META-HUMANS AND *METANOIA*: THE MORAL DIMENSION OF EXTRATERRESTRIALS

by Alfred Kracher

Abstract. Although we do not know whether intelligent extraterrestrials exist, they are a permanent fixture of literature and philosophical argument. Part of their appeal is that they watch us from above and thus serve as a metaphor for human self-reflexivity. This makes fictional aliens especially useful when moral issues are at stake. In order to evaluate stories about aliens with respect to moral conclusions two conditions must be fulfilled. First, the stories have to be detailed enough that we can understand the circumstances of the aliens' moral choices. Therefore science fiction often is more useful than arguments involving aliens in short technical papers. Second, their fictional lives need to be possible in our own universe, or very nearly so, in order to be relevant for our own moral conduct. Taking as an example the unfallen aliens in C. S. Lewis's novels *Out of the Silent Planet* (1938) and *Perelandra* (1943), we can acknowledge the theological interest and literary subtlety. Nonetheless, the stories fail as moral parables in one important respect: The aliens depicted could not be a product of evolution in our universe, at least as we currently understand its scientific laws. This realization has important consequences for our self-understanding and thus underlines how fictional aliens can be useful in making sense of the complexities involved in moral argumentation.

Keywords: extraterrestrial aliens; C. S. Lewis; morality; original sin; science fiction.

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The Ontology of Aliens

Aliens, extraterrestrial beings with humanlike intelligence, present us with a peculiar problem: They have been, and continue to be, of great help to us pedestrian Earthlings, even though we cannot be sure that they even exist. Debates about the existence of other worlds and of intelligent extraterrestrial beings have throughout the course of history been of significant help in advancing our knowledge and our understanding of nature, including human nature, and thus understanding of ourselves.

No other objects of debate pose quite the same kind of ontological conundrum. For example, not everyone agrees on whether elementary particles such as quarks are "real," but this is a matter of one's epistemological position; scientists generally agree about the evidence. Also, some people think fairy stories and myths are important, whereas others dismiss them simply as lies; there is little doubt, however, about the ontological status of fairies as creations of our imagination. It is only with aliens that we have the peculiar problem of having a mythology (or perhaps multiple mythologies) about a potentially real object without being able to prove or disprove its existence.

One interesting consequence of this strange ontological status is that aliens, when considered as metaphor, have a peculiar appeal across a range of epistemological attitudes. Rationalists, who tend to dismiss the significance of myth, cannot write off aliens altogether; after all, they might really exist. On the other hand, many of those disenchanted with science put their hope in aliens that are more "spiritual" than those suspect individuals in the white coats who might mess up the world. The peculiar status of aliens as objects of both science and mythology can to some extent serve as a point of contact between such otherwise incompatible views.

For Karl Guthke, the idea of intelligent extraterrestrial beings is the *Myth of the Modern Age*,[1] which connects science, philosophy, and science fiction (Guthke 1990, 22). Science writer Joel Achenbach has interviewed and even lived with persons as diverse as top NASA scientists and individuals who thought they were abducted by aliens. The experiences he recounts illustrate the talent of aliens to bring together these disparate groups, which he characterizes with the whimsical slogan that all of them have been "captured by aliens," though in very different ways (Achenbach 1999).

In this essay I examine the role of aliens—hypothetical, metaphorical, or imaginary—in moral reflection and discourse. The emphasis is on nonhuman *moral agents* rather than nonhuman *intelligence*. It is necessary to examine some features of moral reflection that shed light on why aliens are so helpful to the enterprise. This leads to an examination of the role of imagination and its limitations. Some examples illustrate the variety of viewpoints and the variety of aliens reflecting them. In particular I explore what the aliens in the novels of C. S. Lewis tell us about evil and the doctrine of original sin.

Moral Reflection and the Metaphor of Altitude

Human moral agency is rooted in human self-reflexivity. We are able to watch ourselves think and act and assess potential consequences of our actions. This is an exercise of imagination, and carrying it out requires a kind of conceptual toolbox. Some of the truly indispensable tools are metaphors that illuminate the nature of this peculiar relationship that we have to ourselves when we are both watcher and watched.

The *watching self* is of course already a metaphor. We might call this imaginary observer a *meta-human*, in the same sense that a meta-theory is a theory about theories. Closely associated with the metaphor of watching is the one of looking down from above. Getting an *overview* from a higher standpoint is such a commonplace experience that we hardly notice metaphors of altitude in this context. We talk about an *overseer* (*supervisor* in Latinized form) who directs others, and religious leaders are *bishops*, from the Greek word for "looking down on." Guthke (1990) begins his investigation into aliens in science, philosophy, and literature with the ultimate icon of this self-reflexivity: the images of Earth taken from space by astronauts. This is, in a way, the extraterrestrial's view of the human situation.

The metaphor of looking down from above is linked with yet another one, namely, that we are *on a journey*, and that morality demands that we *go in the right direction*. We need, as it were, a map, which is itself a device that schematically depicts a landscape as seen from above. If we have lost our way, we have to *turn back*. Such a change of direction, the *metanoia*, or rethinking of where we are headed, is possible only as a result of watching ourselves on the journey, of picturing our path on the moral map. Ever since the seventeenth century, when John Bunyan wrote *The Pilgrim's Progress*, the journey as metaphor of spiritual development has been a popular device of religion-inspired fiction.[2] Lewis's consciously Bunyanesque *The Pilgrim's Regress* ([1933] 1981) even contains an imaginary map as frontispiece, just like countless fantasy and science fiction novels that unfold in imaginary worlds.

Fictional extraterrestrials who come from outer space obviously fit the image of watching from above most closely and therefore are in many ways the ideal meta-humans. This is attested by the many science fiction stories that make implicit or explicit moral points. Moral philosopher Judith Barad, for example, has made a detailed study of the ethical positions and issues in the *Star Trek* television series (Barad and Robertson 2000). A recurrent topic of many episodes is how to arrive at reasoned moral judgments, both by us humans about aliens and by aliens about us.

Taken at face value, these are judgments about each other (the aliens might, for example, stand for another culture here on Earth), but the aim of the stories often is to reflect on our own morality. The most interesting metaphors are therefore the ones that are valid both ways, meaning that

they allow us to evaluate our own attitudes and actions as well as make reasoned judgments about one another.

For much of the history of Christianity God-images presumably have played this role of watching from above. However, we obviously cannot see ourselves the way God sees us, and trying to imagine God's viewpoint has its dangers. Whatever its merits as a means of reflecting on our own conduct, judging others as if we could ourselves assume God's viewpoint is alarmingly prone to abuses. If we persist in trying to put ourselves into God's place we should end up not godlike but rather insane with megalomania. For this reason Christian storytellers often have employed an intermediary—a metaphorical watcher who knows God's viewpoint but is not identical with God. Such supernatural watchers in older stories come to resemble the aliens in modern ones. Thus the aliens in some contemporary stories are clearly the angels of old transplanted into a science fiction milieu.[3]

Developing adequate metaphors of reflection is very important because of the complexity of moral reasoning. This complexity constantly drives us to unwarranted simplifications either in the direction of moral dualism or toward a denial of the pervasive nature of evil. My hypothesis that aliens capture our imagination primarily through their moral function as meta-humans (rather than, for example, their scientific interest) suggests the necessity for an analysis that links their artistic function with moral complexity and epistemological sophistication. Inventing a story about aliens can help to concretize a complex scenario and to some degree resist the temptation to oversimplify.

The ways in which such metaphors are further developed rely, either implicitly or explicitly, on a particular moral philosophy. Thus, fictional aliens carry the features of the philosophy that conceived them. As we shall see, scientism begets godlike aliens, whereas more recent imaginary species frequently are postmodernistically confused. In order to evaluate their uses, we need to take a look at the underlying philosophies that brought them into existence.

The Variety of Philosophical Aliens

Speculations about the existence of aliens go back to the very beginning of Western philosophy. Democritus thought that there were many worlds like ours; Aristotle denied the possibility. The question surfaced again in the Middle Ages, and since then many authors have speculated about aliens in a philosophical or theological context, among them William of Ockham, Giordano Bruno, Thomas Paine, Thomas Chalmers, and on the side of denial William Whewell. (All historical examples are from Dick 1982 and Crowe 1986.) Of particular interest is Bernard de Fontenelle (1657–1757), who is one of the major figures, together with Giambattista Vico (1668–1744), to begin a phenomenological inquiry into the nature of religion

(Preus 1987). It might be said that with Fontenelle and Vico human self-reflexivity reaches the point where we watch ourselves *believe* as well as think and act. It is intriguing that Fontenelle, although perhaps unaware of the connection, also was an emphatic proponent for the existence of many worlds peopled by humanoid races.

Steven Dick (1982; 1996) and Michael Crowe (1986) have covered the history of speculations about aliens from antiquity until the present. Guthke (1990) has a more literary focus, although he overstates his point when he calls aliens *the* myth of the modern age. There certainly are other contenders. The common thread to all of the historical speculations about the plurality of worlds and extraterrestrial intelligence is that they were not the idle thoughts of people who had nothing better to do but were in fact used in many ways at the very center of the seminal debates that shaped our intellectual history.

The tradition of using aliens as philosophical meta-humans continues today. Michael Ruse (1989) wonders if rape is wrong on Andromeda. Mary Midgley deploys an alien from α Centauri to observe human aggressive behavior in *Beast and Man* (Midgley 1978, 59–67). Of course, a much less esoteric place than philosophical discourse where we encounter aliens *en masse* are the science fiction narratives that pervade our culture as television series, movies, mass market novels, and all of the paraphernalia associated with fandom of any of the above. These narratives, too, take a philosophical stand, sometimes explicitly but often seemingly without being aware of it.

In this context the aliens assume yet another useful role: They obligingly implement the philosophical position of whoever invents them. Midgley's Centaur is a metaphor for the objective observer of traditional philosophy. He (it?) observes humans without being biased by human prejudice. He represents our ability for self-reflection, which includes becoming aware of one's own bias and making allowance for it.

At the same time, this ability to step outside ourselves is limited; it is not a godlike power of assuming any viewpoint at will. Depending on how this human limitation is conceived within different epistemologies, we can construct a taxonomy of aliens spanning the range between two extreme poles that generally reflect modern attitudes about rationality and its role in moral conduct.

At one pole is the view that there is a universal, objective truth that is ultimately obtainable for us, and science gets us there. It is enlightenment taken to its extreme consequences. Roger Trigg has characterized the hidden religious affinities of this position by calling it the "God's eye view" (Trigg 1993). At the opposite pole is the view that there is no universal truth to be had at all. This usually manifests itself in some flavor of relativism—epistemological or ethical or both.[4] In order to have convenient labels for the following discussion, I refer to these poles as *rationalist* and

pluralist. This is not entirely satisfactory, because these words do not really describe the extremes of the continuum. However, I want to avoid prejudging the issue by using loaded words such as *enlightenment* and *postmodernism* for these poles.

To have the different philosophical species of aliens who live along this scale fleshed out for us, we have to turn to science fiction. There is a reason why complete stories are more useful to our discussion than the odd imaginary alien mentioned in a mere paragraph or two in a philosophical paper. Table 1 lists some of the properties of aliens on each side of the philosophical tug-of-war.

Carl Sagan, for example, clearly represents the rationalist view of science as a "candle in the dark," explicitly so in the subtitle to Sagan 1995. The aliens in *Contact* (Sagan 1985) embody this ideal of superior and absolute rationality and in many ways exemplify the attributes of the god their author didn't believe in. Sagan does not actually use the adjective *omnipotent* for his aliens, but he might as well; their powers may not be unlimited, but they can do anything that humans can imagine, which is as close to omnipotence as matters. With that much power one must necessarily think of them as benign (otherwise we would not be left alive to talk about them), and to a rationalist like Sagan being benign also means being totally rational. Sagan's aliens are thus as godlike as they come, and their perspective of humanity is exactly Trigg's "God's eye view" of perfect rationality.

But imagination need not be committed to this kind of aliens. We may be able to reflect on ourselves—and let aliens stand for this ability—but the reflection can be just as confused as the issue we are reflecting on. Aliens, at least fictional ones, can be just as clueless as the humans who invent them. And these quasi-postmodern aliens have their own argumentative power, precisely because they are so much like us. The reason for their existence (in fiction and philosophy) is to help us muddle through

Table 1
A Taxonomy of Aliens

Rationalist	Pluralist
omnipotent	confused
benign	diverse
rational	belligerent
dominating	cooperative
Godlike	humanlike
Example:	Example:
Carl Sagan, *Contact*	David Brin, the *Uplift* novels

our own existence. These aliens are therefore humanlike, although not necessarily anthropomorphic in a physical sense.

David Brin's amazing assembly of unlikely life forms is a case in point. Their bewildering diversity (wheeled creatures, five-sided crabs, stacks of toroids communicating by scent, and many others) conveys most clearly one message: that for all of their differences these life forms will have to somehow get along with each other if they want to survive. When I refer to Brin's zoo as postmodern, the primary association is with the eclectic architectural and artistic style known by this label, although it also reflects the general concern of giving all the different life forms equal rights in the galaxy.

I want to emphasize that both kinds of aliens are relevant to our morality, albeit in different ways. The godlike ones can sometimes tell us what to do or at least instruct us how to become better. The humanlike ones teach us something about ourselves, too, but not by instruction; they teach by example—sometimes a bad example that we ought *not* to follow. In Brin's world, unlike Sagan's, a higher form of rationality clearly is not an entitlement to moral superiority.

Complications arise when an author wants to locate himself in the middle range, where no direct access to quasi-divine advice is available but superhuman guidance is nonetheless a necessary part of the story. Lewis presents us with two kinds of aliens in *Out of the Silent Planet* (1938) and *Perelandra* (1943), two of the books in his space trilogy.[5] One kind is anthropomorphic, the other angelic. This reflects a philosophical heritage of dualism, which manifests itself not merely in the world of his aliens but in Lewis's philosophy in general. Whereas the anthropomorphic aliens stand for humans, albeit not affected by original sin, the "eldila" (angelic aliens) represent the world of spirits. For all the differences in belief between the Christian apologist Lewis and the atheist Sagan, eldila and the aliens of *Contact* are effectively indistinguishable.

Because of the important implications Lewis's aliens have for religion, I return to them later. Before I do, let us investigate in more detail what it is about our imagination that has such important consequences for moral reasoning.

Aliens and Human Imagination

So far the only aliens available for us to study are the ones that reside in our imagination. I have argued that our philosophical position determines what they are like. What must yet be demonstrated is how this makes imaginary aliens useful for handling actual moral problems.

If we ever were to encounter real aliens, we might lose the luxury of adapting them to our own ends. No doubt this would force many creators of imaginary aliens, whether in philosophy departments or in Hollywood,

to change their conceptions of them. But until such time we must look to imagination in order to see in what way it is useful in generating aliens that are actually helpful to our moral reflection.

Human imagination is limited in two ways. The first and more obvious is that it is incomplete; there are things we have not yet imagined and also perhaps things that we cannot imagine. This is expressed by J. B. S. Haldane's ([1927] 1928) famous statement that the universe may well be not only "queerer than we suppose, but queerer than we *can* suppose." The other limitation to our imagination results not from a constraint but from a lack of constraint. This limitation was expressed by Austrian architect Adolf Loos[6] in the form of this parable: A university professor comes to a leatherworker who makes harnesses and saddles and shows him a new design for a saddle while boasting about his creative imagination. "My dear professor," replies the saddler, "if I knew as little about horses, about riding, and about leather as you do, then I would have your creative imagination, too" (Loos [1929] 2002, 186).

What good is imagination if it does not lead to practical results? In a way, the source of the problem here is the illusion that imagination is unconstrained. But in reality it is precisely by finding useful and valid constraints that we can put our imagination to work to do something useful. Creativity is more than imagination. Psychologist Rollo May (1975) has called creativity a *passion for form*. Creative solutions are obtained by giving shape to things imagined. Aliens are particularly useful here, because the aliens we imagine (in fiction, philosophy, or movies) give form to certain ideas—they *embody* them, in the literal sense of the word—and this can let us discover problematic consequences of these ideas or at least come to see them more clearly.

There are, then, two complementary limitations to our imagination, which may be summarized thus: *We do not and perhaps cannot imagine everything that is possible in our world* (Haldane's limit), and *We can and do imagine things that are impossible or entirely useless in our real world* (Loos's limit). Both limitations affect the use of imaginary aliens in moral argument.

Imagination Encounters the Horse

Aliens allow our imagination to expand, yet used properly they also constrain it. Loos's imaginary saddle has to fit a real horse, and the aliens of our imagination have to be plausible once we locate them in the context of a narrative or a moral argument. What particular kinds of constraints are kept in view as a narrative or argument unfolds depends on the author's aim as well as the philosophical viewpoint. Philosophers who use imaginary aliens for the sake of an argument and science fiction authors who write stories about them may well have aims that are very different. Aliens who could not possibly exist in a universe that has the physical laws of our

own may make very good stories, but they are mostly useless for moral arguments.

We nonetheless need fiction, that is, extended stories, if we are to learn the lessons that fictional aliens can teach us. Midgley writes, "Philosophers are rather prone to throw out claims like 'I can imagine a tribe which . . .' without going to the trouble of actually doing it" (1981, 137). What is true of imaginary tribes of humans applies even more to imaginary aliens. Storytellers, including writers of science fiction, cannot get away with this. The success of a story depends on our ability to imagine it. No imagined world, no story. What makes a story successful is a kind of inner logic and plausibility. Even though a story does not have to be about something that is actually possible in real life, it can still be judged on this basis. We can tell stories about unicorns, sorcerers, and impossible life forms in other quadrants of the universe. But we can also comment that unicorns, at least nonmagical ones, might exist if evolution had taken a different track, that most fictional acts of sorcery are impossible in the real world, and that travel at warp speed is highly unlikely on the basis of physics as known today.

Our ability to make these judgments rests on the fact that the imaginary world is developed to a sufficient extent that we recognize connections. We can orient ourselves in it, even if we cannot live in it. Midgley's complaint comes in part from the fact that a scholarly paper or even a chapter in a book provides insufficient space to make the imaginary world sufficiently rich. That is no excuse for not "going to the trouble of actually doing it," but it does explain why science fiction is of more use than scholarly disputation for the purpose of the present discussion.

However, evaluating just what kinds of things can exist in our universe is by no means straightforward, even if we assume that our current scientific knowledge is entirely correct. If the constraints on the origins of life outlined by R. F. Fox (1997) are correct, we would expect that any potential aliens are very much like ourselves. On the other hand, if we were to follow Stephen J. Gould (1999), planets with anything but bacterialike life forms would be exceedingly rare, and how higher life forms looked would be anybody's guess.

This ambiguity, however, should not be taken as weakening the case for the use of aliens in moral arguments. On the contrary, it is precisely the opportunity for fruitful debates on a very general and fundamental level that enable aliens to shed light on our own moral predicaments.

One area of debate where aliens are particularly convincing is evolutionary ethics. This is in part because the scientific study of what kind of real aliens *might* exist somewhere in the universe has to rely on our knowledge of what is possible according to the principles of physics, chemistry, and biology. Because evolutionary ethics is largely about how these same

principles shape human conduct and attitudes, the use of aliens as argumentative device is not surprising.

In the context of evolutionary ethics plausible aliens are constrained by their own evolutionary history. Because they need to inhabit our universe in order to be relevant for human morality, they also share the constraints of its physical laws. This is not necessarily the only kind of aliens that can be validly deployed by moral argument, but considering the force of scientific reasoning it is probably the most important one in the contemporary debate.

Aliens and Anthropomorphism

At this point we need to ask how like or unlike humans hypothetical aliens need to be in order to be useful for moral investigations. That is, we need to confront the role of anthropomorphism in our conception of aliens. Anthropomorphism is a complex concept, and different aspects of it play different roles depending on whether they are part of scientific inquiry, fiction, or moral argument.

A scientific investigation into what kind of intelligent beings could exist elsewhere in space would have to start with what we know about human intelligence. This is a form of *heuristic* anthropomorphism (Kracher 2002), and it is an enterprise constrained by scientific principles and the Haldane limit of our imagination. By this I mean that there may well be aliens that really exist, and therefore do not violate any scientific principles, but we just have not imagined the possibility of their existence.

Storytellers are not bound, of course, to invent the kind of aliens that are allowed by science. In this sense the literary imagination is a way of transcending anthropomorphism. However, for the sake of plausible storytelling or because of other constraints some quasi-human features usually need to remain. Until recently television and movies were constrained by the limitations of make-up art to present mostly human-looking aliens, beings that are anthropomorphic (human-shaped) in a literal sense. Aside from a few ridges on the forehead the Klingons of *Star Trek* could pass for humans. This limitation is now changing as a result of the ability to merge computer-generated graphics with filmed footage. Books never have been constrained in this way. Brin's aliens are as different from humans in shape as can possibly be imagined. They are, however, anthropomorphic in a metaphorical sense, because their problems, conflicts, and relationships strike us as very humanlike.

Both human-shaped and bizarre aliens can be given a moral purpose. We feel kinship with *Star Trek* aliens, because they look like us. They exaggerate human traits and thereby act as a mirror for ourselves. We also feel some kind of empathy with Brin's menagerie. Their strange and diverse forms make the point that, however bizarre they seem to us on the

outside, we have something in common with them, and we need to find a way to communicate and get along.

We should note, however, that the media of communication are not interchangeable. It would be much more difficult to empathize if we were to see Brin's aliens on screen. The attitude toward what we see with our eyes is invariably different from the images our imagination creates in the act of reading. Visually represented creatures have to be more anthropomorphic for us to identify with them. Mickey Mouse is not really very mouselike. His visual appeal depends on his anthropomorphic looks.

Now that the fictional aliens have captured our attention mostly through emotions like empathy, aversion, and the occasional shock of realization how like ourselves they are, we need to return once more to rational analysis. Good stories can be told in the service of bad ends. We may read or see a story about aliens that is well made and exciting only to find that its underlying message was that we should kill aliens wherever we find them. Indeed, aliens are the prime fictional devices to raise the issue of xenophobia, and well-crafted stories can just as easily promote it as fight against it.

One crucial question in evaluating the moral impact of a story is whether the evolutionary and cultural development of our fictional aliens makes sense. If it does not, we need to be wary of the moral lessons drawn from their existence. Science fiction has the advantage that we usually know enough about the aliens at hand to address this question. We can ask, for example, whether a species as belligerent as the Klingons could really persist once they had space-faring technology. This is not an idle question. Human beings are only at the beginning of the space age, but there is valid concern that we could annihilate ourselves before we get into it much farther. Jill Tarter thinks that this might happen as a result of the persistence of organized religion[7] (in Dick 2000, 142–49). In the case of the Klingons, survival in the face of their aggressiveness seems to depend on a complex web of rituals coupled with reliance on a strict code of honor. This is an interesting and thoughtful way to address the problem, and the solution comes right out of the ethological tradition. The idea that ritual is necessary to mitigate aggression and that this function is even preformed in biology goes back to studies by Konrad Lorenz (1966) and others of ritualistic behavior in animals and its human parallels.

Asking whether a particular race of fictional aliens could exist in the real world implies that we are addressing the Loos limit of imagination: Does what we are imagining fit the scientifically possible? Not all fiction can or should be analyzed in this way. Brin makes no claim that his outrageous aliens could live in our universe. He is just telling a good story. He can appeal to our emotions, but his aliens hardly lend themselves to the kind of argumentative use of Ruse's Andromedans or Midgley's Centaur. However, other stories are intended as religious or moral parables, and for them the Loos test is crucial. One author who has used aliens in this way is C. S. Lewis, and we now turn to his stories about aliens.

Unfallen Aliens

Lewis was concerned with the rationality of belief and with human freedom and its relationship with obedience to God—and thus with moral reason. This brings him up against the problem of evil, as Susan Neiman has formulated in her dilemma about theodicy: "If [reason was God's greatest gift], . . . He is bound to adhere to it; if not, . . . we are bound by nothing but obedience to His will" (Neiman 2002, 318). If being wholly rational means, as in the aliens of *Contact*, being wholly benevolent, why is there so much suffering in the world? Perhaps Sagan's aliens are not powerful enough to prevent it, but this limitation does not apply to the Christian God.

The answer of traditional theology is the story of the Fall—original sin and as a result the "fallenness" of the world. In Lewis this theology is manifest in a view that regards evil as in a sense extraneous to our world. Evil is, as it were, imported at the point of the Fall. In *The Magician's Nephew* (1955), one of the books in *The Chronicles of Narnia*, this event is personified by Jadis the White Witch, who is literally dropped into Narnia by accident at the point of its creation. Narnia is a world of magic, and therefore it cannot directly tell us how to relate Lewis's view of evil to our own world. Anything might happen in a world of magic.

However, this view of evil immediately raises the question of whether there are worlds that have not been so invaded. Are there unfallen aliens? To his credit, Lewis confronted this question and created some of his best fiction in the process. By fulfilling the demand to go to the trouble and imagine what such a world would be like, he gives us the opportunity to critique his view of evil. This is why *Out of the Silent Planet* and *Perelandra* are such useful examples of employing aliens in moral reflection.

Lewis was not the first to raise this issue. Speculations about unfallen aliens reach back at least as far as William of Ockham (~1285–~1349), who pursued the claim of St. Augustine eight hundred years earlier that God could, if he wanted, create a sinless human. Ockham extended the argument to aliens who might be free from original sin and hence "better in essential goodness" than humans (Dick 1982, 33). This means that they have a nature different from humans; they are not merely humans who happen to behave better than Earthlings actually do. That would be a contingent rather than an essential difference between them and us. But apparently Ockham did not give us any clue what the perfect state, the Paradise before the Fall, that would prevail on such worlds would be like. Perhaps he thought that we would be unable to imagine it.

In the centuries since Ockham others have raised questions about unfallen aliens (Guthke 1990). Whereas Ockham did believe that unfallen aliens might exist, the position of later authors on this is not always easy to ascertain.[8] There are reasons to believe that Lewis, like Ockham, thought of his aliens as potentially real. Late in his life he wrote an essay (Lewis [1963] 1967) about the variety of potential aliens in which he left little doubt that

he considered unfallen aliens a real possibility. With regard to the third book of the trilogy, *That Hideous Strength* (1945), Lewis wrote in a letter to Dorothy Sayers that "We have to put up with [a mixture of the realistic and the supernatural] in real life" (Hooper 1996, 231). This suggests that he also considered the mental communication between his unfallen creatures and God ("Maledil") as potentially part of our world, something that we lost in the Fall from paradise. Like Augustine and Ockham, Lewis apparently conceived of the Fall as an actual historical event.[9]

Lewis takes these fallen Earthly humans to another planet, and there he needs to create a foil or counterpart for them. For this he has to develop a plausible life in Eden. Its alien inhabitants have to escape Neiman's dilemma: for them reason and obedience to God's will must always coincide. In *Out of the Silent Planet* and *Perelandra* Lewis thus fulfills Midgley's demand of going to the trouble of actually imagining this situation. Does it succeed? As storytelling it is certainly compelling, as the continued popularity of these novels demonstrates. To phrase it in terms of Loos's parable, the saddle is elegant, but does it fit the horse? That is, given known laws and principles of science, would his quasi-Edenic world be possible within the universe we live in? The question may not be relevant if one treats the stories as purely works of fiction, but if they are to serve as moral parables, the question is all-important.

Evolution and the "Itch for Repetition"

A crucial difference between fallen humans and the unfallen aliens of the planets Malacandra and Perelandra in Lewis's trilogy is that when we humans get a good thing, we want more of it. There is something in human nature, a fundamental temptation, Lewis thought, that inclines us to indulge. Lewis and his biographer Walter Hooper call this the "itch for repetition," and it is an important theme in Lewis's writing (Hooper 1996, 576). In *The Pilgrim's Regress* it is sensual experience, both sexual and aesthetic. In *Perelandra* there is a simple and straightforward exposition of it: Having arrived on Perelandra, Ransom, the story's hero, eats a very good-tasting fruit. He is no longer hungry after that, but he is tempted to repeat the experience simply because of the pleasure of it. His conscience tells him that that would be wrong. Ransom even toys with the idea that this itch may be "the root of all evil." We cannot go back and have a pleasurable experience over again. Certainly we can have *another* experience, if it comes in its proper time, but wanting to have something that was meant to be experienced only once, to *possess* the experience, is sinful.

The itch for repetition is not exactly greed, although greed can spring from it. The underlying idea is rather that we are tempted to escape from temporality. It is part of our wanting to be like God in that we want a piece of eternity. Lewis is so far right to connect the itch for repetition with the idea that we have an inclination to do things that are morally

wrong. Whether or not one wants to identify this inclination with original sin, it is pretty clear what is at issue in the story.

However, the aspect of human nature represented by the itch for repetition cannot be something that is grafted onto an innocent human nature by outside forces, as Lewis's parables would have it. We may be able to imagine aliens who are happier than we are to experience a piece of music or a sweet fruit only once, but the desire to have more than necessary is not merely something that "the devil makes us do" as a result of some peculiarly human deficiency. It is in many ways a logical consequence of evolution. If we are talking about real aliens, as Lewis apparently was,[10] we must be talking about beings that have become what they are through an evolutionary process. Life as we know it tends to expand until it comes up against a limiting factor, such as a nutrient or available space. Not only does this mean competition over access to the limiting factor, but if the latter is something that can be stored, it will mean the evolution of hoarding behavior (think of squirrels) as insurance against fluctuation in the supply.

By contrast, the three sentient species of aliens on Malacandra (the fictional "true name" of Mars), who have never fallen away from God's will, have enough of everything, manage their resources wisely, and do not procreate beyond the carrying capacity of their planet. Although Malacandra is a dying planet whose resources are dwindling, the Malacandrans do not feel any pressure to overexploit them. They have no more offspring than they can feed and therefore no overpopulation problem.

However, Darwinian evolution presupposes that the number of offspring exceeds the replacement level. Otherwise there could be no natural selection. Unless we make the additional assumption that the emergence of reason immediately thwarts these natural tendencies, sentient species evolve in competition for resources and with more offspring than the replacement level for their environment. There is good evidence that reason, too, is the result of a slow evolutionary process, so it is wildly implausible that there are evolutionary jumps that propel a species straight from being animals to a level of sentience that would let them overcome their inherited instincts. And to preserve the Edenic nature of this picture, their rational motivation would have to be strong enough to not even let them feel frustration at this suppression.

Although it is true that we humans are tempted to do immoral things as a result of the itch of repetition, this is not something we can simply remove from the world—no more from an alien world than from our own. The relationship between evolution, morality, and excess is exceedingly complicated, and considering aliens helps to bring some structure and order to our thinking on this topic. The result of this clarification, however, is that Lewis's picture of unfallen aliens cannot work in the real world. Whatever their attractions, Perelandrans are really no better off than we

are. It is perhaps significant that Lewis himself had apparent difficulties in creating a plausible alter Eve (see Hooper 1996, 224).

Lewis's stories work superbly well when taken as parables. When analyzed as potential reality, however, they demonstrate that his view of evil as external to the world is ultimately untenable. By creating fictional aliens, Lewis gave his abstract view of our fallen condition concreteness. In this way he enriched it and at the same time exposed it to potential falsification. This is a risk, but to a scientist it is also a virtue. Thus we see the alien as a point of contact between scientific methodology (in the form of falsificationism) and metaphysical considerations of human nature.

Lewis created the aliens even though the science he knew was not advanced enough for him to understand everything they were telling him. The aliens took on a life of their own, and they are still talking to us. Such are the pleasures and benefits of a good story.[11]

Conclusions

Perhaps in the case of the Fall and original sin we did not need aliens to reach the conclusions that I have drawn from Lewis's stories. A similar point has been made without the benefit of aliens by Jerry Korsmeyer (1998) and Patricia Williams (2001), among others. That the aliens agree with them gives us confidence in their usefulness. There may be other issues, less thoroughly investigated, where an appeal to aliens can advance our understanding of a problem or give us a fresh viewpoint.

Aliens are useful in other ways. The picture they create in our imagination can be evaluated on very different levels, not just as an academic argument. When we use aliens to embody certain philosophical positions, we broaden the scope of the discussion by including participants who may not have a more abstract and academic access to the problems raised.[12] It is important in this effort that we not shortchange the aliens. Once we imagine them, they need to be developed into plausible beings to be of any use. To say this another way, they have to become sufficiently real to our imagination to serve as conversation partners. And the more real they become, the more likely it is that they will tell us things that we did not anticipate.

Moral issues can be complicated, and the more ways we can bring our imagination to bear on them, the more chance we have to avoid oversimplification. Of course, alien stories may, like any other fiction, reflect the prevalent dualism of our times of dividing humanity into "good guys" and "bad guys." There are any number of stories about aliens that are overly simplistic in exactly that way, whichever side the aliens take. But they do not have to be, and if they are not, they are generally more interesting. Any story that stimulates our imagination while respecting the complementary limitations mentioned earlier can assist us in reflecting on our

own conduct and help us change course if necessary. Such is the role of extraterrestrial meta-humans in *metanoia*.

To summarize, then, I believe that (1) aliens are helpful in solving serious philosophical problems (ethical, epistemological, and so forth); (2) their peculiar ontological status as something imaginary that *might* be true is responsible for appealing to people with widely divergent presuppositions; (3) the reason for their utility is at least in part that they are powerful metaphors of self-reflexivity; (4) the appeal of this metaphor is connected with their "watching us from above"; (5) unlike God, they can adapt to the philosophical position of their author; and (6) in order to take full advantage of this we have to harness our power of imagination by keeping sight of its limitations.

This last point can be metaphorically expressed by saying that we need to *listen to* the aliens we have created. It may be that aliens do not exist, but they do not have to be real in order for the moral lessons to be real. Imaginary aliens continue to tell us important things about our character and morality. They do so because they are part of ourselves—and not just any ordinary figment of the imagination but something that stands for our uniquely human self-reflexivity.

In a sense, encountering real aliens would fundamentally change this situation. But as yet we do not know what real aliens are like, nor even whether they exist at all. Until such time as we actually make "contact," we should be content to get all the help we can from the aliens that live in our imagination.

NOTES

1. The title of the German original, published in 1983, is *Der Mythos der Neuzeit*.
2. Other examples are George McDonald's nineteenth-century novels *Phantastes* and *Lilith*, which inspired C. S. Lewis. The continued popularity of the genre is exemplified by, among others, Anne Perry's *Tathea* (1999).
3. On a related issue, David Ritchie (1994) thinks that many stories of angelic and demonic visions have the same (pathological) source as modern accounts of alien abductions and the like. Carl Sagan (1995) makes a similar point.
4. For a taxonomy of relativisms see Newton-Smith 1981.
5. The dualism of aliens was pointed out by Steven Dick. I do not include the third part of Lewis' trilogy, *That Hideous Strength* (1945), because it takes place on Earth, and aliens are not a major part of the story.
6. Adolf Loos (1870–1933) was not only a pioneer of modern architecture but also an accomplished essayist of acerbic wit. His writings have only recently been translated into English. The parable as presented here is a paraphrase from the obituary for a master carpenter who made dining chairs for Loos's clients (Loos [1929] 2002). In the obituary Loos chastises architects who "design" chairs, since a master carpenter can build chairs that are more functional and more comfortable than anything a professor of architecture is capable of designing. The barb might be in part directed at Frank Lloyd Wright, who held the opposite view.
7. This is not the place to critique Tarter's rather unconvincing arguments that link potential self-destruction to religion. However, the concern that humanity might self-destruct is, in my opinion, well founded.
8. Guthke contends that no one in the Middle Ages believed in the real existence of aliens. He argues that everyone, including Ockham, treated them merely as a hypothetical possibility.

I am not convinced by his argument. Considering how different the medieval understanding of facticity and symbolism was from ours, the issue might be undecidable.

9. Some seem to have gone even further. Günther Schiwy in his biography of Pierre Teilhard de Chardin reports that Teilhard was embarrassed about theologians who warned that the pilots of flying saucers might be impossible to kill if they came from a planet not affected by original sin (Schiwy 1981, II, 270). Schiwy charitably does not tell us who these theologians were.

10. "Real" here is not meant in the sense that Lewis considered Mars or Venus to be inhabited by the creatures he described in his fictional stories but rather that he meant them to have a nature that could actually exist in our universe.

11. There is one final piece of irony. I have used Loos's parable about the real horse and the imaginary saddle. Coincidentally, the first species that Lewis's hero Ransom encounters on Malacandra is called *hross*, which is derived from the Nordic word for horse.

12. I have used major parts of the story presented in this essay in talks to amateur astronomers and other audiences representing a variety of backgrounds. The success of these presentations is the basis for my claim that aliens are useful to an audience broader than just academic specialists when it comes to discussing moral issues.

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