Nietzsche's Overman as Posthuman Star Child in **2001: A Space Odyssey**

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All beings so far have created something beyond themselves; and do you want to be the ebb of this great flood and even go back to the beasts rather than overcome man? What is the ape to man? A laughingstock or a painful embarrassment. And man shall be just that for the overman: a laughingstock or a painful embarrassment.

—Friedrich Nietzsche, Thus Spoke Zarathustra

A Vision of the Future

Stanley Kubrick's 2001: A Space Odyssey (1968) is perhaps the greatest science fiction film ever made, and certainly one of the most philosophical.¹ In moving images—and almost no dialogue—Kubrick captures the entire evolutionary epic of Friedrich Nietzsche's magnum opus Thus Spoke Zarathustra. From worms to apes to humans, Nietzsche tracks the movement of life as the will-to-power—ultimately claiming that it is not yet finished. We have one final stage left, the overman, a being who will look upon humanity as humanity now looks upon the apes.² It is well known that Nietzsche tells us little about what the overman will look like, except that he or she will emerge as a new kind of "child." So, naturally, many scholars have dismissed the prediction as wild speculation. But Kubrick saw in Zarathustra the vision of a true prophet and looked on the future of technology as the culmination

of that vision.³ His 2001 maps the same Nietzschean pre- and posthuman stages, beginning with ape-men, proceeding through humanity, and finally culminating in a new (beyond human) form, the "Star Child," a planet-sized superintelligent fetus. Almost four decades later, this remarkable image continues to overwhelm audiences as one of the most sublime visions in all of cinema. Yet, in the next four decades, that vision may itself move out of the realm of science fiction and into the realm of "science fact." According to some contemporary philosophers of artificial intelligence—such as Ray Kurzweil and Hans Moravec—a vision like Kubrick's (and Nietzsche's) may soon come to pass. In fact, Kurzweil claims that around 2045 we will witness a new kind of "birth" called the "singularity," which will mark the beginning of a new race of superintelligent beings that Moravec aptly calls the "mind children." As these mind children, or star children, come into being, questions will arise about whether we are in control of them. And once they are born, is it possible, as Nietzsche seems to intimate, that all humanity will be left behind?

Synopsis of the Film

The film 2001 begins silently, on the plains four million years ago, with "The Dawn of Man." A cave is inhabited by a group of apelike creatures. One morning, they awake to find standing outside the cave a massive black monolith. The viewer knows that it has been placed there by aliens to initiate the apelike creatures' development into humans. Almost immediately, we see the effects take hold as one ape curiously plays with a skeleton, detaches a bone, and suddenly realizes that this bone can serve as a tool or a weapon, allowing him to bludgeon a rival ape to death. The implication here is that knowledge, technology, evolution, and advanced forms of violence are all intertwined. The next scene is one of the most famous in all cinematic history, and it is set to Richard Strauss's Also Sprach Zarathustra (1896), also written as a tribute to Nietzsche's masterwork: "I wished to convey by means of music an idea of the development of the human race from its origin, through the various phases of its development, religious and scientific, up to Nietzsche's idea of the superman. The whole symphonic poem is intended as a[n] homage to Nietzsche's genius, which found its greatest expression in his book *Thus Spake Zarathustra*."4

Beautifully, perfectly, Kubrick moves to slow motion, and the triumphant ape throws its bone-hammer into the sky. Then, in one montage cut, we

move four million years into the future, and the white bone is transformed into a white bone-shaped ship floating through space. From prehistory to the space age, we move from the end of one stage of evolution to the end of another stage—from the last moments of the ape-humans to the last moments of humanity.

By this point, we have reached the upper limit of human consciousness, having gone as far as we can with the human brain. So we now proceed with a powerful form of artificial intelligence: the HAL 9000 (voice by Douglas Rain), which is the brain of the spaceship *Discovery* that carries the astronauts Dave Bowman (Keir Dullea) and Frank Poole (Gary Lockwood). HAL is unlike any computer to date because he is more than capable of passing the Turing test (named after Alan Turing, who developed the test to determine whether a computer is "conscious"). A version of this test is given quite explicitly in the film when a television journalist from earth interviews HAL. He asks HAL a series of questions, hoping to see him as merely a machine rather than as a person. Yet the interviewer cannot tell the difference between HAL and a brilliant human being. In fact, HAL appears cordial, relaxed, bright, warm—even proud of never having made a mistake.

For all HAL's computational brilliance and seeming humanity, he ultimately turns on the crew, killing all but Bowman. HAL believes that this action is essential to the completion of the mission (the real purpose of which neither Bowman nor Poole knows). Now, Bowman must square off with HAL in a battle of wits that Bowman wins by crawling into HAL's brain and lobotomizing him down to the level of a babbling three-yearold. With HAL's mind and will completely out of the way, Bowman can at last access the secret files about the mission, which are buried at the base of HAL's brain.

Upon learning the truth about the mission, Bowman takes control of the ship and heads straight into the monolith, passing through it like a star gate. The next series of shots takes several minutes and involves a fantastic montage of kaleidoscopic and hallucinogenic images of shifting colors and noise and a flight over land and sea. Suddenly it stops, and Bowman finds himself in an elegant hotel room, where we see him pass through several stages of aging. In the last stage of his life as a man, lying on his deathbed in the same hotel, Bowman looks up and sees at the foot of the bed a new monolith. Now Bowman (like the ape with the bone) is prepared for the final transformation. Once again, Strauss's Zarathustra beats in the background as a newly born superintelligent Star Child turns gently to look at us.

The Age of Nihilism

The entire process leading toward this Star Child is designed and directed by a hidden race of aliens. But we discover them (indirectly) when we discover, beneath the surface of the moon, a massive black monolith that appears to have been "deliberately buried." This human discovery is Kubrick's analogue to Nietzsche's idea of the death of God, when modern science casts all religion into doubt. Nietzsche develops this idea in *Zarathustra* and in *The Gay Science*, where a prototype Zarathustra called the "madman" says, "Whither is God?' . . . 'I shall tell you. *We have killed him*—you and I. All of us are his murderers." By "you and I," Nietzsche means the modern age of the Enlightenment, secularism, and science. But the real turning point is probably Galileo: "What did we do when we unchained this earth from its sun?" continues the madman. We now stray "through an infinite nothing" (and all the coldness of space).⁵

The real problem here is that along with the old cosmology, we have also lost the religious foundation for all our values—values that, like ourselves, seem to float hopelessly in the abyss. This is the beginning of the age of nihilism, marked by three specific losses. First, we lose our normative account of the past, the view that God created us for a purpose. Instead, now everything appears contingent, evolutionary. Second, we also lose our sense of normative groundwork in the present because there is no God-given "right" or "wrong" to guide our daily decisions. Finally, we lose our teleological end. Our future can no longer be said to lie in heaven, a messiah, or resurrection.

Recognizing this threefold loss, the madman and Zarathustra diagnose our age of nihilism and then present the necessary antidote. As the madman puts it, "How shall we, the murderers of all murderers, comfort ourselves? . . . Is not the greatness of this deed too great for us? Must not we ourselves become gods simply to seem worthy of it?" In other words, we must transfer all the sublime and superhuman power of the God of the next world back into this world, and we must will by ourselves the creation of an overman. But, in the process, our reach should not exceed our grasp. That is, we should not will another God. As Zarathustra puts it, "God is a conjecture; but I desire that your conjectures should not reach beyond your creative will. Could you create a god? Then do not speak to me of any gods. But you could well create the overman." Similarly, Kubrick signals a new loss of faith in the old story and the old ideals, just as Galileo and modernity called religion into doubt. In 2001, the discovery of the moon monolith seals the case against

religion, because we now know that God did not create us; we know who our creators and designers really are—namely, the aliens.

Moreover, with this discovery of our true nature and our true creators comes a political cover-up, in the same way that Galileo's new science of the planets triggered a suppression of the truth. Likely, it was a combination of this Galileo affair and the cover-up at Roswell, New Mexico, in 1947—where an alien spaceship allegedly crashed—that prompted Kubrick's own version of a political cover-up of a new scientific discovery involving both planets and aliens (that is, a monolith buried on the moon).8 Kubrick's cover-up is a "noble lie" in Plato's sense from the *Republic*: the elite intellectuals must create and maintain a religiously based creation myth to keep people secure and stable. In 2001, this takes the form of the government keeping secret the buried monolith, which is proof positive of the existence of aliens who seeded the earth, directed our evolution, and are likely directing it still.

The Higher Men

After establishing the death of God, Kubrick appropriately moves to the next stage of evolution in Zarathustra—namely, the higher men, who, according to Nietzsche, accept the death of God.⁹ In fact, having overcome the religious noble lie, Kubrick's higher men feel incredibly liberated and are now confident that they can create a new kind of society—one entirely without lies. This is the Enlightenment, a new project that will free the rest of humanity from the darkness of the Middle Ages. And the higher men are the modern philosophers, such as René Descartes and Immanuel Kant, who will guide the way.

In developing their new society, however, they have one rather large problem. A gaping moral void is left after the exposure of the noble lie—the same void the madman and Zarathustra diagnose as the age of nihilism. But the higher men understand what the madman and Zarathustra mean about becoming gods in order to be worthy of our deicide. And they are going to try to do just that (even though, as I point out later, they do not succeed). So, in place of God, they put the human mind and make that the new foundation of morality and culture. And in place of religion's ascent into heaven, they take all our forward-looking spirit and transfer it back to this world in the form of an enlightened, globalized, cosmopolitan, scientific, individualistic, and technological society.

Like Nietzsche, Kubrick also separates the higher men from the "herd" (the rest of the population) and, indeed, places them quite literally "higher" up in space. Kubrick's higher men are the astronauts: Dave Bowman, Frank Poole, and Dr. Heywood R. Floyd (William Sylvester). And here, Kubrick provides an interesting twist on Nietzsche's view. In Nietzsche, the higher men must leave behind the otherworldliness of God in heaven and become masters of the earth. But in Kubrick, the higher men leave behind the earth and become masters of the otherworldly heavens, essentially taking God's place among the stars. In spite of this twist, however, it is important to point out that Kubrick's higher men are still very much like Nietzsche's, insofar as they represent the Enlightenment's values and the view of humanity as a replacement for God. The astronauts are clearly committed to democracy, science, and technology. And indeed, these higher men are impressive; they are intelligent, brave, and strong—certainly the best humanity has to offer, in Kubrick's vision, just as in Nietzsche's.

The Last Man and the Tightrope Walker

Yet ultimately, the higher men are doomed in both Nietzsche and Kubrick. They are doomed to become what Nietzsche calls the "last men." As Gilles Deleuze puts it in *Pure Immanence*: "Following the higher men there arises the last man, the one who says: all is vain, better to fade away passively!"10 In other words, the once noble and brave higher men who fought and stood for humanistic values gradually settle into their new global, democratic, popular culture and eventually get tired and lazy. This is not to say that the higher man project did not work—certainly it did for a while, and it was essential for replacing religion with reason—but in the end, the higher man project was inadequate to replace the religious teleology of otherworldly bliss, immortality, and near omniscience. Keep in mind that the ultimate goal of the higher men—really, the goal of the Enlightenment—was merely the liberation of humanity from the old noble lie and the establishment of a secular society. But this goal is second rate at best, for once it has been achieved, according to Nietzsche, there is nowhere left to go and nothing left to hope for. And after enough time passes, one ends up with the finished product: Nietzsche's "most contemptible" last man. He is a marketplace man without any higher ideal. He lives solely for his sensuous appetites, his "little pleasure for the day and [his] little pleasure for the night."11

Basically, this is where we are now in secular culture with democratic capitalism—and as bad as it is, it is, in fact, going to get worse. According to Nietzsche, we have one more stage of descent to go before the philosophical vision of the overman can truly take hold of our minds. As Deleuze puts it, "Beyond the last man, then, there is still *the man who wants to die*. And at this moment the completion of nihilism (midnight), everything is ready—ready for a transmutation." This last stage before the overman is signaled by the character in Zarathustra of the tightrope walker: he performs a high-wire act for the people of the marketplace but falls to the ground. Seeing him there, Zarathustra goes to him and cares for him. The tightrope walker is ready to die; he even wants to die. But, as he tells Zarathustra, he is afraid of going to hell and meeting the devil. Zarathustra recognizes that the tightrope walker is still in the last throes of the old noble lie. Perhaps the tightrope walker no longer hopes for heaven, but there is a lingering fear of the afterlife that occurs right at the moment of death. So, Zarathustra tells him plainly, "there is no devil and no hell." Hearing this from Zarathustra, the tightrope walker is at once appeased, as though he already knew this but needed to hear it again. He says, "If you speak the truth . . . I lose nothing when I lose my life." Now, all the tightrope walker desires is death because "he loses nothing if he loses his life." He has nothing left to live for anyway.¹³

In *Zarathustra*, the rope in the tightrope sequence is a symbol of humanity. As Nietzsche puts it, "Man is a rope, tied between beast and overman—a dangerous across, a dangerous on-the-way, a dangerous looking back, a dangerous shuddering and stopping." Ne when the tightrope walker falls to his death and wants to die, this really means that humanity itself is descending, as a consequence of the nihilism that began with the death of God. And that descent, which proceeds through the stage of the last man, ultimately results in the same attitude of the dying tightrope walker: having nothing left to live for, we simply give up and wish for death.

The Hotel Sequence

Kubrick clearly appropriates these two Nietzschean ideas of the last man and the tightrope walker. Ultimately, Poole, too, falls to his death, because HAL disconnects the rope and thus all his life support. Moreover, in terms of Kubrick's use of Nietzsche's text, Bowman goes to the disconnected Poole in a space pod, picks him up with mechanical arms, and carries him back

through space—very much like Zarathustra, who picks up the tightrope walker's dead body and carries it over his shoulder.

The point about Bowman being a neo-Zarathustra character, however, should not be taken too far. His role can be seen more explicitly as that of the higher man who descends into the stage of the last man.¹⁵ We see this role especially after Bowman has passed through the monolith star gate and then suddenly appears in a comfortable hotel room. Like Nietzsche's last man, Bowman is no longer a higher man. His government-issued spacesuit has been transformed into an evening robe. He no longer eats the prepackaged food on the *Discovery*, intended only to keep him healthy and focused on his mission. Rather, he enjoys fine cuisine and wine. He is descending into decadence and enjoying, as the last man does, his "little pleasure for the day and [his] little pleasure for the night." He lives in isolation from the rest of humanity and is indeed quite literally the "last man" in space (the rest of the crew having been murdered by HAL).

Bowman continues this descent of the last man until, finally, he is a very old man lying on his deathbed, wanting to give in to death, just like the tightrope walker. Of course, there is a temptation not to conceive of Bowman as the tightrope walker because Poole is so clearly this character, but it is important to keep in mind that Bowman *also* performs a tightrope walk. He journeys out through space to retrieve Poole and then must make an additional and extremely treacherous spacewalk from the pod, through the bay doors, across an abyss. This is a potentially fatal maneuver because he has no life support, having been cut off from the *Discovery* by HAL. Indeed, both Poole and Bowman begin as higher men and become tightrope walkers (Poole, however, does not pass through the last man stage).¹⁶

Finally, in a scene taken almost directly out of Nietzsche, we see the dying Bowman look up to find the final black monolith standing over him, in exactly the same way Zarathustra emerges at the moment of the tightrope walker's death to stand over him. The monolith has come to transform Bowman into the Star Child, just as Zarathustra has come to humanity to prepare us to go forward into the next stage of the overman. In both *Zarathustra* and *2001*, it is only after humanity completes its descent into darkness that we can move onto another plane of existence. We must first see the ultimate limit of the project of the higher men before a new form of existence is possible, even if only in principle. We must watch one ideal fail completely before another can be fully grasped and achieved.

Motivation and Design

In Nietzsche, the movement beyond the last man to the overman requires a fourfold recognition: (1) we cannot stay as we are and, if left to our own devices, we will continue to decline; (2) we cannot go back to the religion of the Middle Ages, because the myth has been debunked; (3) we can only go forward; and (4) we have no ideal to guide us forward, since God is dead: "the one goal is lacking. Humanity still has no goal." All other ideals of humanism (for example, socialism) are powerless to solve the last man problem. So, as Zarathustra puts it, we must create a new ideal, and this is the overman: "The time has come for man to set himself a goal. The time has come for man to plant the seed of his *highest* hope."18

So, effectively, the motivation toward the overman is ethical, in two senses. Negatively, we want to overcome the problem of the last man; positively, we must create an ideal worthy of our aim. And Nietzsche's overman just might give us both. We would have all the old superhumanity (of religion) and none of the otherworldly immateriality, all the futuristic perfectionism and none of the superstitious metaphysics of rebirth in another world. It is the perfect substitute for what we lost: the same sublime ecstasy of the divine, newly transferred from the "next world" to this one, in the form of a new kind of superior being who will provide us with a substitute for nihilism. Of course, as already noted, Nietzsche provides little information about what the overman will look like. But it seems clear, at the very least, that the overman will be superintelligent compared with humans, specifically with regard to rationality, creativity, and the will to power—yet with none of the guilt and resentment that characterize humanity.

Here, however, there is a strong break between Nietzsche and Kubrick on the point about moral nihilism being a motivating factor for the push toward the overman. We are *not*, in 2001, motivated by the death of God or its consequent last man. The death of God, the last man, and the tightrope walker certainly appear in the film, and they are clearly integral to the plot. But neither nihilism nor the last man as its consequence appears to motivate the coming to be of the Star Child. In other words, Kubrick's 2001, in contrast to Nietzsche's Zarathustra, is not a story about moral nihilism at all. Rather, 2001 is about metaphysics and epistemology.

Metaphysically, the aliens have constructed everything, beginning with a massive black monolith that enhances the primitive brains of the apes. However, this direct influence quickly becomes indirect. Apparently, the aliens have designed us to become intelligent through technology; consequently, we become curious about anomalies such as the monoliths and the aliens themselves. In the final movement from Bowman to Star Child, these two forms of influence—indirect and direct—coalesce. Bowman is drawn (due to an alien design) to know the mind of HAL and to know the inner workings of the monolith. And he proceeds to complete his mission alone—even after his entire crew has been murdered—without permission or direction from earth. As he does so, the aliens and the monolith act directly on Bowman's mind and transform him into the Star Child.

The Singularity and the Mind Children

Both Nietzsche and Kubrick intend their respective visions to be deeply prophetic. And here, it is reasonable to ask whether Kubrick or Nietzsche might turn out to be right. Should we expect Nietzsche's overman or Kubrick's Star Child? I think perhaps we should, but not for the reasons Nietzsche and Kubrick give—that is, not necessarily because of moral nihilism or because of aliens directing evolution.

Of course, Nietzsche is quite right in his diagnosis of the age of nihilism, and much of popular culture certainly resembles the stage of the last man. But it seems rather implausible that a new form of being will appear on the horizon—out of the blue, or even as motivated by problems of the last man—and render humanity as primitive as the apes are to us, as Nietzsche predicts. A superior and brilliant man or woman is hardly genetically out of the question—and may even be likely. But this would not count as a *new kind* of being. Moreover, although humanity may be in a last man stage, Nietzsche's view of our descent into absolute darkness may be a little overstated. It seems just as likely that we will continue to develop toward the modern (higher man) ideal of democratic cosmopolitanism, perhaps becoming increasingly stable and maybe even a little happier.

Kubrick's account of our next stage is a little far-fetched as well. Like Nietzsche's overman, it is also in the realm of logical possibility, but it does not appear to be the way things are going. We may have discovered a spaceship at Roswell, and there are certainly many UFO sightings around the world. But these facts, taken together, do not add up to the conclusion that an alien race has been guiding our entire evolutionary process from early primates toward a Star Child. That *may* be the case, but the scientific com-

munity certainly has not even hinted at this picture. So, at this point, there is little reason to accept this specific view.

Kubrick's view of artificial intelligence, however, is an entirely different story. HAL, though not an overman or a supermind, is certainly superior to humans in intelligence, at least in some ways. It is true that Bowman outwits HAL, but the idea of a HAL-type entity that is more intelligent than humans is a real possibility for our species. In our highly technological society, we have already dedicated great resources and intellectual power toward the pursuit of a mind such as HAL's. But we do not do this out of an aching nihilistic religious void, nor do we do this because aliens are guiding us. Rather, we do it because our minds are intrinsically bound up with technology. Tool use marks the ascent of consciousness from our early primate beginnings to our current state of humanity, just as Kubrick portrays it—only without the monoliths' influence.

In fact, we are not really *that* far away from HAL at the moment. No computer or artificially intelligent personality can pass the Turing test like HAL can, and surely none is as charismatic. But HAL's chess ability is already within our reach. Remember, Poole and HAL play a friendly game of chess, and HAL wins (which is a foreshadowing of HAL's murder of Poole). At the time of the film's release, such a game was mere fiction. In 1968 computers were more theory than practice, more science fiction than household reality. But of course, everything changed in 1989 when a computer named Deep Blue beat world champion Gary Kasparov in a game of chess. Everyone was shocked—everyone, that is, except for Ray Kurzweil, who had predicted precisely such an event a decade earlier (virtually to the date). Insiders had long known about Kurzweil's mysterious and uncanny powers of prediction, but this was simply off the charts. So, everyone started listening.

What Kurzweil was doing was simply extrapolating from Moore's law, which states, in general terms, that computer power doubles about every eighteen months. This law works on a nonlinear curve, sort of like a bent knee. Presently, we are just rounding the bend of the knee, but once we round that bend, Moore's law will attain a kind of "racing ahead" feel, and technology will evolve very quickly. This law governs virtually everything that occurs in computer technology today, and because computer technology governs much of the evolution of science, the scientific community also pays close attention. Indeed, the ability to know the future of the computer industry attracts many bright young minds today. But no one is better at it than Kurzweil. Virtually the entire computer community is in agreement on this.¹⁹

Given Kurzweil's impressive success in predicting the future, it is not surprising that the high-tech community is swarming around his most recent statement about what Moore's law will do next. In his book *The Singularity Is Near: When Humans Transcend Biology*, Kurzweil claims that we are heading for a major revolutionary advance in technology—one that begins with a massive-scale birth (on a par with *2001*'s birth) and results in an entirely new kind of child. As Kurzweil puts it, "I set the date for the Singularity—representing a profound and disruptive transformation in human capability—as 2045. The nonbiological intelligence created in that year will be *one billion* times more powerful than all human intelligence today." Yes, that is correct: an intelligence one billion times the sum of all human brains today. The question quite naturally arises: could this be Kubrick's Star Child?

Some will no doubt cast this prediction aside as too outrageous or simply crazy. But similar things were said about airplanes, cloning, computers, the Internet, space travel, nanotechnology, the Hubble telescope, and robots that can run like humans and drive cars—all of which are part of our common language today. Others will insist that the possibility of artificial intelligence is no different from any previous form of technology; we have never made a machine that is truly conscious, and we probably never will, because consciousness simply is not machine based. But, as it is often countered, the onus is on the critics to establish why the presence of protein and fat (in our brains) is a necessary, and not merely sufficient, condition for consciousness.²¹ And even if we do require fat and protein today (in the short run), no one really doubts that nanotechnology will eventually be used within human brains to enhance them well beyond their present power. This enhancement will take place primarily through what are called "assemblers": nanotechnological robots with tiny arms capable of reorganizing the positions of atoms—placing them in alternative arrangements. And because everything we see around us is built of atoms, in theory, assemblers can rearrange anything to become anything else: apples can become oranges, and perhaps our minds can be enhanced as well.

This vision of the future can be seen as quite Nietzschean, especially in the writings of Hans Moravec, who, as it turns out, was later to become a favorite author of Kubrick's. In his books *Mind Children* and *Robot: Mere Machine to Transcendent Mind*, Moravec—also relying on Moore's law—describes the emergence of a whole new kind of "child" (not unlike Kubrick's Star Child). Indeed, Moravec claims that there will be an entirely new *race* of

"mind children."22 The mind children will be "our" children in four distinct ways. First, they will be beings created by us, meaning that we will "give birth" to them in the form of the singularity.

Second, the mind children will bear many marks of their lineage. That is, for all their uniqueness, they will not be entirely alien to us. Like the Star Child, the mind children will possess cognitive powers well beyond ours, but we will also recognize ourselves in them, just as we recognize ourselves in the massive Star Child, with its human eyes and its human fetal shape. As Moravec puts it, "I consider these future machines our progeny, 'mind children' built in our image and likeness, ourselves in more potent form."23 Here, a key difference with Kubrick's Star Child should be pointed out. The Star Child is made to look like us because the aliens direct it. So, in effect, the aliens made us first in their image and then directed us to become like them, in a greater (perhaps more approximate) image of the aliens themselves. In contrast, Moravec's mind children are like us not because of aliens but because we will make them in our image.

Third, the mind children represent our greatest reasonable hope for a better future: "Like biological children of previous generations, they will embody humanity's best chance for a long-term future."²⁴ Here, Moravec means that because the mind children are not protein based, they will have significant advantages over all previous human beings; they will not be mortal, nor will they be fundamentally limited in intelligence, as we are. Indeed, they will not even be confined to earth and will likely move off the planet into space to colonize other galaxies as their intelligence grows.²⁵ "Unleashed from the plodding pace of biological evolution," writes Moravec, "the children of our minds will be free to grow to confront immense and fundamental challenges in the larger universe."26

Fourth, and connected to point three, we will also live on in the mind children. But note that this kind of "immortality" is not merely metaphorical, like a parent living on through his or her child or someone becoming immortal through his or her work. And it is not the kind of immortality (if we may call it that) found in Nietzsche's Zarathustra either: "what can be loved in man is that he is an overture and a going under."27 In Nietzsche's view, humanity's ultimate decline is a necessary stage for a greater end, and the overman will remember us as his parents. In Moravec, by contrast, the point is literal. We are *literally* going to live on in the mind children by fusing our now-biological brains with them.²⁸ We will actually pass into a new and higher form, in much the same way that Bowman becomes the Star Child.

This is what is known as "posthumanity," a state in which we are no longer, strictly speaking, human: we are beyond human—immortal, superintelligent, and not confined to earth.

Perhaps, then, Kubrick's vision (and Nietzsche's) is not as far off as some may think. In fact, in light of current research into the field of artificial intelligence, Kubrick and Nietzsche might actually be as prophetic as they thought they were. An overman does appear to be on the horizon who may indeed render the history of humanity primitive and apelike. This new stage of the child, moreover, will mark the end of death and a new kind of supermind, precisely in the way that Nietzsche and Kubrick claim—though perhaps not for any of the reasons they give.

Aliens and Monoliths

A final question presents itself, considering the possibility that Kubrick's vision may come to pass. Why does Kubrick—a man acutely aware of the future of technology—use the idea of aliens as the driving force behind human evolution? Of course, some will claim that because we do not actually see the aliens in the film, and because the monoliths have a kind of dark blankness about them (that is, they are not personified), the monoliths may represent human technology itself. After all, the scene of the ape-humans making an evolutionary leap forward with the discovery of tools is not so difficult to imagine being true without the aliens and monoliths. But if Kubrick's monoliths (and the aliens controlling them) are merely metaphors for human technology and innovation, what about the moon monolith being deliberately buried? Who else would have been able to bury it in outer space but aliens? The interpretation of the monoliths as technology also raises questions about why HAL, the most advanced form of human technology to date, must ultimately be destroyed in order for humanity to develop technologically into the Star Child. Indeed, it seems clear that Kubrick intended for nonhuman beings to be running the show from behind the scenes. And the plot simply becomes untenable without interpreting the cause of the monoliths and our future development as alien life.

And yet it also seems likely that Kubrick was aware that alien designers would not be necessary for future advances toward an overman-like future—assuming that HAL is not the end of the line of technology in 2001 or in real life. So, there is an oddity about 2001, interpreted in light of Nietzsche's Zarathustra (on which Kubrick obviously based his film). Aliens

may make for a better science fiction epic, but being "replacement gods" (as we may call them), they obscure what is perhaps the most fundamental insight in Zarathustra. There is, of course, much in Nietzsche that can be safely reinterpreted to capture the essence of his philosophical vision in space, but perhaps the death of God is not one of them. Now, as noted earlier, Kubrick does use his own version of the death of God (a death also achieved through science) when the moon monolith is discovered. But in an age in which the idea of God is not so widely held—certainly compared with the Middle Ages—why does Kubrick replace the old idea of a designer with a new one? The aliens may not be omniscient and omnipotent, but Kubrick gives them many of the properties of the old worldview. They are not only designers but also creators, guiding their created designs toward a new and higher form of being; they are also, like God, quite hidden. Indeed, Kubrick presents them beautifully by *not* presenting them—by presenting only the monoliths and their effects, giving 2001 an eerie, mysterious feeling. But the introduction of a new kind of extraterrestrial god must, ultimately, render Kubrick's higher men, last man, and tightrope walker conceptually thin reflections of the Nietzschean personas on which they are so clearly based.

Notes

I am grateful to Elizabeth F. Cooke and Chris Pliatska for conversations and comments on this essay and to Elizabeth Cooke for reading and commenting on it.

- 1. Screenplay by Stanley Kubrick and Arthur C. Clarke. Clarke's original story was written in 1948 and titled "The Sentinel."
- 2. Here, I am using "apes" because that is what Nietzsche uses. Of course, biologists today inform us that the apes are our cousins rather than our great-grandparents. We did not descend from them.
- 3. Kubrick considered the computer "one of man's most beautiful inventions." This quotation is cited by Andrew Bailey, "A Clockwork Utopia," Rolling Stone, January 20, 1972, 16, and Alison Castle, "Stanley Kubrick's A.I.," in The Stanley Kubrick Archives (made in cooperation with Jan Harlan, Christiane Kubrick, and the Stanley Kubrick estate), ed. Alison Castle (Los Angeles: Taschen, 2005), 517. In 1971 Kubrick told Alexander Walker: "One of the fascinating questions that arises envisioning computers more intelligent than men is at what point machine intelligence deserves the same considerations as biological intelligence. . . . You could be tempted to ask yourself in what way is machine intelligence any less sacrosanct than biological intelligence, and it might be difficult to arrive at an answer flattering to biological intelligence." Alexander

Walker, *Stanley Kubrick*, *Director* (New York: W. W. Norton, 2000), 32; also cited in Castle, "Stanley Kubrick's A.I.," 504.

- 4. Richard Strauss, program for *Also Sprach Zarathustra*, Op. 30 (1896), in Bernard Jacobson's essay "Also Sprach Zarathustra" for the American Symphony Orchestra, http://www.americansymphony.org/dialogues_extensions/99_2000season/2000_03_08/strauss.cf (accessed October 30, 2005).
- 5. Friedrich Nietzsche, *The Gay Science*, trans. Josefine Nauckhoff, ed. Bernard Williams (Cambridge: Cambridge University Press, 2001), 119–20.
- 6. Ibid., 120. See also Friedrich Nietzsche, *Thus Spoke Zarathustra: A Book for None and All*, trans. Walter Kaufmann (New York: Modern Library, 1995), 13. One of the first mentions of this idea appears in Hegel's *Phenomenology*, just before the final section on Absolute Mind: here we have "the painful feeling of the Unhappy Consciousness that *God himself is dead*" (G. W. F. Hegel, *Phenomenology of Spirit*, trans. A. V. Miller [New York: Oxford University Press, 1977], 476). See also Nietzsche's *Zarathustra:* "God is dead; God died of his pity for man" (90); and "I recognize you well," he said in a voice of bronze; 'you are the murderer of God! Let me go. You could not bear him who saw you—who always saw you through and through, you ugliest man! You took revenge on your witness!" (264).
 - 7. Nietzsche, Zarathustra, 84.
- 8. In terms of the Roswell cover-up, there are several possible explanations. For example, from a political perspective, if aliens *were* discovered, suppressing the truth might be seen as necessary for political stability and the protection of certain technological secrets—which was crucial in the post–World War II era, just as we were entering the cold war. And if aliens *were not* discovered, the rumor could serve to cover up something else that needed to be hidden. Colonel Philip J. Corso, a member of President Eisenhower's National Security Council and head of the Foreign Technology Desk at the U.S. Army's Research and Development Department, allegedly saw everything. In his *The Day after Roswell* (New York: Pocket Books, 1997), Corso relies on personal experience and materials recently declassified through the Freedom of Information Act to explain in detail how an alien spaceship *did* crash; he claims that many saw it and that there was a great deal of alien technology onboard that we continue to use.
- 9. Leonard Wheat also makes this point about Bowman and Poole being higher men in his book *Kubrick's* 2001: *A Triple Allegory* (Lanham, Md.: Scarecrow Press, 2000). Wheat's basic thesis is that there are three allegories at work in the film: (1) the allegory of Nietzsche's *Zarathustra*, (2) the allegory of Homer's *Odyssey*, and (3) the allegory of human-computer fusion as it is found in Arthur C. Clarke (who collaborated with Kubrick on the film). Wheat's analysis of the relation between *2001* and *Zarathustra* is perhaps the best in the literature.
- 10. Gilles Deleuze, *Pure Immanence: Essays on a Life*, trans. Anne Boyman (New York: Zone Books, 2001), 82. Deleuze also notes, "the distinction between the last man

and the man who wants to die is fundamental in Nietzsche's philosophy: in *Zarathustra*" (ibid., 101 n. 8).

- 11. Nietzsche, Zarathustra, 17, 18.
- 12. Deleuze, Pure Immanence, 82.
- 13. Nietzsche, Zarathustra, 20.
- 14. Ibid., 14.
- 15. As noted earlier, Wheat and I agree on Bowman and Poole being the higher men, but we part ways on the idea of the last man and his relation to the tightrope walker, a difference that can be localized in the hotel sequence near the end of 2001. Wheat's take does not seem to include the last man: "The five Bowmans in the hotel room (just three or four Bowmans in some instances) collectively symbolize (1) the aging (maturation) and birth of the fetus, (2) cell division (first four Bowmans), (3) the five stages of evolution (worm, ape, lower man, higher man, and overman), (4) Zarathustra's parable of the shepherd, the black serpent, and the light-surrounded being (last three Bowmans only), and (5) Zarathustra's three metamorphoses (camel, lion, and child) metaphor (last three Bowmans)" (Wheat, Kubrick's 2001, 155). There is, I admit, a remarkable collection of symbols drawn from Zarathustra—with references to characters such as the shepherd, the serpent, the lion, the camel, and many others. But I tend to see this sequence as the descent of the higher man into the last man. The last man does not appear to play a strong role in Wheat's analysis, even though it is one of the most important characters in both Zarathustra and 2001.
- 16. In making the Poole–tightrope walker connection, Wheat supports his view by using what he calls a "90% anagram." He suggests that we can rearrange the last nine of the ten letters of "[F] rank Poole," and get "[W] alk on rope" (Wheat, *Kubrick's* 2001, 95). By dropping the F and adding a W, we can get what we want: namely, something Nietzsche almost says, in a literary form that does not really exist.
 - 17. Nietzsche, Zarathustra, 60.
 - 18. Ibid., 17; emphasis added.
- 19. Bill Gates is quoted on the dust jacket blurb for Ray Kurzweil's *The Singularity Is Near: When Humans Transcend Biology* (New York: Viking, 2005): "Ray Kurzweil is the best person I know at predicting the future of artificial intelligence. His intriguing new book envisions a future in which information technologies have advanced so far and fast that they enable humanity to transcend its biological limitations—transforming our lives in ways we can't yet imagine."
- 20. Kurzweil, *The Singularity Is Near*, 136. Furthermore, even President George W. Bush's Bioethics Commission recognizes the coming changes. See, for example, Francis Fukuyama, *Our Posthuman Future: Consequences of the Biotechnology Revolution* (New York: Farrar, Straus and Giroux, 2002), and Leon Kass, *Life, Liberty, and the Defense of Dignity: The Challenge for Bioethics* (San Francisco: Encounter Books, 2002). Both warn about the potential dangers of going forward into posthuman-

ity. Other groups, more sympathetic to the transition, are also busy planning for posthumanity. These include the Extropians, led by Max More and Natasha Vita More (www.extropy.org), and the World Transhumanist Association, led by Nick Bostrom out of Oxford University (www.transhumanism.org/index.php/WTA/index/). These proposthuman groups are, of course, quite aware of the Nietzschean philosophical roots of their ideas. Max More makes this point explicitly and claims that the basic transhumanistposthumanist philosophy derives from Nietzsche's vision in Thus Spoke Zarathustra. As More puts it, "I resonate to Nietzsche's declaration that 'Man is a rope, fastened between animal and overman—a rope over an abyss.... What is great in man is that he is a bridge and not a goal." Further on, More continues, "A bridge, not a goal. That nicely summarizes a transhumanist perspective" (Max More, "Max More and Kurzweil on the Singularity," http://www.kurzweilai.net/meme/frame.html?m=1). See also Ray Kurzweil, Are We Spiritual Machines? Ray Kurzweil vs. the Critics of Strong A.I., ed. Jay W. Richards (Seattle: Discovery Institute, 2002). For a critique of artificial intelligence, see Hubert Dreyfus, What Computers Still Can't Do: A Critique of Artificial Reason (Cambridge, Mass.: MIT Press, 1993).

- 21. As Dr. Chandra (Bob Balaban) puts it aptly in 2001's sequel, 2010: The Year We Make Contact (Peter Hyams, 1984): "Whether we are based on carbon or silicon makes no fundamental difference. We should each be treated with appropriate respect."
- 22. Hans Moravec, *Mind Children: The Future of Robot and Human Intelligence* (Cambridge, Mass.: Harvard University Press, 1988).
- 23. Hans Moravec, *Robot: Mere Machine to Transcendent Mind* (New York: Oxford University Press, 1999), 13.
- 24. Ibid. Kubrick could not have read Moravec's *Mind Children* before he made 2001, but it is clear that *Mind Children* was an important text for Kubrick when he was writing *A.I.: Artificial Intelligence*. For example, Kubrick highlighted this sentence in his own copy of Moravec's *Mind Children*: "Complex robots will sometimes get into trouble on their own initiative" (see Castle, "Stanley Kubrick's A.I.," 507). One can certainly see the relevance of that line to *A.I.*'s David (Haley Joel Osment) and Gigolo Joe (Jude Law), who get into quite a bit of trouble on their own initiative.
 - 25. Moravec, Robot, 13-14.
 - 26. Moravec, Mind Children, 1.
 - 27. Nietzsche, Zarathustra, 15.
- 28. Kurzweil (*The Singularity Is Near*, 375) touches on this subject in the following dialogue with Bill Gates:

RAY: Once we saturate the matter and energy in the universe with intelligence, it will "wake up," be conscious, and sublimely intelligent. That's about as close to God as I can imagine.

BILL: That's going to be silicon intelligence, not biological intelligence.

RAY: Well, yes, we're going to transcend biological intelligence. We'll merge

with it first, but ultimately the nonbiological portion of our intelligence will predominate. By the way, it's not likely to be silicon, but something like carbon nanotubes.

In addition, according to Kurzweil, we will need a new form of religion: "Yes, well, we need a new religion. A principal role of religion has been to rationalize death, since up until just now there was little else constructive we could do about it" (ibid., 374).