Kupperman 1991: 311). Naturally, this practice causes bewilderment and indignation among men, who are forced to try to prove to the Throgs the immorality of these actions. The mission is entrusted to a group of renowned philosophers.

The invaders analyzed each of the arguments presented by the philosophers, but they were not convinced. Indeed, in Throgian metaethics, there are only two possible groundings for a moral duty: naturalistic and contractualistic. Thus, what is morally mandatory is based either on the acceptance of a deal between peers or on certain general conditions (biological, psychological, *etc.*) of Throgian life. Nevertheless, neither of these groundings applies in this particular case: Throg’s nature is not Human nature and they obviously don’t consider us peers. Moreover, due to the disparity of forces between our two species, they do not recognize any duty of egalitarian justice to us. In the best case, we could expect a commendable but not obligatory compassion-like feeling similar to the one that some humans feel for animals.

Leaving aside the way in which Kupperman tries to solve this problem, the nucleus of the question is “whether there are objective and compelling elements in ethics which neither are based in the general conditions of human life nor on implicit (or hypothetical) consent” (Kupperman 1991: 311). Following this idea, a happy resolution (for us) exceeds the possibilities of both naturalistic and contractualistic ethics. If such a

resolution is indeed possible, it should appeal to objective and therefore commensurable moral arguments. After all, reason is, in principle, the only morally relevant feature that Throgs and Humans have in common.

Even though I cannot develop the question at length here, I believe that this fictional scenario involves at least four theses: i) morality is objective, ii) within the objective nucleus of morality stands the intrinsic value of the person, iii) this intrinsic value is superior to the mere pleasure of other persons, and iv) human beings are persons. Only on these assumptions, it is unreasonable for a Throg to take a human life just for fun.

It would be indispensable to discover some objectivity in the ethical sphere as the minimum requisite for any trans-specific moral claim. In this regard, I agree with philosopher David Enoch, who holds that moral discussions manifest *per se* an objectivist phenomenology. And that is why in our everyday experience moral judgments are more similar to claims about states of affairs than to the description of mere subjective preferences. Taken as an act of speech, the statement: “slavery is wrong” is more similar to “mammals are vertebrates” than to “I do not like beans.” Given that moral duties and prohibitions have, in fact, certain objectivity, they cannot be manipulated at will or distorted to fit our convenience (Musso 2011: 491). In short, as every objective valuation, moral appraisals need reasons beyond will or caprice (Enoch 2009: 15-50).

Nevertheless, as Kupperman suggests, “objective” and “compulsory” are not interchangeable terms in the moral realm (Kupperman 1991: 315). On the contrary, I believe that if the term “compulsory” is understood in a strong sense, *i.e.* as something that is not suggestive but conclusive or coercive, to this very extent, we are missing the point of the true nature of a moral obligation. For if there are any reasons in the moral realm, they are reasons for a free agent and therefore, reasons that exert a “resistible compulsion” on the agent (Mahlmann and Mikhail 2005: 99). Due to this resistible character, moral reasons can be disregarded in practice, allowing human beings to do evil knowingly and deliberately. This would explain why our dominators could overlook very good objective reasons, just as we do. An intelligent being can freely choose to act in an unreasonable way.

Furthermore, this constitutive character of morality, that invites us but that does not force us to act, af-

fects also its theoretical dimension. Although ethical appraisals are in a way imposed upon the conscience of a subject (they are not indefinitely manipulable as etiquette rules are), they are neither infallible nor immutable. Moral evidence is perhaps more sensitive to subjective predispositions than other kinds of evidence. Thus, if there is any objectivity in moral law, it has to be an objectivity that can be eroded by wrong-doing but also by the influence of culture. Human history has an ample record of highly distributed rude moral errors.

In the end, Kupperman’s thought experiment enlightens the essential but particular relationship between ethics and objectivity. Without this reference to objectivity, there would be no rational grounds to distinguish an act of justice from a simple imposition by force. In an extreme position, it suggests that without moral objectivity there would be no rational limits for the mistreatment of the weak and the poor, beyond compassion or mercy. Finally, the whole dilemma suggests that a strong sense of objectivity, *i.e.* one that applies to any rational creature *qua* rational, cannot be grounded on what is contingent in our human nature. This kind of objectivity and universality would fall, if possible, beyond the boundaries of ethical naturalism (Kupperman 1991).

Conclusion

Throughout this paper, I have tried to defend the interest of the ETI issue in the face of two possible objections. From a practical point of view, one may wonder whether it makes sense to spend time and money looking for something whose very existence is under question. From a theoretical point of view, it may seem pointless to speculate about the nature of the ETI, when somehow our own human mind is still a mystery.

Regarding the first objection, I defined my own position as a mild and indirect optimism. This may appear as a rather weak position, but I think that it would be unrealistic to hold a more robust thesis (either for or against ETI), because of the under-determination of the available empirical evidence. We simply don’t have enough rational elements to settle the question.

I defined myself as optimistic because the probability of finding ETI cannot be ruled out; and, in principle, looking for something that we do not know whether it exists or not is not equivalent to looking for some-

thing that simply doesn't exist. This kind of uncertainty does not *per se* make a pursuit trivial. On the contrary, it has often been a condition for many truly novel findings. Nevertheless, my optimism is not strong but mild, because of the weight of the uncertainty about the outcomes of the search. We don't know if aliens exist, if we would be able to contact them, or which would be their attitude towards us. Finally, my optimism is also indirect because the search process has already produced some interesting collateral benefits.

With regard to the second objection, which questions the philosophical interest of the subject, my justification is direct and much more robust. In fact, the ETI as a mental experiment can be useful to tackle many philosophically relevant problems, as I tried to show with several examples.

The core of all these problems is the difficulty in distinguishing what is necessary and what is contingent in our own nature. Another side of this problem is the natural tendency to anthropomorphism that affects theology but also ethology and, to a lesser extent, epistemology and philosophy of nature. Anthropomorphism is somehow an inherent limitation of our knowledge and constitutes therefore a permanent theoretical risk. For this reason, any strategy to counterbalance it can be useful and even necessary.

Among these strategies, which always involve an effort of self-transcendence, I individuated two forms of using the ETI as a mental experiment: direct fictions and recourse to the gaze of others. Direct fictions are useful because in speculating about how an ETI could be, we have to select carefully the potentially universal aspects of our nature. In a similar way, trying to imagine how they would see our world forces us to analyze ourselves with new eyes.

In summary, the value of the ETI as an instrument of philosophical analysis is that it can contribute to our self-knowledge by forcing us into a self-reflexive movement that questions what we consider obvious, exposes what is unconscious and problematizes what we take for granted. The other can thus become a mirror of ourselves.

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Conflict of Interest

The Author declares that there is no conflict of interest.

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