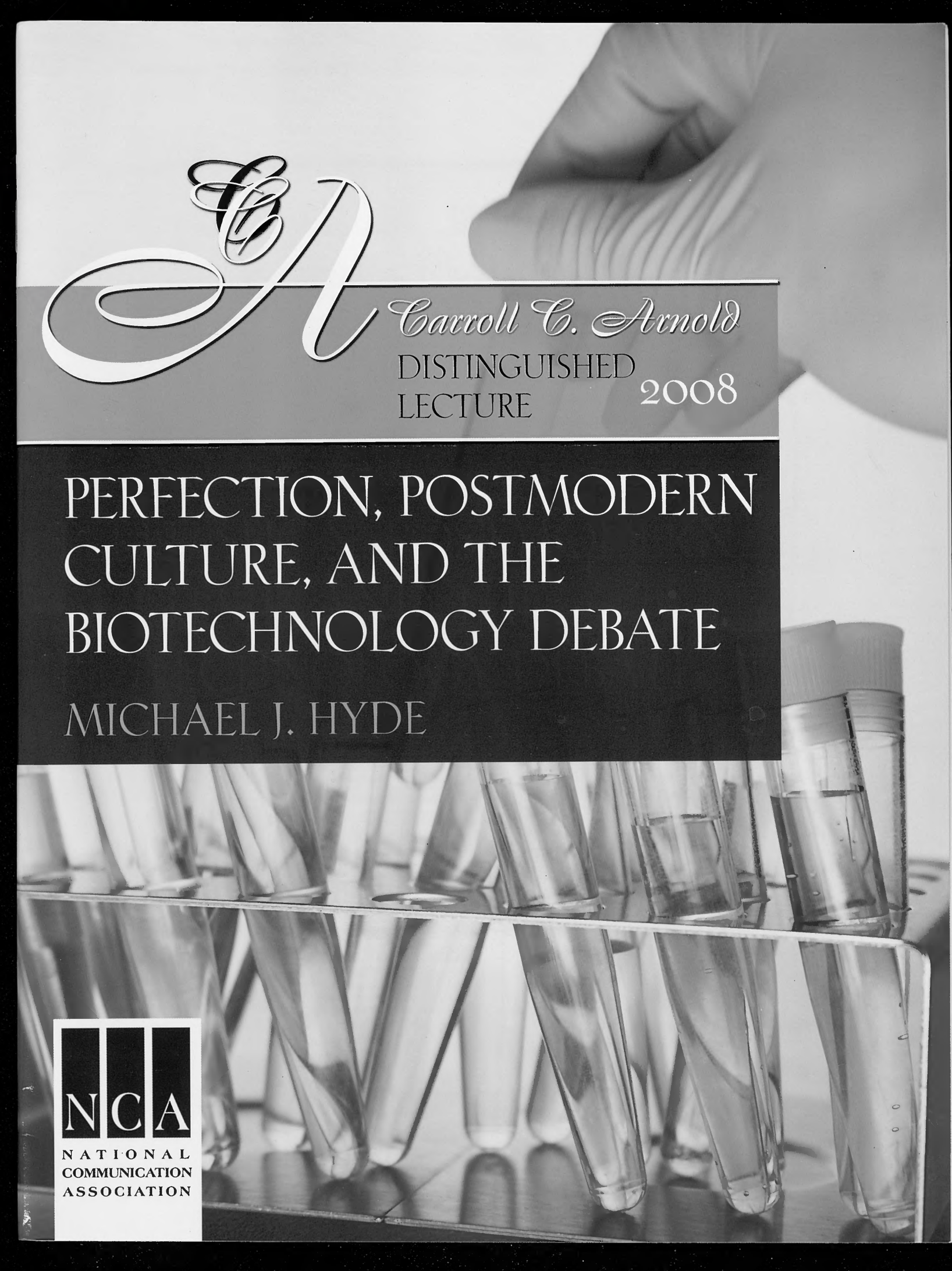

Carroll C. Arnold
DISTINGUISHED LECTURE
2008

PERFECTION, POSTMODERN CULTURE, AND THE BIOTECHNOLOGY DEBATE

MICHAEL J. HYDE

NCA
NATIONAL COMMUNICATION ASSOCIATION

The Carroll C. Arnold Distinguished Lecture

On October 8, 1994, the Administrative Committee of the National Communication Association established the Carroll C. Arnold Distinguished Lecture. The Arnold lecture is given in plenary session at the annual convention of the Association and features the most accomplished researchers in the field. The topic of the lecture changes annually so as to capture the wide range of research being conducted in the field and to demonstrate the relevance of that work to society at large.

The purpose of the Arnold Lecture is to inspire not by words but by intellectual deeds. Its goal is to make the members of the Association better informed by having one of its best professionals think aloud in their presence. Over the years, the Arnold Lecture will serve as a scholarly stimulus for new ideas and new ways of approaching those ideas. The inaugural Lecture was given on November 17, 1995.

The Arnold Lecturer is chosen each year by the First Vice President. When choosing the Arnold Lecturer, the First Vice President is charged to select a long-standing member of NCA, a scholar of undisputed merit who has already been recognized as such, a person whose recent research is as vital and suggestive as his or her earlier work, and a researcher whose work meets or exceeds the scholarly standards of the academy generally.

The Lecture has been named for Carroll C. Arnold, Professor Emeritus of Pennsylvania State University. Trained under Professor A. Craig Baird at the University of Iowa, Arnold was the co-author (with John Wilson) of *Public Speaking as a Liberal Art*, author of *Criticism of Oral Rhetoric* (among other works) and co-editor of *The Handbook of Rhetorical and Communication Theory.* Although primarily trained as a humanist, Arnold was nonetheless one of the most active participants in the New Orleans Conference of 1968 which helped put social scientific research in communication on solid footing. Thereafter, Arnold edited *Speech Monographs* because he was fascinated by empirical questions. As one of the three founders of the journal *Philosophy and Rhetoric,* Arnold also helped move the field toward increased dialogue with the humanities in general. For these reasons and more, Arnold was dubbed "The Teacher of the Field" when he retired from Penn State in 1977. Arnold died in January of 1997.

The Arnold lecture founders stipulated that, following its oral presentation, the lecture should be published with wide distribution to not only the NCA membership but to scholars of allied disciplines as well. This charge became a reality via the gracious help of Allyn & Bacon Publishers and by the generosity of friends, colleagues, and students of Dr. Arnold (listed in the back) who honored his scholarly contribution with their personal donations.

Funds for the Arnold Lecture are still being solicited. Those interested in supporting this endeavor should make out their checks to the "Arnold Lecture Fund" and forward them c/o The Arnold Lecture Fund, National Communication Association, 1765 N Street, NW, Washington, DC 20036.

Perfection, Postmodern Culture, and the Biotechnology Debate

Michael J. Hyde
Wake Forest University

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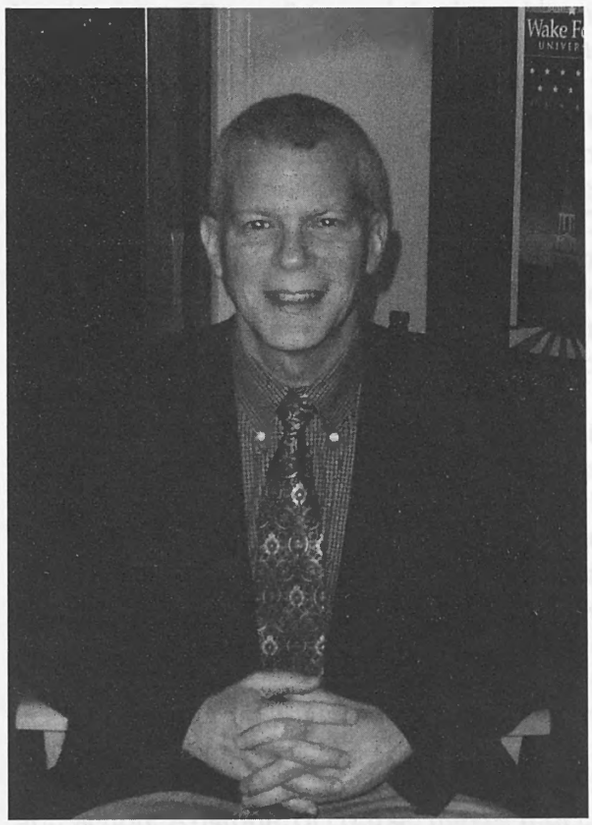
Professor Hyde is a fellow of the W. K. Kellogg Foundation and a recipient of national, state, and university research grants for his work in



Michael J. Hyde

"the rhetoric of medicine." He has served on the editorial boards of *Human Communication Research, Critical Studies in Mass Communication, Communication Education, Communication Quarterly, Communication Monographs, Communication Theory, Southern Communication Journal,* and the *Journal of Applied Communication Research,* and is presently on the editorial boards of *Philosophy and Rhetoric, Quarterly Journal of Speech,* Baylor University Press' Series in Rhetoric and Religion, and *Kaleidoscope: A Graduate Journal of Qualitative Communication Research.* He has served as a consultant to private industry, universities and colleges, management organizations, national publishing houses, The Humane Society of the United States, and the American Medical Association. He is the co-producer and co-writer of the three documentary films: *Great Expectations: Life and Death in the World of High Tech Medicine* (Kartemquin Films), *Negotiating Death: A Rhetorical Perspective on Euthanasia* (Northwestern University), and *The Life-Giving Gift of Acknowledgment* (Wake Forest University). During his career so far, he has been the recipient of twelve teaching excellence awards. He is a recent recipient of the Scholar Award for Communication Excellence in Ethics Education for the Mind, the Heart, and the Soul from The Communication Ethics Center, Department of Communication and Rhetorical Studies, Duquesne University, Pittsburgh, Pennsylvania.

Perfection, Postmodern Culture, and the Biotechnology Debate

Michael J. Hyde
Wake Forest University

Offering what is credited as being the first statement in Western History of the idea of progress, the sixth century (B.C.E.) philosopher Xenophanes notes, "Truly the gods have not revealed to mortals all things from the beginning, but mortals by long seeking discover what is better" (quoted in Freeman, 1966, p. 22; also see Nisbet, 1980, p. 11). Discovering what is better is a sign of progress. The continuing advancement of progress marks out a process directed toward some state of perfection. Plato offers his "theory of Forms" to explain the epistemological nature and goal of the process. Perfection is the Form itself, the noumenal source of the truth of anything that exists. Aristotle associates the process with his metaphysical and teleological notion of "entelechy," which emphasizes how any entity—be it a stone, a tree, a bird, or a human being—comes about and develops in such a way that it aims at the perfection or completeness natural to its kind: the essence of what it *is*. Considering the difficulty of this task for human beings and the time it might take to achieve it, the nineteenth century philosopher Frederick von Schelling (1936), with God in mind, wondered: "Has creation a final purpose at all, and if so why is it not attained immediately, why does perfection not exist from the very beginning?" (p. 84).

The question may incite frustration, if not anger, on the reader's part. As one of my undergraduate students once remarked, "Really, all this struggle, all the pain and suffering in the world. It seems like God is playing an 'amazing game' with us for 'His' amusement. That's sadistic! I'm certainly not amused." Another student responded, "Neither was Job, but it all worked out in the end, right? Perfection takes time!" Schelling agrees. He favors an evolutionary metaphysics: the notion of an evolving God that potentially has it all together but still needs the thinking and acting of human beings in order to complete the task of all being one with the cosmos.

Rhetorical discourse offers itself as a way of encouraging such thought and action. Aristotle, of course, makes much of this point in his *Rhetoric.* Influenced by Aristotelian theory, Lloyd Bitzer (1968) emphasizes that

rhetorical discourse is called into being by some "exigence": "an imperfection marked by urgency." An exigence is "a defect, an obstacle, something waiting to be done, a thing which is other than it should be." An exigence is rhetorical when it "invites the assistance of discourse" as a way of finding and implementing change that can result in some "positive modification" of the imperfection at hand (pp. 6–7). It follows from this understanding of rhetorical discourse that perfection is something that must be on the orator's mind as she or he decides to accept the invitation and formulate a positive and worthy response (Poulakos, 2004).

Have you ever been a witness to perfection? How did you know it when you perceived the phenomenon? I agree with the philosopher John Rawls (2000), who notes, "One difficulty with perfectionism is that while it seems quite evident that there is an intuitive idea of perfection, it is hard to make it sufficiently clear" (p. 111). What I have to say about the topic necessarily involves me in this task.

The most extensive treatment of the topic offered by communication and rhetorical scholars is found in the work of Kenneth Burke when he discusses how human beings can become "rotten with perfection" in their attempts to live meaningful lives (Burke, 1966, pp. 3–24; 1970, pp. 273–316). In today's lecture, I speak about perfection and its consequences in a way that extends theologically, naturalistically, aesthetically, ontologically, and practically Burke's treatment of the topic. The extension is needed to appreciate what I take to be the robust workings of perfection that escape Burke's attention. My interest in these workings is also motivated by a specific development occurring in our evolving postmodern culture: how science and technology are being employed more than ever before to create what the social critic Anjula Razdan (2005) describes as our ever-growing "instant-makeover," "self-improvement" life-world where "anything less than perfection is pathology" (p. 59). Those who have been termed "the new conservatives in bioethics" (Macklin, 2006; Cohen, 2006), critics like Francis Fukuyama (2002), for example, respond to this situation with great caution, especially when considering the "progress" of "contemporary biotechnology" and the "significant threat" it poses: namely, "that it will alter human nature and thereby move us into a 'posthuman' stage of history" where a genuine understanding and appreciation of "human dignity" is likely to become tragically confused and misleading (p. 7; also see Levin, 2003; Meilaender, 2003; Mitchell, 2007; Rubin, 2003; Shields, 2007; Smith 2000).

Dismayed by what they perceive to be postmodern culture's lack of normative moral standards, Fukuyama and his fellow conservatives in the biotechnology debate warn against the possibility of humankind becoming rotten with perfection. In her instructive historical discussion and rhetorical analysis of "the meanings of the gene," Celeste Condit (1999) identifies this issue as one that warrants our continued attention. My assessment of the biotechnology debate offered later in this essay centers on the issue. Here I make much of what the President's Council on Bioethics terms the "giftedness of life." A related focal point will be selected writings of the noted physician, conservative bioethicist, and past chairman and present member of the Council, Leon Kass. Although these specific interests define but a small portion of a very robust and sometimes mean-spirited debate, they nevertheless are crucial for communication and rhetorical scholars whose teaching and research might in one way or another lead them to consider the perfectionism that cur-

rently stimulates public moral argument over the benefits and burdens of biotechnology.

As my overall assessment of perfection unfolds, I emphasize a point that is too often and too easily overlooked by those who offer remedies for the disease associated with the phenomenon and that motivates biotechnological progress: Although too much perfection can lead to disaster, not having enough of this specific *pharmakon* can also be dangerous to our health. Along with the ailment of being rotten with perfection, we must also take seriously the disease of what I term being *rotten with imperfection.* This fact of life is given a humorous twist in an episode of the award-winning television comedy *Seinfeld,* when the funny but irritating character, George Costanza, reflects on his "pathetic" existence:

> Why did it all turn out like this for me? I had so much promise. I was personable, I was bright . . . oh, not academically speaking, but I was perceptive. I always know when someone's uncomfortable at a party. It all became very clear as I was sitting [alone] out there [on the pier] today. . . . Every decision I've ever made in my entire life has been wrong. My life is the complete opposite of everything I want it to be. Every instinct I have in every aspect of life, be it something to wear, something to eat . . . it's all been wrong. Every one. . . . I'm disturbed! I'm depressed! I'm inadequate! I got it all! And, yeah, I'm a great quitter. It's one of the few things I do well. I come from a long line of quitters. My father was a quitter; my grandfather was a quitter . . . . I was raised to give up.

George is rotten with imperfection. His outlook toward the future is cynical and hopeless, uninformed by careful reasoning, and lacking in moral responsibility. His character is not enriched by such attributes as faith, intellect, and ethics. That George is still able to feel bad about his situation is, however, an indication that a desire for perfection still flickers in his soul. Being rotten with imperfection is not a particularly praiseworthy way to be; in fact, it goes against human nature.

In the next section I expand on and clarify this claim by examining the relationship between perfection, nature (as represented in religion, science, mathematics, geometry, and aesthetics), and the everyday existence of the lived body. As with my earlier and related work on the call of conscience (Hyde, 1994, 2001a, 2001b, 2002, 2005b, 2005c, 2007b; Hyde & Rufo, 2000), the ethos ("dwelling place") of rhetoric (2004b, 2007, pp. 60–97; in press), the life-giving gift of acknowledgment (Hyde, 1993, 2003, 2004a, 2005a, 2006), and the rhetoric of perfection (Hyde, 2007a; Hyde & McSpiritt, 2007), my assessment of the relationship moves toward a phenomenological and ontological appreciation of human being—the way we, as lived bodies, are situated in the time and space of everyday existence such that we embody a metaphysical desire for perfection: achieving a state of completeness in our lives whereby, at least for the moment, we feel secure and at home with ourselves, others, and our immediate surroundings. The philosopher William Earle (1976) associates this state of being of the lived body with the feeling of "nostalgia for something final and absolute" (p. 157). This description is especially appropriate for my purposes in that the feeling identified here—"nostalgia," from the Greek *nostos:* to return home—speaks of that state of being where one feels "homeless" and is thus "homesick." Being homesick is not a perfect way to be, although as I hope to make clear below, this state of being is a fundamental catalyst

for generating our metaphysical impulse for perfection—an impulse that lies at the heart of the biotechnology debate.

The Workings of Perfection

It is said in the first book of the Old Testament: "I am the Almighty God; walk before me and be thou perfect [Hebrew: *tamin* or wholehearted]" (Genesis 17:1). It is expressed a bit differently in the first book of the New Testament: "Be ye therefore perfect, even as your Father which is in heaven is perfect" (St. Matthew 5:48). God asks much of us.

Webster's Collegiate Dictionary defines perfection (Lat. *perficere; facere:* "to make"; *per:* "thoroughly" or "completely") as "freedom from fault or defect," "flawlessness," "the quality or state of being saintly," "an exemplification of supreme excellence," "an unsurpassable degree of accuracy." Accurate definitions are made possible by our using language as perfectly as possible. Indeed, an impulse for perfection permeates the very fabric of language that allows us to think and to talk about whatever this impulse (or anything else) may truly be. As Burke (1966) notes: "The mere desire to name something by its 'proper' name, or to speak a language in its distinctive ways, is intrinsically 'perfectionist.' What is more 'perfectionist' in essence than the impulse, when one is in dire need of something, to so state this need that one in effect 'defines' the situation?" This impulse also is at work in deconstructionist deeds; for "even a poet who works out cunning ways of distorting language," writes Burke, "does so with perfectionist principles in mind, though his ideas of improvement involve recondite stylistic twists that may not disclose their true nature as judged by less perverse tests" (p. 26).

We tend to think of the completeness of perfection in terms of virtue. Yet, as Burke once again reminds us, perfection can also drive us crazy and lead to troublesome (if not disastrous) consequences in our lives. People suffering from obsessive-compulsive disorder (OCD) are a case in point; they are afflicted with the disease of being rotten with perfection. Working in conjunction with the illnesses of anorexia and bulimia, OCD is known to kill. People (especially young women) who need not go hungry will starve themselves to death in order to achieve with "perfect control" the "perfect look" (Platt, 2004).

Perfection can be both a benefit and a burden. We even find this contradictory nature of the phenomenon displayed in God's "true" character, at least as this character is presented and developed in the narrative of the Old Testament: God's perfect unity includes such imperfect traits as jealousness, indecisiveness, and vengefulness. Still, we are given reassurance. In Psalm 19:7–11, for example, we are told that

> The law of the Lord is perfect, converting the soul: the testimony of the Lord is sure, making wise the simple. The statutes of the Lord are right, rejoicing the heart: the commandment of the Lord is pure, enlightening the eyes. The fear of the Lord is clean, enduring for ever: the judgments of the Lord are true and righteous altogether. . . . Moreover by them is thy servant warned: and in keeping of them there is great reward.

God, it seems, has a perfectly good reason for exhibiting imperfect traits: they incite the fear that is needed to ensure that we walk the straight path toward the truth.

Western religion makes much of how truth is a "great reward." Truth speaks to us of "the perfection of beauty" (Psalms 50:2) that is seen throughout the "cosmos" (the Greek term for "world" which means "fitting order" or "beautiful arrangement"). Science seeks to display this beauty in its mathematical equations of the laws of nature—be these laws divinely inspired or not. The Nobel Prize winning physicist and atheist Steven Weinberg (1992) puts it this way: "It is when we study truly fundamental problems that we expect to find beautiful answers. For [cosmologists] . . . the beauty of present theories is an anticipation, a premonition, of the beauty of the final theory. And in any case, we would not accept any theory as final unless it were beautiful" (p. 165). A perfect understanding of the cosmos would be an awesome and lovely thing to have.

Like religion, science longs for the beauty of truth and the truth of beauty—the completeness of perfection. With science, however, this particular longing prohibits any leap of faith, or what cosmologists term "God-of-the-gaps" thinking. As the scientist Paul Davies (1983) notes: "Our ignorance of the origin of life [and the universe] leaves plenty of scope for divine explanations, but that is purely a negative attitude, invoking 'the God-of-the-gaps' only to risk retreat at a later date in the face of scientific advance." Hence, "To invoke God as a blanket explanation of the unexplained is to invite eventual falsification, and make God the friend of ignorance. If God is to be found, it must surely be through what we discover about the world, not what we fail to discover" (pp. 70, 209). When it comes to perfection, science turns first and foremost toward nature and then, perhaps, to God.

Perfection, Nature, and the Lived Body

Nature exhibits perfection. The physicist Lee Smolin (1997) makes the point this way: "The Universe we live in is beautiful," and "it is so at least partly for the same reason a beautiful landscape or a beautiful city is, because a multitude of phenomena are taking place on a vast array of scales. . . . Indeed, in our universe we not only find structure on a variety of scales, *we find structure on every scale we have so far explored*" (p. 163)—from the sub-atomic quantum world of quarks, electrons, and neutrinos to the logarithmic spiral wave of the whole galaxy. A fundamental property unique to this spiral's perfection is its "self-similarity": it does not alter its shape as its size increases (see Figure 1).

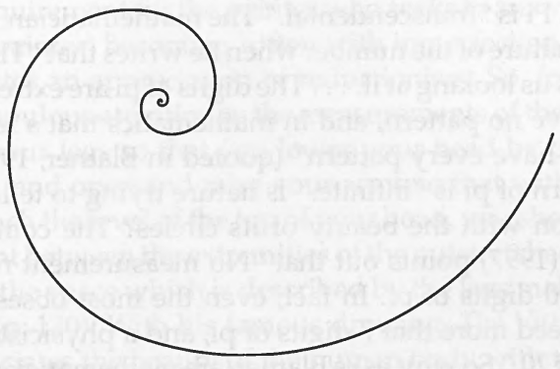


FIGURE 1

"Nature loves [the perfection of] logarithmic spirals," writes astrophysicist and cosmologist Mario Livio (2002). "From sunflowers, seashells, and whirlpools, to hurricanes and giant spiral galaxies, it seems that nature chose this marvelous shape as its favorite 'ornament'" (p. 117). Put this way, one might wonder whether nature is skilled in rhetorical competence.

Rhetorical competence presupposes some agent, a speaker or a writer, using discourse in an intentional, purposive, and appropriate way. The discourse makes manifest the author's aesthetic sense of "style" (Gusdorf, 1965). Does nature have style? Did nature intend to create logarithmic spirals? The petals of a rose—the most famous being the one named American Beauty—display this geometric form. A rose is often taken as a symbol of natural symmetry, harmony, love, fragility. No being rotten with imperfection here! Did nature design this specific floral display on purpose and with the best of intentions? Does nature have a mind, a consciousness that is conscious of itself? The evolution of the human brain makes possible the power of pattern recognition. Along with perfect spirals, we thus can also recognize, for example, that geometric configuration in nature exhibited in such things as the sun and the full moon: the circle. Is this recognition in any way an instance of a meeting of the minds? God ever geometrizes, claims Plato (1961).

Fascination with the circle's completeness (perfection) dates back to ancient Egyptian culture (1650 B.C.E.). Dividing a circle's circumference by its diameter in order to dissect and better understand the geometry of its perfection gives us the ratio 3.141592653 . . . , more commonly known as pi (π) (see Figure 2).

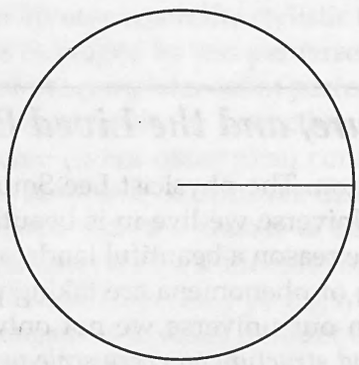


FIGURE 2

With the help of computers, the value of pi has been calculated to over fifty-one billion digits. There appears to be no end to the number, no exact value. Pi is "transcendental." The mathematician Peter Borwein speaks of this nature of the number when he writes that "There's a beauty to pi that keeps us looking at it. . . . The digits of pi are extremely random. They really have no pattern, and in mathematics that's really the same as saying they have every pattern" (quoted in Blatner, 1997, p. 63). The beautiful pattern of pi is "infinite." Is nature trying to tell us something about perfection with the beauty of its circles? The computer analyst David Blatner (1997) points out that "No measurement realistically requires even 100 digits of pi. In fact, even the most obsessive engineer would never need more that 7 digits of pi, and a physicist wouldn't use more than 15 or 20." So why, asks Blatner, are mathematicians "so driven"

to complete the count? His answer: "The search for pi is deeply rooted in the human spirit of exploration—of both our minds and our world—and in our irrepressible drive to test our limits" (p. 2–3).

Indeed, we are metaphysical creatures: we are drawn by infinity to find some sense of completeness, a sense of who we really are and how far we can go in life with the physical and cognitive abilities that we have. Is all of this nature's doing? For what reason? To inspire awe, wonder, and a sense of perfection found happening in nature? And what are we to do with such inspiration? In his constant search for wisdom, Leonardo da Vinci offers direction for answering these questions.

Wisdom, for da Vinci, is a product of directly experiencing and assessing nature in as a precise of a way as possible. Da Vinci's exemplar is science. He tells us that "true sciences are those which have penetrated through the senses as a result of experience and thus silencing the tongues of disputants, not feeding investigators on dreams but always proceeding successively towards the conclusion. This may be witnessed in the principles of mathematics, that is to say, number and measure—termed arithmetic and geometry—which deal with discontinuous and continuous quantities with the utmost truth"(da Vinci, 1989, p. 10)

Da Vinci is after the truth with his drawings and paintings of the human form in various settings and circumstances. Science led him to study dissected human corpses in order to better understand the anatomical basis of our everyday bodily presence and posture, be it at rest or in motion. Science, too, informed his understanding of geometric proportions and optics: how, for example, light falling on the sides of multifaceted polygons is instructive for learning about the dynamics of "shading" and how this particular phenomenon must be accurately captured in painting in order to bring the subject matter alive for spectators, thereby encouraging their emotional participation with the work of art. Whatever "there is in the universe through essence, presence, or imagination," writes da Vinci, "[the painter] has it first in his mind [by way of an intricate experiencing of nature] and then in his hands, and these are of such excellence that they can generate a proportional harmony in the time equivalent to a single glance, just as real things do" (p. 32). Regarding the specific role played by the "draughtsmanship" of the painter, da Vinci writes this capacity "is of such excellence that it not only investigates the works of nature but also infinitely more than those made by nature. . . . On this account we should conclude that it is not only a science but a goddess which should be duly accorded that title. This deity repeats all the visible works of almighty God" (p. 16)

Da Vinci speaks of a higher calling in detailing his "science of painting." Attending carefully to the smallest detail in one's subject matter is an "ethical" requirement for the painter who seeks to answer the call and to avoid (as a painter) becoming rotten with imperfection. This requirement necessitates an appreciation of reductionism. So, for example, da Vinci pays scrupulous attention to the measurements of the human body: "If you open your legs so that you lower your head by one-fourteenth of your height, and open and raise your arms so that with your longest fingers you touch the level of the top of your head, you should know that the central point between the extremities of the outstretched limbs will be the navel, and the space which is described by the legs makes an equilateral triangle" (p. 120). With his famous drawing, *The Vitruvian Man*, da Vinci also associates the beauty of the human body with the square and

the circle (see Figure 3). The man's arm span equals his height, and these equal proportions can be inscribed in a square. When he does a spread eagle with his arms and legs he is inscribed in a circle. The center of the circle is located at the man's navel. The ratio of his height divided by the height of his navel is what mathematicians describe as the golden ratio (phi or Φ).

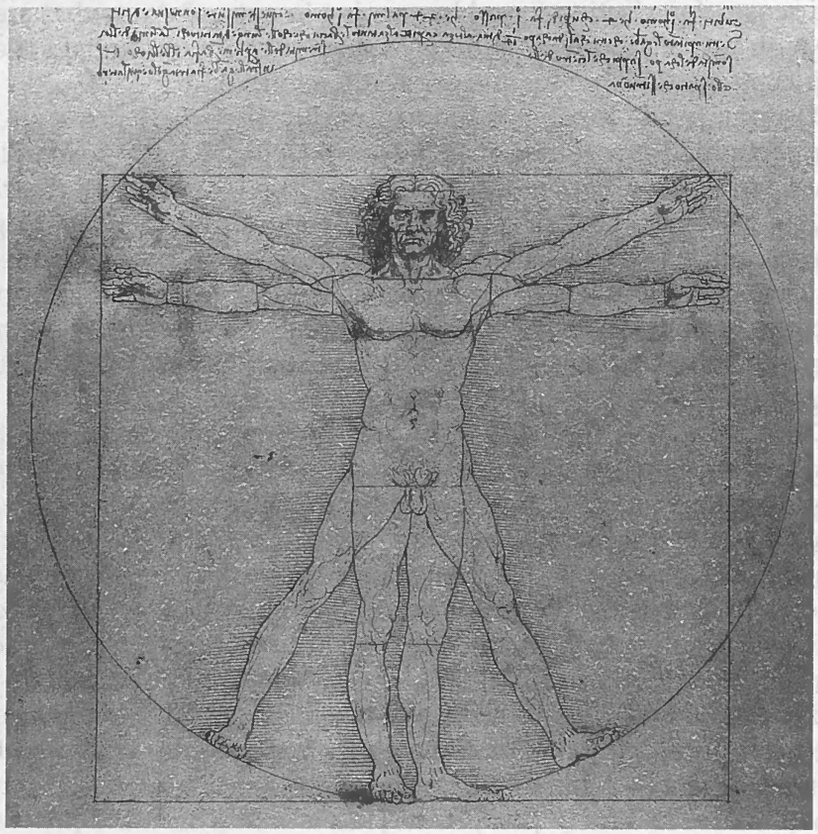


FIGURE 3

Euclid (around 300 B.C.E.) discovered this mathematical phenomenon by dividing a line into what he called its "extreme and mean ratio." The phenomenon appears when the ratio of a longer segment of a line (AC) to the shorter and remaining segment (CB) is the same as the ratio of the entire line (AB) to the larger segment (AC) (see Figure 4). This specific proportion speaks to us of infinity (Livio, 2002, pp. 2–11). Computed mathematically, the golden ratio is the never-ending, never-repeating number 1.6180339887. . . . Hence, like pi, phi is a number that is neither whole nor a fraction (i.e. "rational"); it is defined as an "irrational number" that speaks to us of infinity. There is reason to wonder with pi and phi in mind: Does the irrational have a role to play in nature's beauty and perfection?

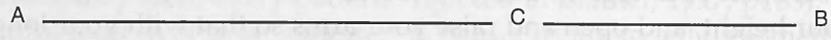


FIGURE 4

Euclid found that the golden ratio was crucial for the construction of the pentagon. Every angle in a "regular" (perfect) pentagon is equal to 108 degrees. When diagonal lines are used to connect point A to point

B and point C, we find that the ratio of the diagonal to the side is equal to phi (see Figure 5). The ability to construct a line divided in a golden ratio thus provides at the same time a simple means of constructing the regular pentagon. The triangle that forms with the diagonals in the pentagon has a ratio of side to base of phi. This "golden triangle" has a unique property: it can be dissected into smaller triangles that are also golden triangles. This same property is also manifest in a "golden rectangle," where the lengths of the sides of the rectangle are in a golden ratio to each other. The golden rectangle is the only rectangle with the property that cutting a square from it produces a similar rectangle (see Figure 6).

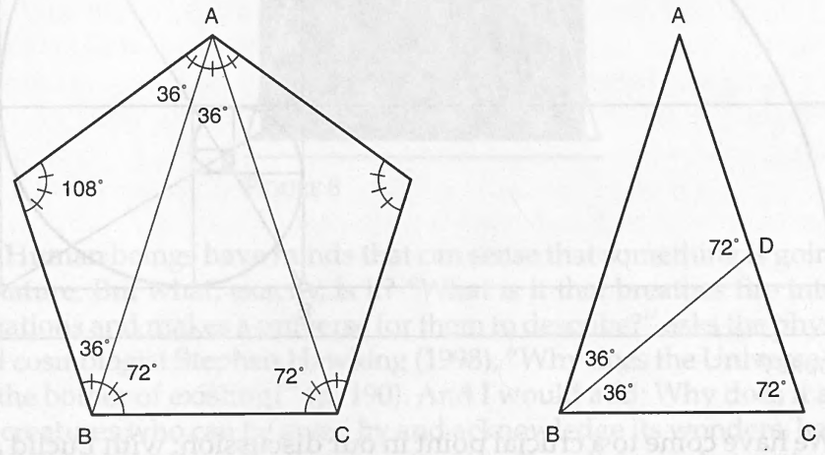


FIGURE 5

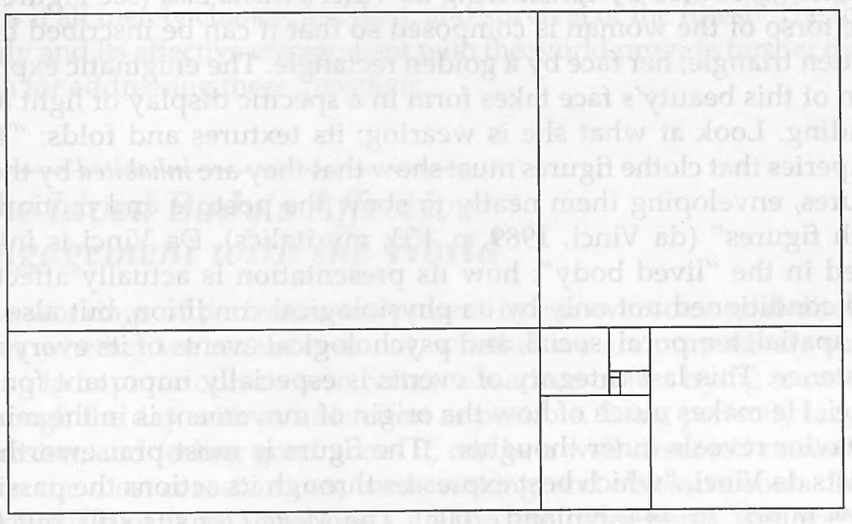


FIGURE 6

The resulting series of ever smaller and never-ending golden rectangles unfolds in such a way that if we draw two diagonals of any "mother-daughter" pair of rectangles in the series, they will all intersect at the same point. If we connect the successive points where these "whirling squares" divide the sides in golden ratios, we obtain a logarithmic spiral that coils inward toward the point of infinity (sometimes referred to in mathematics as "the eye of God"; see Figure 7 on p. 10) (Livio, pp. 75–86; Atalay, pp. 112–150). Indeed, it is common to associate infinity with

God. In orthodox Judaism, the association goes even further. God is not "restricted" by infinity; rather It (*Ein Sof*) created infinity. *Ein Sof* goes "beyond infinity"; moreover, It goes "beyond the Nothingness that surrounds infinity" (Cooper, 1997, p. 67).

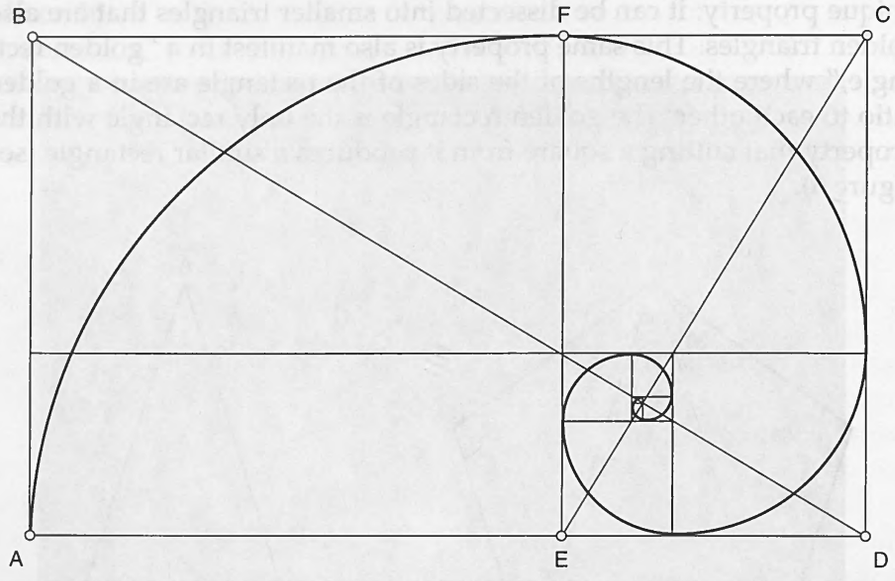


FIGURE 7

We have come to a crucial point in our discussion: with Euclid and da Vinci, we find that there is a link between the cosmic, geometric, organic, and spiritual basis of the beauty of perfection. The point is further illustrated by considering da Vinci's *Mona Lisa* (see Figure 8). The torso of the woman is composed so that it can be inscribed by a golden triangle; her face by a golden rectangle. The enigmatic expression of this beauty's face takes form in a specific display of light and shading. Look at what she is wearing; its textures and folds: "The draperies that clothe figures must show that they are *inhabited* by these figures, enveloping them neatly to show the posture and motion of such figures" (da Vinci, 1989, p. 153, my italics). Da Vinci is interested in the "lived body": how its presentation is actually affected and conditioned not only by its physiological condition, but also by the spatial, temporal, social, and psychological events of its everyday existence. This last category of events is especially important for da Vinci. He makes much of how the origin of movement is in the mind. Behavior reveals inner thoughts. "The figure is most praiseworthy," insists da Vinci, "which best expresses through its actions the passion of its mind" (p. 144; Nuland, 2005). The *Mona Lisa* sits still, but the passion of her mind is present in her face, with its lighting, shading, specific geometric proportions, muscle tone, wondering eyes, and the ambiguous contour of her lips, all working together to convey a spiritual feeling of being alive. The *Mona Lisa* is not simply rendering an exact physiognomic or photographic likeness of its subject. Rather, she is a lived body; there is something on this woman's mind that we see in the geometric proportions and anatomic features of her smiling presence, that captivates our attention, and that is more than simply the sum of its parts—its physiological and mathematic attributes (Atalay, 2004, pp. 175–177).

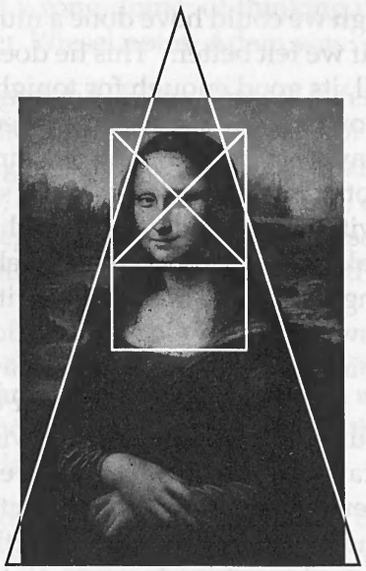


FIGURE 8

Human beings have minds that can sense that something is going on in nature. But what, exactly, is it? "What is it that breathes fire into the equations and makes a universe for them to describe?" asks the physicist and cosmologist Stephen Hawking (1998), "Why does the Universe go to all the bother of existing?" (p. 190). And I would add: Why does it allow for creatures who can be awed by and acknowledge its wonders, beauty, and perfection? Does the universe itself really call for such emotion and acknowledgment? Is that truly part of its logic and laws? Is there an "intelligent designer" behind all the chaos and order that appears before us, or is it all merely chance, accident, and survival of the fittest? The lived body and its affective engagement with the world provide further direction for addressing these questions.

The Lived Body's Affective Engagement with the World

The workings of perfection are present in our everyday, goal-directed lives whether we realize it or not, whether we are purposively struggling to improve ourselves in certain situations or just trying to make it through the day with as little effort as possible. Being perfectly lazy on occasion, and feeling good about it, can be a well-deserved reward for even the most conscientious, hard-working, and obsessive souls. Being perfectly lazy throughout one's life, on the other hand, will warrant objections from anyone who believes that dedication to a respectable work-ethic is truly the way to perfect one's moral character. Perfection has its rules, and they operate on a sliding scale. Sometimes our actions are complete failures. Sometimes they are stunning successes—so stunning, in fact, that others who "really" know us might describe them as "being too good to be true." At other times, the way we behave is meant only to be "good enough" to pass whatever test is at hand and thereby avoid being like Mr. Costanza: rotten with imperfection. This specific measurement comes into play when, for example, feeling a bit under the weather, we still get dressed up for a night on the town and are satisfied

with our looks, although we could have done a much better job choosing the appropriate attire if we felt better. "This tie doesn't really go with my shirt and coat. Oh well, its good enough for tonight."

Being skilled in knowing how to perform perfection can help prevent an otherwise perfect day from going wrong. An inner-city gang member, for example, might not survive the day if he or she does not perfect a certain way of being with others, of giving the right "signs," wearing the "true colors," and speaking the "proper lingo." Religious souls who take exception to associating perfection in any way with such a "pagan" lot, might not hear and answer correctly God's call to do the good if they have not perfected their "spirit" enough in the right way. The civilizing effect of "normal," "proper," and "righteous" behavior cannot establish itself in any domain of culture until members, employing a certain ability of know-how, communicate in a rhetorically effective way and agree about what is bad, good, better, perhaps best, if not perfect, about their everyday existence and all they hold to be just, true, and worth living and dying for. Sending a condolence card to a friend or acquaintance is a "nice" thing to do. Are the words on the card genuine, fitting, truthful—reflecting the authentic sincerity of your heart-felt compassion? Just how perfect is the card? Just how perfect are you? Caring enough to buy and to send the card is at least an indication that you are not totally rotten with imperfection.

We are purposive and metaphysical creatures. Possessing these ontological characteristics, we are fated to struggle with the task of perfection: the ever present challenge of "getting things right," "making things better," "improving" ourselves, being as "complete" as we can be as we grow, mature, and become wise with experience. We are beings who must continually engage in the process of acting and planning, planning and acting, in order to sustain the best of times and to overcome the worst of times. A person who admits that he or she has no purpose in life is likely to be taken as being irresponsible, if not worthless. Even a person who, owing to some accident, is in a persistent vegetative state and who is being kept "alive" artificially by the technologies of medical science, is recognized by right to life advocates as serving a crucial purpose: encouraging a heartfelt respect for God's gift of life and the struggle that is needed to put this gift to its proper and perfect use (Tada, 1992; Hyde, 2001; Hyde and Sager, 2007). We perform perfection; it is in our nature to do so. Human emotions have a significant role to play here. Three quite telling and related affects are boredom, melancholy, and anxiety (Schrag, 1961). As detailed below, these emotional states or moods, working together, help to disclose something of the material and ontological bases of our metaphysical desire for perfection.

Boredom, Melancholy, and Anxiety

I do not know any teachers or researchers who enjoy what they do as teachers and researchers because it is boring. Nor do I know any devout religious souls who admit that their faith suffers this fate. The Holocaust survivor and Nobel Prize–winning author Elie Wiesel (1994) does, however, make an interesting case for the role played by boredom in the biblical story of Genesis.

Before the Fall, Adam, "the prototype of perfect man," was "wise, intelligent, erudite, understanding, generous [and] endowed with a flaw-

less soul. Incapable of wrong-doing, of thinking ill; closed to weakness, to doubts." Moreoever, Wiesel notes, Adam was

> . . . humble, shy, grateful. Some sources refer to him as *Hasid.* Others call him the luminary, the "candle of the world." Some go as far as seeing in him the future Messiah. So glorious was he that the angels, dazzled by his perfection, confused him with his Creator and began to sing him their praises. God responded by making him fall asleep and the frightened angels recognized their error.

Wiesel immediately adds this parenthetical comment: "As for me, I'd rather think that Adam fell asleep not because of God but because of the angels: nothing bores a perfect man more than excessive praise." (pp. 11–12). Clarification follows:

> For Adam was indeed bored in paradise; all the texts point to it. Since he had the whole universe to himself, he desired nothing, thought of nothing and nobody. Happy, content, he seems singularly uninteresting before his downfall. No cloud, no shadow to mar his person. No indifference to the world extended to his own person. No trace of foreboding or concern. He was intoxicated with God, brimming over with God, joined to God in God: no need for him to seek God, to serve Him, understand Him, woo Him. So total was God's presence, he did not feel it. Nor did he think of it; he didn't need to, for the very source and cradle of his mind were occupied by God. (p. 12)

With the specific way that Wiesel tells the story, we are forced to come to terms with the possibility that perfection is boring. Based on what experiencing this mood can do to us, the possibility is chilling, but also quite enlightening. I offer the following consideration of the matter to make the point.

Existential occurrences (e.g, sickness) that disrupt our purposive and metaphysical nature prompt us to think about this essential but often taken for granted disruptive fact of life. The disruption, however, need not be catastrophic; rather, it can come about with something as simple as finding ourselves being bored with whatever we are doing at the time. Caught up in the influence of this mood, we make ourselves susceptible to experiencing two other and more dreadful moods: melancholy and anxiety. Boredom sets us on a path that, as we tread its course, places us before a stark reality—ourselves, stripped of pretensions and faced with a most ancient question regarding perfection: What does it mean *to be?*

Boredom is not known for its pleasantness. Boring jobs and relationships are a "drag," weighting down our dreams for better things to come. In order to avoid being bored, we will engage ourselves, if only half-heartedly (at best), in any number of diversions and distractions (e.g., reading a magazine, surfing the web, watching television, overeating) that might protect us from this lifeless mood. Indeed, boredom puts us on the alert for things to do. Boredom—especially as it reaches the state where we find ourselves "bored to death" with things, others, and perhaps ourselves—discloses and reveals a fundamental aspect of human existence: how our being is structured spatially and temporally so as to open us to the future, its possibilities, its freedom, whereby the option of finding things to do is made possible. Freedom is an ontological structure

of existence; its presence forms the backdrop of the willfulness of all resolute thought and action. Any specific act of freedom presupposes that we are already situated in the world in such a way that we are faced with the choice of making a decision about what to do. We not only *have* freedom, the ontological structure of our existence *is* freedom. The openness of existence allows for choice; hence, the options to relieve our boredom immediately with distractions and diversions that add a little bit of purpose to our lives, at least for the moment.

Being bored is not a perfect way to be. Better to be busy; better yet, creative. Failing this second option, busy will do. Being constantly busy, however, can become tedious; thus, a remedy for boredom can become itself boring. Boredom is capable of growing in intensity. Fueled by the tedium of life's everyday tasks, this disquieting state of mind can fester, stimulating a feeling of "emptiness" or "homesickness" in which all meaningful contexts of life begin losing their significance. When this feeling totally (perfectly) overtakes our lives, we suffer from the disease of melancholia: an existential condition characterized by extreme depression, bodily complaints, and sometimes even hallucinations and delusions. People can become so bored to tears with their everyday lives that they, in fact, will admit that they occasionally "feel like dying."

Getting out of bed in the morning can be a chore for these people. They feel so unmotivated, useless, unacknowledged, achy, and alone. Nothing matters. If you have ever been in bed this way, you know how depressing it can be. Your mood closes you off to the possibility of doing anything other than staying in bed, feeling bad for yourself. Losing yourself in other more pleasurable activities is a hope fading fast. Homesickness prevails. You are beyond the point of being able to ease your boredom by doing anything that might enable you to forget about your pitiful existence and the "nothingness" that it has in store for you.

"What's it matter, anyway?" The question is asked by a purposive creature who no longer feels that he or she has a purpose in life. In this particular case of homesickness, human being is crippling itself, unable to shoulder the burden of freedom of choice and responsibility that comes with this being's existence and the fundamental way it opens us to the future, to possibilities that still can be enacted if we don't give up. Death is inevitable, but it need not necessarily happen right *now.* The moment at hand is dire. Levinas (1987a) speaks to us of this moment as "being backed up against life and being" (p. 69). A less academic but equally enlightening description of the situation is offered by the maestro of bluegrass music, Ricky Skaggs (and his band Kentucky Thunder) when he sings of how breaking up with his one "true" love has left him "too far down to fall" any further in life (Skaggs, 2001). He is quite homesick.

The anxiety of the moment can be overwhelming. "What is anxiety? It is the next day," writes Kierkegaard (1939, p. 80). Anxiety functions by directing our attention to how the future orientation of existence is always, infinitely, calling us into question with its openness and uncertainty. Anxiety is order losing out to chaos. Anxiety brings us face to face with this uncertainty of existence and the challenge that comes with it: having to assume the responsibility of affirming our freedom through resolute choice in order to feel at home with ourselves and others. Anxiety opens wide boredom's capacity to disclose our purposive and metaphysical nature. We are creatures who need to do things in order to avoid being bored, and even then the mood can affect us. What is required to

prevent the situation from getting worse is the very thing that gave rise to the habits and routines of everyday existence that have now become dull, mindless, worthless, boring. If any degree of optimism remains, we might utter the famous plea—"There must be *more* to life than this!"—and then act in one way or another in order to make it so. Homesickness is not a pleasurable state of being.

With what it begins to uncover about our existence, boredom indicates what it takes to remedy its ill effects: action, our responding to what I have described elsewhere, following Heidegger and Levinas, as "the call of conscience" that comes from the very heart of our purposive existence and that challenges us with the benefits and burdens of freedom, of being open to the possibility and uncertainty of the future, and choosing to do something about it while at the same time respecting the existence of others (Hyde, 2001, pp. 21–115). Answering the call of conscience is humankind's fundamental moral vocation. As is the case with George Costanza, we fail this vocation the more we are "raised to give up," become "great quitters," and live a life that is rotten with imperfection.

Human Perfectibility and Otherness

Everyday existence (especially when its habits and routines break down) shows us that, at the very least, we are here on earth to answer a call of conscience that lies at the heart of our spatial and temporal existence and that opens us to the objective uncertainty of the future. Human being is structured ontologically as an evocation and a provocation. As it discloses itself to us in moments of breakdown and calls us into question, existence at the same time calls for the responsiveness of concerned thought and action, for that which enables us, even in the most distressful situations, to take charge of our lives as we assume the responsibility of affirming our freedom through resolute choice and thereby become personally involved in the creation of a meaningful existence. Human being, in other words, *is* an ongoing process of "deconstruction" and "reconstruction" (Hyde, 2001, pp. 44–78). Any talk of human perfectibility presupposes the existence of this process that *is what it is* (a completeness) only by its being open-ended and thus incomplete, forever calling itself into question and challenging us with the task of maintaining or remaking our meaningful existence. The perfectibility of human being has the character of paradox: Our existence is perfectly structured as an imperfection, an incompleteness that constantly speaks to us of our crucial role in keeping ourselves and others open to the truth of all that stands before us. Although we typically feel homesick when existential disruptions expose us to this ontological dimension of our lives, the dimension nevertheless defines a fundamental catalyst for generating our metaphysical impulse for perfection. The call of conscience is always there to be heard. It speaks to us of an infinite task.

Notice, however, that this calling nature of ours is in its most original and primordial form *not* a human creation. We can measure space and time with such instruments as clocks, calendars, maps, and computers. But we had nothing at all to do with creating the ontological and ecstatic dynamics of our spatial/temporal existence that came about approximately 15 billion years ago with a Big Bang and that appears to

be infinite. These dynamics define the way in which the *no-longer* (the past), the *not yet* (the future), and the *here and now* (the present) interpenetrate each other so that human existence is always in the state of "standing outside and beyond itself" (Gk. *ek-stasis*), at every moment opening toward the future, toward the world of possibilities, and thus toward the realm of objective uncertainty where the finality of death will eventually take place, yet we don't know when. There is an "otherness" to human being that makes possible this being's existence and the perfectibility that goes with it. This otherness is always at play in our lives, yet we know not for sure why this is so. Human being brings together the finite and the infinite.

The disclosing of this otherness defines an epideictic display of existence in its most original form: a "showing forth" (*epi-deixis*) or "saying" (*logos*) of the truth of something that is and that can be represented symbolically for others to understand. The call of conscience is existence disclosing itself (rhetorically?) to the one who is living it and who can and must respond to its challenge (Hyde, 2001, pp. 108–115). Here, at this ontological level of existence, language is not understood first and foremost as a capacity of communication but rather as the original and silent manifestation, the sheer presencing, saying, of what is. Heidegger (1962) thus emphasizes that "The call dispenses with any kind of utterance. It does not put itself into words at all; . . . [c]onscience discourses solely and constantly in the mode of keeping silent" (p. 318). Heidegger speaks to us of a discourse, a silent "voice," that is more original than anything he or anyone else has to say about it. The relationship between perfection and language runs deeper in material existence and is thus more complicated than someone like Burke admits. Heidegger (2001) provides a description of what he is doing in describing the call of conscience when he notes: "To speak means to say, which means to show and to let [something] be seen. It means to communicate and, correspondingly, to listen, to submit oneself to a claim addressed to oneself and to comply and respond to it" (p. 215). The call of conscience is an empirical phenomenon, although the otherness that it speaks of emphasizes a "transcendence" of material reality and thus is known to send us metaphysical creatures toward scientific and spiritual realms in the hope that we may someday understand how and why it is that we are here on earth (Eco, 1997). Cognitive scientists have shown that the brain has evolved to accommodate the impulse at work here, thereby explaining, at least for the time being, "why God won't go away" (Newberg et al., 2001; Hamer, 2004).

Human being embodies otherness. The pull of this otherness draws our thoughts and attention upward, toward the stars, planets, galaxies, and beyond toward infinity. This vertical movement, however, is grounded existentially and ontologically in a horizontal trajectory: the temporality of human existence that we did not create, that pushes forward to the objective uncertainty and infinity of the future, to the not yet and the unknown, to our own "passing away," and that along the way involves us with the earthly otherness of other people and other things. Human consciousness arises in the midst of a very wide-ranging world of otherness or what Levinas (1999) terms "alterity." He makes the point when he emphasizes how consciousness begins with an awareness of otherness and thus with "the inevitable orientation of being 'starting from oneself' toward 'the Other' "(Levinas, 1969, p. 215). For Levinas, the importance of this movement toward the Other cannot be overempha-

sized, for this movement is the basis of the birth of one's subjectivity and moral character: "I am defined as a subjectivity, as a particular person, as an 'I,' precisely because I am exposed to the other. It is my inescapable and incontrovertible answerability to the other that makes me an individual 'I.' . . . I can never escape the fact that the other has demanded a response from me before I affirm my freedom not to respond to his demand" (Levinas, 1984, pp. 62–63; also see Levinas, 1996, pp. 72–74). The demand has something infinite about it.

With this demand comes the ethical responsibility of thinking and acting with others in mind. Be it the otherness of our own existence or the otherness of other people and other things, alterity is a source of interruption, a calling into question of consciousness that raises the issue of accountability—"Are you being just in all that you say and do?"—and thereby summons the moral capacity of human being to action. "This is certainly not a philosopher's invention," writes Levinas (1987b), "but the first given of moral consciousness, which could be defined as the consciousness of the privilege the other has relative to me. Justice well ordered [as perfectly as possible] begins with the other" (p. 56). Otherness and its infinity bring together God, nature, and our lived existence. We make symbolic sense of these three matters as we respond to the call of conscience. The process has been going on ever since we evolved into beings capable of using the technology of language to make meaningful all that lies before us. The call of conscience that comes with the spatial and temporal dynamics of human being, that in its infinite way opens us to the future, and that thereby challenges us to assume the ethical responsibility of our freedom of choice, can also be heard as a "call of technology" (Hyde, 2006, pp. 226–228). We are purposive, goal-directed beings. Human existence exhibits not only a metaphysical impulse, but also an instrumental impulse. The history of technology offers a record of these related impulses at work.

Postmodern Culture and the Biotechnology Debate

The importance of responding to and respecting otherness is an ethical claim that lies at the intellectual core of postmodern philosophy, for it grants social, political, and moral purchase to this philosophy's way of being critical or "deconstructive" in its attempt to better the human condition. Jacques Derrida (1984) puts it this way: deconstruction is "a positive response to an alterity which necessarily calls, summons or motivates it. Deconstruction is therefore vocation—a response to a call" from the "other, as the other than self, the other that opposes self-identity. . . . The other precedes philosophy and necessarily invokes and provokes the subject before any genuine questioning can begin" (p. 118). Deconstruction is fundamentally a moral endeavor; a call of conscience that, like the primordial call that is always already happening with our existence, functions to open us to all matters of otherness. "Every culture and society requires an internal critique or deconstruction as an essential part of its development," writes Derrida. "Every culture needs an element of self-interrogation and of distance from itself, if it is to transform itself. . . . Every culture is haunted by its other" (p. 116).

Emphasizing the ontological, existential, and moral workings of otherness is a hallmark of postmodern philosophy. Following Levinas (2003), we are told that the ultimate goal in today's postmodern culture must be that of developing and securing "a humanism of the other." We perfect who and what we are as altruism is given priority over egoism. Being true to the self presupposes first and foremost our being open and responsive to the welfare of others.

It should be clear by now that the openness of human being is central to our related purposive and metaphysical natures—a necessary catalyst for our impulse for perfection. Our openness to nature, to other people and other things, is the ground of moral consciousness. This openness is also the source of the objective uncertainty, the world of possibilities, of our spatial and temporal existence. With this last understanding of openness in mind, Zygmunt Bauman (1993), in his analysis of postmodern culture, speaks to us of what he commends as "postmodern wisdom":

> What the postmodern mind is aware of is that there are problems in human and social life with no good solutions, twisted trajectories that cannot be straightened up, ambivalences that are more than linguistic blunders yelling to be corrected, doubts which cannot be legislated out of existence, moral agonies which no reason-dictated recipes can soothe, let alone cure. The postmodern mind does not expect any more to find the all-embracing, total and ultimate formula of life without ambiguity, risk, danger and error, and is deeply suspicious of any voice that promises otherwise. . . . The postmodern mind is reconciled to the idea that the messiness of the human predicament is here to stay. This is, in the broadest of outlines, what can be called postmodern wisdom. (p. 245)

Such a characterization of the wisdom of the postmodern mind has led many conservatively oriented critics to launch tirades against this mind-set and its "lax" and "skeptical" attitude toward the grand goal of achieving some degree of certainty about our purpose on earth (e.g., Smith, 2000, pp. 231–233). At the center of the quarrel lies the impulse and question of perfection: We are metaphysical creatures. Is the completeness of our incompleteness, the openness and objective uncertainty of our spatial/temporal existence, an inevitable barrier to obtaining at least some degree of certainty or reliable knowledge about the social, political, psychological, and moral character of our being? The question haunts us with the possibility of "relativism" becoming the rule of the day. This possibility, of course, can be quite disturbing to creatures whose existence embodies a metaphysical desire for perfection. Yet, in its acknowledgment of the inevitable "messiness of the human predicament," postmodern wisdom is not necessarily advocating the relativistic attitude of "anything goes" when it comes to deliberating about the "truth" of some matter. Rather, its primary teaching is in complete agreement with what the physicist and Nobel Prize recipient Richard Feynman (1998) has to say about the scientist's ethical obligation to acknowledge uncertainty and its infinity:

> All scientific knowledge is uncertain. This experience with doubt and uncertainty is important. I believe that it is of very great value, and one that extends beyond science. I believe that to solve any problem that has never been solved before, you have to leave the

> door to the unknown ajar. You have to permit the possibility that you do not have it exactly right. Otherwise, if you have made up your mind already, you might not solve it. (p. 25)

Feynman goes on to stress how this "freedom to doubt" allows science to thrive and how he feels a responsibility as a "citizen-scientist" to "proclaim the value of this freedom and to teach that doubt is not to be feared, but that it is to be welcomed as the possibility of a new potential for human beings. If you know that you are not sure, you have a chance to improve the situation. I want to demand this freedom for future generations" (p. 28).

This same demand motivates postmodern philosophy. What Feynman is arguing for is nothing more and nothing less than what comes with the temporality of human existence and its openness to the future: the ethical responsibility of answering a call of conscience that challenges people to affirm their freedom of choice with others in mind. Indeed, maintains Feynman, "Openness of possibility is an opportunity. Doubt and discussion are essential to progress" (pp. 49–50). Feynman's continuation of his argument is worth noting:

> Why do we grapple with problems? We are only in the beginning. We have plenty of time to solve the problems. The only way that we will make a mistake is that in the impetuous youth of humanity we will decide we know the answer. This is it. No one else can think of anything else. And we will jam. We will confine man to the limited imagination of today's human beings.
>
> We are not smart. We are dumb. We are ignorant. We must maintain an open channel. (pp. 56–57)

To maintain an open channel is to remain true to the openness and objective uncertainty of our temporal existence. Openness allows us to become what Feynman describes as "atoms with curiosity" who look at themselves, wonder why they wonder, and thereby help to promote the evolution of moral consciousness (p. 39). When it comes to praising and respecting an ethic of openness toward otherness, scientists and postmodernists have something fundamental in common. The case study I now offer provides a concrete illustration of this point. The current debate over the development and appropriate use of biotechnology to perfect our lives defines a rhetorical situation where an ethic of openness toward others is a central and much contested issue. Here the distinction between being rotten with perfection and being rotten with imperfection comes to the fore in a most dramatic way.

Debating Human Perfectability and Biotechnology

In his award-winning book, *Redesigning Humans: Choosing Our Genes, Changing Our Future,* Gregory Stock (2002) speaks to us as a postmodernist and a scientist, or what in the literatures of computer science and biotechnology is termed a "transhumanist" or "posthumanist."

> We know that *Homo sapiens* is not the final word in primate evolution, but few have yet grasped that we are on the cusp of

> profound biological change, poised to transcend our current form and character on a journey to destinations of new imagination. . . . Some imagine we will see the perils, come to our senses, and turn away from such possibilities. But when we imagine Prometheus stealing fire from the gods, we are not incredulous or shocked by his act. It is too characteristically human. To forgo the powerful technologies that genomics and molecular biology are bringing would be as out of character for humanity as it would be to use them without concern for the dangers they pose. We will do neither. The question is no longer whether we will manipulate embryos, but when, where, and how. . . . Well before this new millennium's close, we will almost certainly change ourselves enough to become much more than simply human (1–2, 5).

The change referred to here is championed by posthumanists whose appreciation of postmodern wisdom encourages them to stay *wide* open to the future, its possibilities, and to how we might improve the human condition with the help of science and technology. The transformation, of course, is already underway. There was, for example, the Enlightenment. Eventually came the computer revolution. No technology in the history of humankind (with the exception of language itself) allows for and facilitates an experimenting with self-identity and acknowledging others more than the personal computer. Cyberspace offers itself as a postmodern dream become reality: an awesome transformation of space and time, an immense and easily accessible dwelling place for people to meet, possibly feel at home with others, and thereby know together what is going on in their lives. Sherry Turkle (1995) thus sees cyberspace as exhibiting "a postmodern ethos" (pp. 263–264). Indeed, here is a habitat made possible by the wonders of science and technology and where the challenge-response (deconstructive-reconstructive) logic of human being is constantly being demonstrated in calls and responses. With these calls and responses, one might even feel that there is something holy going on here: "Where art thou?" "Here I am!" The call of conscience and the call of technology go hand in hand. (Hyde, 2006, 239–245).

The ways and means of cyberspace speak to us not so much of our being *totally* posthuman as they do of our heading in that direction. Actually becoming God, of course, would be the ultimate posthuman event. Artificial intelligence scientists like Hans Moravec (1999) and Ray Kurzweil (2006) head us in this awesome direction when discussing how humans will eventually be capable of downloading the cognitive self into computers so they we can outlive their bodies. The goal here is to transcend biology. Immortality awaits us.

Taken with the call of technology, the scientist as posthumanist not only has a postmodernist attitude toward the openness and possibilities of the future, but also revives the Enlightenment's zeal for scientific and technological progress as the ultimate means for perfecting humankind. Key principles for conducting this work include "perpetual progress," "self-transformation," "practical optimism," "intelligent technology," "open society," "self-direction," and "rational thinking" (More, 1999). Although such zeal is a source of criticism for many postmodernist critics who are concerned, for example, with the relationship between "patriarchal capitalism" and the "business" of developing biotechnologies (Bartlett & Byers, 2003), the scientist as posthumanist answers these crit-

ics by making much of how his or her work is dedicated not only to improving the "self's" existence, but also the existence of others as biotechnology continues developing its tools for the betterment of humankind. DNA diagnostic tools, for example, are revolutionizing medicine. And then there are such things as gene-discovery software applications, embryonic cloning procedures, stem cell research, regenerative medicine, psychotherapeutic drugs, organ harvesting and transplantation, and plastic surgery techniques. Having such tools at hand, the scientist as posthumanist is committed to fighting the disease of being rotten with imperfection.

With all of these postmodernist and posthumanist thoughts and developments in mind, the newly formed President's Council on Bioethics (hereafter cited PCB) was charged on November 28, 2001, with deliberating about the benefits and burdens of biotechnology and then publishing these deliberations as a way to "spark and inform public debate" throughout the nation about the matter. President Bush appointed the noted physician and conservative bioethicist Leon Kass to chair the council, which consisted of sixteen additional members from the fields of medicine, law, political economy, biochemistry and biophysics, psychology, cognitive science, biology, psychiatry, philosophy, political science, philosophy, and business management. Here is an example of how this distinguished, but not always agreeing, group of experts phrased the issue:

> Seemingly from the beginning, human beings have been alive to the many ways in which what we have been given falls short of what we can envision and what we desire. We are human, but can imagine gods. We die, but can imagine immortality. . . . Although [human beings] are far from omnipotent, we have extraordinary powers, unique among the earth's creatures, to shape our environment and even ourselves according to our wills. It is perhaps not surprising, therefore, that also from the beginning human beings have struggled with two opposing responses to our lot. Should we try to mold the imperfection we have been given into something closer to our ideal? Or should we content ourselves with beholding and enjoying it as it is? And what about our own natures? Does our ability to flourish as human beings depend on our ability to improve upon the human form or function? Or might the contrary be true: does our flourishing depend on accepting—or even celebrating—our natural limitations? (PCB, 2003, p. 1)

The PCB readily and repeatedly admits that our "extraordinary powers" have enabled medical science to develop a vast number of life-saving and life-bettering technologies. The council, however, is especially concerned with how these powers, their medical successes, and the consequences of these successes might condition us to undervalue our "natural limitations" and thus to perceive them only as imperfections that must be remedied if at all possible. The fear of being rotten with imperfection might result in our becoming rotten with perfection. Here is how the PCB frames the problem:

> We want better children—but not only by turning procreations into manufacture or by altering their brains to gain them an edge

over their peers. We want to perform better in the activities of life—but not by becoming mere creatures of our chemists or by turning ourselves into bionic tools designed to win and achieve in inhuman ways. We want longer lives—but not at the cost of living carelessly or shallowly with diminished aspiration for living well, and not by becoming people so obsessed with our own longevity that we care little about the next generations. We want to be happy—but not by means of a drug that gives us happy feelings without the real loves, attachments, and achievements that are essential for true human flourishing. (PCB, 2003, p. xvii).

Where are we to draw the line between being rotten with perfection and being rotten with imperfection? As noted above, the president's council admits that "we have been given" "extraordinary powers" and "natural limitations" that both promote and inhibit our ability to provide a definitive answer to the question. Whom or what is the "giver" here? Where did the gift of life and all that it brings about come from? Might answers to these questions help in our deliberations and recommendations about the proper use of biotechnology for perfecting our lives?

These and many other questions raised by the PCB are meant to stimulate public moral argument and the rhetoric that necessarily informs it. The PCB is aware of how rhetoric will play a role in its deliberations and in public reaction to its published report. In its first report, *Human Cloning and Human Dignity* (2002), the PCB makes much of its use of "fair and accurate terminology"—"especially because the choice of terms can decisively affect the way questions are posed, and hence how answers are given. We have sought terminology that most accurately conveys the descriptive reality of the matter, in order that the moral arguments can then proceed on the merits." The PCB also emphasizes that "we have resisted the temptation to solve the moral questions by artful redefinition or by denying to some morally crucial element a name that makes clear that there is a moral question to be faced" (xlii).

This attitude toward the mandatory use of fair and accurate terminology is a crucial feature of Enlightenment philosophy. When considering how humankind might achieve the "highest moral perfection," Immanuel Kant (1983) insists that the reasoning that directs the process should be as rigorously "scholastic" as possible. When it comes to perfecting our *rational* understanding of moral perfection, "popularity (vernacular) is unthinkable." Striving for perfection is a fundamental moral obligation of the academy, one that demands "scholastic precision . . . even if such precision is denounced as meticulosity. Only in this way can precipitate reason be brought to understand itself before making its dogmatic assertions" (p. 206). Kant makes such claims in an effort to guard against what his fellow Enlightenment thinker, John Locke (1959), termed the "perfect cheat" (p. 146) of the orator's art: rhetoric's ways of manipulating and deceiving others about the truth of some matter of interest. Rhetoric, of course, need not serve such an inauthentic end. The very existence of the PCB and its goal of encouraging public moral argument presupposes as much (PCB, 2003, pp. ixx–xxi).

A fundamental illustration of this point emerges with the PCB's use of the ontological notion of "the giftedness of life" to ground and direct the council's questioning of biotechnology's ever-developing ability to

improve our lives. The PCB considers this gift a "given"—an empirical and *a priori* fact of life. The PCB's fair and accurate definition of this given reads:

> Acknowledging the giftedness of life means recognizing that our talents and powers are not wholly our own doing, nor even fully ours, despite the efforts we expend to develop and to exercise them. It also means recognizing that not everything in the world is open to any use we may desire or devise. Such an appreciation of the giftedness of life would constrain the Promethean project and conduce to a much-needed humility. Although it is in part a religious sensibility, its resonance reaches beyond religion. (p. 288)

The PCB speaks to us of the giftedness of life like postmodern philosophers speak to us of the lived body and the "otherness" that characterizes human existence. We did not create the spatial and temporal structure, the openness, of our being and its inherent call of conscience. We "are not wholly our own doing." Who or what else is at work here? How is it that its call of conscience requires us to recognize "that not everything in the world is open to any use we may desire or devise" and that "humility" is thus called for? What else is called for? All of the virtues? Indeed, there seems to be a "religious sensibility" associated with the giftedness of life. But this gift "reaches beyond religion." To whom, what, where? Are there normative standards for perfect behavior to be found at the gift's source? Religion makes much of how what is beyond itself is the basis of its existence: God. Science, on the other hand, is content with the otherness of nature in its search for truth. Who or what is the ultimate giver of the giftedness of life?

With its discussion of the benefits and possible burdens of biotechnology, the PCB neither affirms nor denies that God is on its side with its understanding of the giftedness of life. Rather, the council typically refers to "nature" and writes in ways that are designed more to stimulate discussion and debate about the matter; hence, the questions that, as suggested above, can be raised about the PCB's definition of the phenomenon under consideration. Such questions expose the ambiguity that is at work in the council's fair and accurate definition of a normative standard that lies at the heart of their discussion. Yet, when matters are ambiguous, as they are in the biotechnology debate, is it not fair and accurate to employ a rhetorical maneuver that is as old as rhetorical theory itself and that is well-known for its ability to stimulate public moral argument?

Chairman Kass defends the use of this rhetorical maneuver in his study of the book of Genesis. Kass (2003) reads this text as being concerned with a question that is easily related to the biotechnology debate: "Is it possible to *find, institute, and preserve* a way of life, responsive to both the promise and the peril of the human creature, that *accords with man's true standing in the world* and that serves to *perfect his god-like possibilities?*" (p. 11). In his assessment of the book's discourse, Kass maintains that it "is precisely the text's sparseness, lacunae, ambiguity, reticence, and lack of editorial judgment that both permit and require the engagement of the reader" (pp. 18–19). With these rhetorical qualities in mind, Kass stresses that the "open form of the text and its recalcitrance to final and indubitable interpretation are absolutely perfect instruments for cultivating the

openness, thoughtfulness, and modesty about one's own understanding that is the hallmark of the pursuit of wisdom" (p. 19).

Whether intentionally or not, the PCB uses a perfect instrument of rhetoric (i.e., ambiguity) to define in a fair and accurate way their essential notion of the giftedness of life. Postmodernist writers are known for their appreciation and use of such instruments to open others to possibilities for thought and action that presently are lost, marginalized, or are going completely unnoticed in the cultural routines and rhetoric of the day (Derrida, 1984). With its notion of the giftedness of life, the PCB is cultivating postmodern wisdom. In the biotechnology debate, however, this deed tends to go unrecognized because of the ideological influences that are known to motivate the individual council members and that thereby attract their critics. Chairman Kass is, by far, the Council member who appears most often in the crosshairs of these critics (Briggle, 2006).

Kass, to be sure, is no deconstructionist, and he loathes the type of postmodern philosophy that such a critical stance supports (Kass, 1994, pp. 6–7; Kass & Wilson, 1998, pp. 8–9). Rather, his appreciation for ambiguity, especially as it can be used to stimulate our moral growth, is rooted in what is described by one of his defenders as "a natural law position colored by [the] religious revelation" of Judaism (Vogel, 2006, p. 32). Indeed, throughout his writings Kass speaks of the empirically-based giftedness of life as something that is best interpreted with the help of a biblical cipher: the "image of God." We supposedly were created in this image. We are "god-like." Kass emphasizes in both his reading of Genesis and in his later, more secular-oriented *Life, Liberty, and the Defense of Dignity* that

> To see how man might be godlike, we look at the text [of Genesis] to see what God is like. In the course of recounting His creation, Genesis 1 introduces us to God's *activities and powers:* (1) God speaks, commands, names, blesses and hallows; (2) God makes, and makes freely; (3) God looks at and beholds the world; (4) God is concerned with the goodness or perfection of things; (5) God addresses solicitously other living creatures and provides for their sustenance.

"In short," notes Kass, "God exercises speech and reason, freedom in doing and making, and the powers of contemplation, judgment, and care"—the very qualities that enable human beings to imagine and be awed by God's presence and to spread the Word that said it all "in the beginning" (Kass, 2003, pp. 37–38; 2002, p. 240; also see Kass, 2007a, 2007c, 2007d).

Kass (1991) associates the reality of human being with its "divine-like status," or what he also terms "human godliness" (p. 129). Interestingly, he also asks us to keep in mind that "the *truth* of the Bible's assertion [about humankind and God's image] does *not* rest on biblical authority: Man's more-than-animal status [his being godlike] is in fact performatively proved whenever human beings quit the state of nature and set up life under . . . a law . . . which exacts just punishment for shedding human (that is, more-than-animal) blood" (p. 127). This last point places aside the question of whether or not the giftedness of life has a deeper source than itself. Council members Fukuyama (2002) and Sandel (2007) would have us do just that. The philosopher Jurgen Habermas (2003)

also recommends as much in his critique of eugenic parenting. But the natural law theology at work in Kass's rhetoric should not be missed, especially when it comes from one who would have us believe that "we stand most upright when we gladly bow our heads" (Kass, 1985, p. 348; also see Kass, 2007a, 2007c, 2007d).

I am discussing Kass as a way of clarifying a position that is often associated by critics with the council's "own" ideological worldview (Blackburn, 2004; Caplan, 2002, 2007). The council denies this assessment (PCB, 2003, pp. xv–xxi). There is no argument in the PCB's report that suggests that God directs its presentation of materials regarding the benefits and burdens of biotechnology. As used by the council, the giftedness of life is not necessarily associated with the workings of God. Rather, it is more a question of human nature. In the end, it might all be nothing more than the dynamics of logarithmic spirals and physical forces that bring about such perfection.

Still, I can understand why the assessment is made. Given his conservative religious bent, his appointment by a right-wing president, and the admired (even by critics) eloquence of his writing, Kass was *the* lightning rod of the council. He is well-known for warning us about "a posthuman future" driven by our excitement over the "transforming powers" of biotechnology, some of which are already here: "The Pill. *In vitro* fertilization. Bottled embryos. Surrogate wombs. Cloning. Genetic screening. Genetic manipulation. Organ harvesting. Mechanical spare parts. Chimeras. Brain implants. Ritalin for the young. Viagra for the old. Prozac for everyone. And, to leave this vale of tears, a little extra morphine accompanied by Muzak" (Kass, 2002, p. 4; Kass, 2007c, pp. 1–2). Skepticism, cynicism, and some gentle humor are characteristic of Kass's writings. He does not hesitate to speak his mind: "[O]ur views of the meaning of humanity have been so transformed by the scientific-technological approach to the world and to life that we are in danger of forgetting what we have to lose, humanly speaking" (pp. 4, 8). The nature of human being reflects "the image of God"—an image that Kass (2007a) terms a "miracle" that suspends the laws of nature and the reductionistic ways of science (p. 46).

Kass makes much of how the giftedness of life warrants more respect than biotechnology is oftentimes known to give it. "No friend of humanity cheers for a posthuman future" (p. 6). Kass reminds us of Aldous Huxley's *Brave New World* to help make his point.

> At long last, mankind has succeeded in eliminating disease, aggression, war, anxiety, suffering, guilt, envy and grief. But this victory comes at the heavy price of homogenization, medical mediocrity, trivial pursuits, shallow attachments, debased tastes, spurious contentment and souls without loves or longings. The Brave New World has achieved prosperity, community, stability and near universal contentment, only to be inhabited by creatures of human shape but stunted humanity (p. 5).

For Kass, stunted humanity cripples the giftedness of life and the "human godliness" that the Giver of the gift makes possible.

This potential disaster is a central concern of the PCB, although it brackets out consideration of the ultimate source of the giftedness of life. Consider, for example, the council's chapter on creating "Better Children." Here the council discusses such issues as the ever-developing

biotechnological practice of prenatal screening and its effect on the parent–child relationship. This practice

> establishes the principle that parents may choose the qualities of their children, and choose them on the basis of genetic knowledge. This new principle, in conjunction with the cultural norm [that encourages parents "to abort any abnormal fetus"], may already be shifting parental and societal attitudes toward prospective children: from simple acceptance to judgment and control, from seeing a child as an unconditionally welcome gift to seeing him as a conditionally acceptable project. If so, these changes in attitude might well carry over beyond choices confined to the presence or absence of genetic diseases, to the presence or absence of other desired qualities. Far from producing contentment and gratitude in the parents, such changes might feed the desire for better—and *still* better—children. (PCB, 2003, p. 37)

We have here, of course, the construction of a slippery slope argument that suggests the danger of our becoming rotten with perfection: of our "extraordinary powers" going too far in transforming our "natural limitations." Recall that when the PCB framed the problem of being rotten with perfection versus being rotten with imperfection, it favored the directive of these limitations. Conservatives make much of the slippery slope argument being considered here. Developments in biotechnology can, for example, change "the traditional structure of the family" (Cohen, 2006; Cohen & Kass, 2006; Smith, 2000). What does it mean to be a "good" parent, a "good" child? Is it the case that attitudes toward prospective children are moving from simple acceptance to judgment and control, from seeing a child as an unconditionally welcome gift to seeing him or her as a conditionally acceptable product whose potential can be further enhanced by an ever-growing market of pharmaceutical medicaments? Conservative religious writers have "good reason" to speak of the child as a gift: "The Spirit itself beareth witness with our spirit, that we are the children of God" (Romans 8:16). "Every good gift and every perfect gift is from above, and cometh down from the Father of lights, with whom is no variableness, neither shadow of turning" (James 1:17). Adam and Eve forgot about the "no variableness." The sin of humankind begins with the Fall.

Writing in the *Hastings Center Report,* Ruth Macklin (2006) tells of how Kass, during a presentation on genetic selection and enhancement, emphasized that it is wrong for parents to be able to choose the traits of their children. His claim was based simply on the position that "Children are a gift." Macklin's response is noteworthy: "Kass's answer may have been understood and accepted by members of a homogenous, religious audience, especially if he had made reference to the giver of the gift (is it even meaningful to speak of a "giverless gift"?). But as a response to a question at a secular conference, and without further explication, Kass's reply was a conversation stopper, not a stimulant to dialogue" (p. 38).

To speak of the child as a gift presupposes the giftedness of life. The PCB refers to both phenomena: the first is conceived in an ambiguous way, and thus the second, too, is not without an element of uncertainty in its meaning. Remember, the ultimate goal of the PCB's report is to stimulate public moral argument. The ambiguity fades, however, when someone with Kass's inclinations and reputation adds his voice

to the debate. The giftedness of life harkens back to God. The child as gift has holy underpinnings, at least until science claims that all of this has nothing to do with Almighty happenings and everything to do with the evolution of cosmological, chemical, and biological processes. Much like intellectuals guided by postmodern wisdom, Kass takes offense to such reductionism—aligning his response specifically with Heidegger's (1977) critique of science and technology and the potentially ill effects that they have on the actual nature of human being (Kass, 2002, pp. 32, 37; also see Kass, 2007a, 2007c, 2007d). But Kass is also a severe critic of this wisdom and what he perceives to be its nihilistic and relativistic tendencies. Why, for example, must we accept Nietzsche's ranting that "God is dead"? Instead, Kass pleads:

> Let us cleave to our ancient wisdom and lift our voice and properly toast *l'chaim*, to life beyond our own, to the life of our grandchildren and their grandchildren. May they, God willing, know health and long life, but especially so that they may also know the pursuit of truth and righteousness and holiness. And may they hand down and perpetuate this pursuit of what is humanly finest to succeeding generations for all time to come. (p. 274)

Setting aside the question of holiness, the PCB takes great interest in this pursuit. How might biotechnological advances affect our understanding "of what is humanly finest" and our related "expectations of perfection" (PCB, 2003, p. 51)? The issue of creating better children encourages the question. Here, for example, is a way that the PCB addresses the matter.

> The salient fact about human procreation in its natural context is that children are not *made* but *begotten*. By this we mean that children are the issue of our love, not the product of our wills. A man and a woman do not produce or choose a *particular* child, as they might buy a particular brand of soap; rather, they stand in relation to their child as recipients of a gift. Gifts and blessings we learn to accept as gratefully as we can; products of our wills we try to shape in accordance with our wants and desires. Procreation as traditionally understood invites acceptance, not reshaping or engineering. It encourages us to see that we do not own our children and that our children exist not simply for our fulfillment. Of course, parents seek to shape and nurture their children in a variety of ways; but being a parent also means being open to the *unbidden* and *unelected* in life. (p. 70)

Some of the rhetoric here, I think it is fair to say, sounds a bit religious: the child is "begotten," a "gift," and a "blessing." The PCB, remember, would have us understand this rhetoric as being fair and accurate regarding the situation at hand. Connected as they are to the council's ambiguous account of the giftedness of life, however, the terms need not necessarily be associated with religion. Notice, for example, that the PCB's definition of a parent also includes "being open to the unbidden and unelected in life." One need not turn to God for this instruction. The lived body, with its openness to the future's objective uncertainty, is enough to teach parents that "chance" always has a role to play in human activities. With this uncertainty comes the ability to answer an ontologically based call of conscience, to assume the ethical burden of freedom

of choice, and to do so with the welfare of others in mind (e.g., a child). Why get religious over the matter? The giftedness of life enables us to perceive emotionally, aesthetically, and mathematically nature's symmetry, beauty, and the infinity that speaks so awesomely to we finite and metaphysical creatures. The otherness of the call of conscience is forever happening in the presence of other things and other people. The giftedness of life brings together the finite and the infinite. Human being is perfect in its incompleteness. At the present stage of human evolution, natural limitations are a part of life. For someone like Kass, God would have it no other way.

Our extraordinary powers, however, have long been evolving to deal with and overcome our natural limitations. Is such progress a sign of God's plan? What is the ultimate goal of this plan? Is it possible that its course is towards a posthuman future? The future remains open to grand achievements; hence, for example, the evolution of biotechnology and its capacity, for example, to tell would-be parents of East European Jewish ancestry that genetic screening has exposed the possibility of giving birth to a child who suffers from Tay-Sachs disease. The disease's pathophysiology is brutal and fatal: Sometime during the first year after birth, the child's central nervous system will begin to degenerate, the child will become noticeably lethargic, and his or her motor skills will decline. Then, during the following year, the child will become blind, experience petit mal seizures lasting for several seconds, be unable to eat because of the deterioration of his or her respiratory and digestive systems, and suffer mental retardation and complete paralysis. The cost of caring for the child will be substantial. If a physician failed to ask about the parents' heritage, run the proper medical tests, and then explain all of this to the parents, and if they ended up unknowingly giving birth to a child with Tay-Sachs disease—a child that they admit they would have aborted if they would have had full knowledge of their situation—the parents could legally sue the doctor for the child's "wrongful life" (Hyde, 1984). Indeed, medical authorities have acknowledged that "for Tay-Sachs, with its well-demonstrated early mortality, the decision to terminate pregnancy is a relatively easy one" (Mangel and Weisse, 1984, p. 196).

Would it be easy for you? Would you bring such a child into the world? At least perhaps for a few months, the child could experience the love of his or her parents without interference from the effects of the disease. Would this wonderful parent–child relationship be worth the pain and suffering that will eventually occur? The PCB does not raise this question; it does, however, consider the instructive nature of suffering and the "sorrow" and "sadness" that it brings. The council tells us, for example, that

> We cannot ignore the truth that life's hardships often make us better—more attuned to the hardships of others, more appreciative of life's everyday blessings, more aware of the things and the people that matter most in our lives. Sadness in the recollection of a loss or a national tragedy (for example, September 11) keeps alive and pays tribute to the blessing we once enjoyed or still enjoy, gratuitiously and vulnerably. Anxiety in the face of a crucial meeting or big decision registers the importance of the undertaking and prods us to rise to the occasion. Shame at our

> own irresponsible or duplicitous conduct exhibits knowledge of proper conduct and provides a spur to achieving it. These emotional stings not only reflect the truth. If they do not crush us, they may make us better. (PCB, 2003, p. 258)

All of this makes good sense to me. With the exception of the use of the word "blessing," the discourse is sound with respect to the ontological workings of the lived body (Hyde, 2001a, 2006, 2006; Hyde & McSpiritt, 2007). Would the PCB recommend giving birth to a child with Tay-Sachs disease? Its report does not say beyond telling us such things as this: "When nature dispenses her gifts, some receive only at the end of the line" (PCB, 2003, p. 17). Kass (2002) agrees and adds, "Humanity is owed humanity." It "is owed the bolstering of the human, even or especially in its dying moments, in resistance to the temptation to ignore its presence in the sight of suffering." Kass thus goes on to emphasize that "What humanity needs most in the face of evils is courage, the ability to stand against fear and pain and thoughts of nothingness" (pp. 138–139; also see Kass, 2007d). Suffering calls for courage, not surrender. Courage helps us face death with dignity to the very end—when the least bit of the will to live operating in our physiology vanishes. Suffering has much to teach us about human dignity and human godliness. Read your Bible! Kass emphasizes this point in his siding with the "right to life" movement in the euthanasia debate (Hyde, 2001a, pp. 160–176; Kass, 2007b). Certainly, even a child fated to die from Tay-Sachs disease has such a right. One year of life is better than nothing. Is it still better if this life is fated to bring with it another year of abject suffering with no possibility of hope? Does enduring such suffering perfect the nature of human being?

I do not know what Kass would say about the specific issue being raised here. He sees the blastocyst, the early human embryo, as a beginning of life and thus as something that warrants the highest respect. He is anti-abortion. He would have us reply "No" to even "the most heart-rending cases" of patients whose diseases and bodily injuries have brought about a "living death" and who beg others to help them "die with dignity" (Kass, 1991, p. 140; also see Cohen & Kass, 2007). He believes that our flourishing depends on accepting and celebrating our natural limitations. He thus questions his religion's unrestricted, orthodox promotion of "l'chaim," whereby one might conclude, for example, that "if cloning human beings is intended to advance medical research or cure infertility, it has a proper place in God's scheme of things" (Kass, 2002, p. 259). Kass maintains, however, that those who toast "to life" must acknowledge and respect humankind's natural limitations. Suffering can make us better. The Bible and everyday existence teach as much. The giftedness of life is sacred. Kass is against the development and use of biotechnology that threatens this sacredness. As is seen throughout his writings, he employs slippery slope arguments to make his point. One, in fact, can hear his voice when the PCB considers the matter:

> We should not be self-deceived about our ability to set limits on the exploitation of nascent life. What disturbs us today we quickly or eventually get used to it; yesterday's repugnance gives way to tomorrow's endorsement. A society that already tolerates the destruction of fetuses in the second and third trimesters will hardly be horrified by embryo and fetus farming (including in

animal wombs), if this should turn out to be helpful in the cure of dreaded diseases. (PCB, 2002, p. 187)

What is especially telling here of Kass's input on the PCB is its use of the term "repugnance." Kass is (in)famous in the biotechnology debate for crediting this emotion with the "wisdom" that it takes to know where to draw the line between our being rotten with imperfection and our being rotten with perfection. Repugnance, writes Kass, is "the emotional expression of deep wisdom, beyond reason's power completely to articulate it." Kass goes on to ask: "Can anyone really give an argument fully adequate to the horror that is father–daughter incest (even with consent), or bestiality, or the mutilation of a corpse, or the eating of human flesh, or the rape or murder of another human being? Would anybody's failure to give full rational justification for his revulsion at those practices make that revulsion ethically suspect? Not at all" (Kass, 2002, p. 150; Kass, 1997). Within the biotechnology debate the "wisdom of repugnance" is, for Kass, best understood with the case of human cloning in mind:

> We are repelled by the prospect of cloning human beings not because of the strangeness or the novelty of the undertaking, but because we intuit and we feel, immediately and without argument, the violation of things that we rightfully hold dear. We sense that cloning represents a profound defilement of our given nature as procreative beings, and of the social relations built on this natural ground. We also sense that cloning is a radical form of child abuse. . . . Shallow are the souls that have forgotten how to shudder. (p. 150)

Kass would have us shudder whenever biotechnological progress demeans the giftedness of life and the "unalterable human nature" that this gift and its Giver make possible (p. 132). Remember, "no variableness"! The "bioprophet's" claims about progress and our posthuman future, argues Kass, encourage a worldview "whose moral boundaries are seemingly up for grabs" and where we hear such erroneous claims that it is "unwise today to ground" our biotechnological aspirations "on dogmas about souls endowed by God." Kass laments: "We are all—or almost all—postmodernists now" (pp. 137, 143). We thus fail to realize that as human embryonic cloning and such related biotechnological developments as genetic and pharmaceutical enhancements continue to advance in medical practice, "standards of health, wholeness or fitness will be needed more than ever, but just then is when all pretense of standards will go out the window" (p. 132). As Kass (2007a, 2007c) sees it, posthumanists and postmodernists are prone to dismiss any appreciation of our being souls endowed by God; these scientists and philosophers make us insensitive to the wisdom of repugnance and thus to things that ought to make us shudder.

Critics of Kass's notion of the wisdom of repugnance point out that it too easily substitutes emotional responses or "yuck reactions" for rational argument; it commends the thesis that "because X disgusts me, X must therefore be wrong" (Briggle, 2006, pp. 172–198). With this type of reasoning at work, bigots would have a field day, as would those who are repulsed by such close-minded creatures. The wisdom of repugnance as a standard of judgment has its burdens and benefits. Kass (2002) acknowl-

edges that repugnance "is not an argument," but that, he maintains, is no reason to keep it from informing our arguments: Repugnance "need not stand naked before the bar of reason"; its emotional wisdom "can be partially articulated" even in "those instances about which the heart has its reasons that reason cannot entirely know" (p. 153). Remember, we must not forget how to shudder. The lived body's emotional attachment to the world of everyday experience grounds this reaction and its call of conscience. As Aristotle long ago discussed in his *Rhetoric,* the validity of pathos can be sustained and critiqued within a rational framework of public moral argument. Kass points to our "holiness" as the true foundation of this entire process.

The PCB invites the possibility of shuddering with the many slippery slope arguments that it presents in its report. Consider, for example, how the Council elaborates on their earlier noted observation about prenatal screening and its affect on the parent–child relationship.

> With genetic screening, procreation begins to take on certain aspects of the *idea*—if not the practice—of manufacture, the making of a product to a specified standard. The parent—in partnership with the IVF [*in vitro* fertilization] doctor or genetic counselor—becomes in some measure the master's of the child's fate, in ways that are without precedent. . . . Today, parents using [IVF and] PGD [preimplantation genetic diagnosis] take responsibility for picking and choosing which "advantages" their children shall enjoy. Such an enlarged degree of parental control over the genetic endowments of their children cannot fail to alter the parent–child relationship. . . . [S]electing for desired traits inevitably plants specific hopes and expectations as to how their child might excel. More than any child does now, the "better" child may bear the burden of living up to the standards he was "designed" to meet. (PCB, 2003, p. 55)

Considering the wider social effects of an increased use of genetic screening and selection, the PCB warns against

> the prospect of diminished tolerance for the "imperfect," especially those born with genetic disorders that could have been screened out. It is offensive to think that children, suffering from "preventable" genetic diseases, should be directly asked, "Why were you born?" (or their parents asked, "Why did you let him live?"). Yet it is almost as troubling to contemplate that "defective" children and their parents may be treated contemptuously and unfairly in light of such prejudices, even if they go unspoken. (p. 56)

When considering the rationality and fairness of slippery slope arguments and the way they are rhetorically designed to make us shudder and to stimulate public moral argument, it is important to keep in mind the difference between becoming paranoid and becoming logically fearful. The PCB, of course, would certainly maintain that they favor and practice the second option. Their construction of the slippery slope argument here is to ensure that the public is given the chance to shudder. With Kass, however, chance becomes fate. Not shuddering is not an option. "One of the most worrisome but least appreciated aspects of the godlike

power of the new genetics," writes Kass (2002), "is its tendency to "redefine" a human being in terms of his genes. Once a person is decisively characterized by his genotype, it is but a short step to justifying death solely for genetic sins" (p. 130). Kass continues:

> Make no mistake: the price to be paid for producing optimum or even only genetically sound babies will be the transfer of procreation from the home to the laboratory. Increasing control over the product can only be purchased by the increasing depersonalization of the entire process and its coincident transformation into manufacture. Such an arrangement will be profoundly dehumanizing, no matter how genetically good or healthy the resultant children. And let us not forget the powerful economic interests that will surely operate in this area; with their advent, the commodification of nascent human life will be unstoppable. (p. 131)

And then there is Kass returning to the specific topic of human embryonic cloning:

> Is cloning a fulfillment of human begetting and belonging? Or is cloning rather, as I contend, their pollution and perversion? To pollution and perversion, the fitting response can only be horror and revulsion; and conversely, generalized horror and revulsion are *prima facie* evidence of foulness and violation. The burden of moral argument must fall entirely on those who want to declare the widespread distastes of humankind to be mere timidity and superstition. (pp. 152–153)

Kass's positions here support and are supported by the stated "mission" of "conservative bioethics": "to prevent our transformation into a culture without awe filled with people without souls" (Levin, 2003, p. 65). Without awe and souls, the wisdom of repugnance and shuddering are not possible and the way from the giftedness of life to God is dismissed as pure fiction. For Kass, this dismissal, too, warrants a shuddering response. He encourages us to be logically fearful of how developments in biotechnology and their attending postmodern and posthuman rhetoric expose us to the disease of becoming rotten with perfection. With God on his side, we might even become a bit paranoid. We are being watched from above—all of the time. Heaven help us.

Conclusion

In the introduction to their report, the PCB emphasizes that the "document is not a research report, but an ethical inquiry." The inquiry seeks "to identify exactly the sorts of questions and concerns to which researchers, policy makers, and the public at large should be paying attention." In raising these questions and concerns, the council did "not mean to be setting ourselves up as prophets" (PCB, 2003, pp. 22–23). Rather, as stated at the end of their report, the council's goal was to keep readers open to a host of pressing issues. They note, for example, that in "wanting to become more than we [human beings] are, and in sometimes acting as if we were already superhuman or divine, we risk despising what we are and neglecting what we have. . . . [W]e risk turning a blind eye to the

objects of our natural loves and longings, the pursuit of which might be the truer road to a more genuine happiness" (p. 300).

I have credited the council as being a producer of postmodern wisdom: it instigates a call of conscience meant to interrupt the complacency of its readers. Perhaps this assessment exhibits too much hermeneutic charity. With its slippery slope arguments and religious sounding rhetoric, the council invites a less charitable response. But the ontological notion that lies at the heart of their discourse—the giftedness of life—admits an ambiguity that grants the council a way out from simply being seen as an agency of conservative thought and religious right tendencies. To those critics who brand the council as such—critics who include such distinguished scientists as Michael Gazzaniga (himself a member of the council), the PCB should admit that their published report is, for example, "full of unsubstantiated psychological speculations on the nature of sexual life and theories of moral agency" (Gazzaniga, 2002, p. 290; also Gazzaniza, 2005). The council could respond, however, that the sometimes conservative slant of its rhetoric is intended only as a means for amplifying its call of conscience in order to ensure that its goal of stimulating public moral argument comes to fruition.

Listening to this call with Chairman Kass in mind, it is difficult not to hear such a response as being inauthentic. Kass's rhetoric has a prophetic ring to it: We are fated to encounter the perverted, polluted, and repulsive environment of a posthuman future if we fail to hear and respond to the call as he recommends (Kass, 2007c, 2007d). The political philosopher and council member Michael Sandel (2007) agrees when he writes that we should "view genetic engineering as the ultimate expression of our resolve to see ourselves astride the world, the masters of our nature. But that vision of freedom is flawed. It threatens to banish our appreciation of life as a gift, and to leave us with nothing to affirm or behold outside our own will" (pp. 99–100). Kass (2002) is more definitive: "[U]nless we mobilize the courage to look foursquare at the full human meaning of our new enterprise in biogenetic technology and engineering, we are doomed to become its creatures if not its slaves" (pp. 138–139). According to Kass, this outcome is already taking shape in our biotechnological quest to extend our "normal" lifespan and remain "forever young." Kass writes:

> [T]he desire to prolong youthfulness is not only a childish desire to eat one's life and keep it; it is also an expression of a childish and narcissistic wish incompatible with devotion to posterity. It seeks an endless present, isolated from anything truly eternal, and severed from any true continuity with past and future. It is in principle hostile to children, because children, those who come after, are those who will take one's place; *they* are life's answer to mortality, and their presence in one's house is a constant reminder that one no longer belongs to the frontier generation. One cannot pursue agelessness for oneself and remain faithful to the spirit and meaning of perpetuation. . . . Indeed, the mitzvah to be fruitful and multiply (the Bible's first positive commandment), when rightly understood, celebrates not the life we have and selfishly would cling to, but the life that replaces us. (p. 272)

Kass insists "that the finitude of human life is a blessing for every human individual, whether he knows it or not" (p. 264). Our finitude,

for example, makes possible "the peculiarly human beauty of character, *virtue and moral excellence*" (p. 267). Kass's clarification of this point is noteworthy:

> To be mortal means that it is possible to give one's life, not only in one moment, say, on the field of battle, but also in the many other ways in which we are able in action to rise above attachment to survival. Through moral courage, endurance, greatness of soul, generosity, devotion to justice—in acts great and small—we rise above our mere creatureliness, spending the precious coinage of the time of our lives for the sake of the noble and the good and the holy. We free ourselves from fear, from bodily pleasures, or from attachments to wealth—all largely connected with survival—and in doing virtuous deeds overcome the weight of our neediness; yet for this nobility, vulnerability and mortality are the necessary conditions. The immortals cannot be noble. (pp. 267–268)

Our finitude may make us shudder and suffer, but it also informs and encourages the godliness of human dignity. Shuddering, suffering, and godliness go hand in hand for Kass. Such is not the case for the scientist and posthumanist, Ray Kurzweil (2006): "Whereas some of my contemporaries may be satisfied to embrace aging gracefully as part of the cycle of life, that is not my view. It may be 'natural,' but I don't see anything positive in losing my mental agility, sensory acuity, physical limberness, sexual desire, or any other human ability. I view disease and death at any age as a calamity, as problems to be overcome" (p. 210; also see Harris, 2007).

Kass and Kurzweil define the extremes of public moral argument at work in the biotechnology debate. Kass celebrates our natural limitations and suffering. Kurzweil cheers our extraordinary powers and their ability to lessen, if not end, suffering. Kass warns against our posthuman future. Kurzweil welcomes its possibilities and its postmodern attitude toward the openness of human existence. Kass emphasizes how this openness and the freedom it makes possible promote a postmodern culture where the disease of being rotten with perfection can grow all too quickly. Kurzweil, however, perceives this openness and freedom as granting us opportunities to overcome whatever contentment we may feel when we too easily accept our natural limitations and risk the chance of becoming rotten with imperfection. Kass writes as if God is on his side. Kurzweil challenges God-of-the-gaps thinking and the conservative tendency to turn the "posthuman" into a devil term. For Kurzweil (2006), the posthuman is associated with how "being human means being part of a civilization that seeks to extend its boundaries. We are already reaching beyond our biology by rapidly gaining the tools to reprogram and augment it." Elaborating on the point, Kurzweil writes:

> If we regard a human modified with technology as no longer human, where would we draw the defining line? Is a human with a bionic heart still human? How about someone with a neurological implant? What about two neurological implants? How about someone with ten nanobots in his brain? How about 500 million nanobots? Should we establish a boundary at 650 million nanobots: under that, you're still human and over that, you're posthuman?

> Our merger with our technology has aspects of a slippery slope, but one that slides up toward greater promise, not down into Nietzsche's abyss. (p. 374)

Kurzweil is a very optimistic postmodernist. The posthuman is an extension of the human, not simply its demise. Kurzweil labels the result of this extension the "Singularity": "The Singularity will represent the culmination of the merger of our biological thinking and existence with our technology, resulting in a world that is still human but that transcends our biological roots. . . . If you wonder what will remain unequivocally human in such a world, it's simply this quality: ours is the species that inherently seeks to extend its physical and mental reach beyond current limitations" (p. 9). Kurzweil emphasizes that this human quality has evolved to the point that it values a moral principle that lies at the heart of "traditional religion" and that must be maintained in the Singularity: the "respect for the consciousness of others" (p. 374). I spoke of this respect earlier when discussing the relationship between human being and otherness. Kurzweil is talking about how we metaphysical creatures are fated to hear and respond to the call of conscience and its attending call of technology.

Kurzweil acknowledges that, as has historically been the case, the challenge here entails dealing wisely with the social, political, and economic problems that necessarily arise with technological progress and its potential to infect us with the disease of being rotten with perfection. The biotechnology debate is a case in point. Like Kass, Kurzweil looks at our natural limitations to inspire his vision. Unlike Kass, however, Kurzweil sees these limitations as indications of what needs to be improved in order to advance the true character of human being. The lived body is open to otherness and its infinity. The ontological dynamics at work here offer a moral directive to Kuzweil the scientist, posthumanist, and postmodernist: we should be as open-minded as possible to how various technological achievements can help us guard against the disease of becoming rotten with imperfection.

The PCB never puts matters this way in its attempt to stimulate public moral argument about the benefits and burdens of biotechnology. Rather the council's rhetoric tends to drift toward the position of erring on the side of caution. Kass's rhetoric affirms the reasonableness of this drift to the point that he recommends a close-mindedness towards those who would head in the opposite direction. I have too much of a phenomenological, ontological, and postmodern outlook to accept this mind-set without question. Human existence sounds a call of conscience that speaks to us of the moral necessity of being open to otherness. We hear this call as finite beings, but the call itself is enduring, infinite—as infinite as pi, phi, and "the eye of God" found at the center of one of nature's geometric forms, the logarithmic spiral. Is there a purpose to infinity? The phenomenon serves as a catalyst for inciting our metaphysical desire for some sense of completeness. Human existence is structured perfectly to stimulate this desire. The desire, at one and the same time, makes us feel homesick and encourages us to do something about this ill feeling. Orthodox Judaism speaks to us of *Ein Sof*, the Creator of the infinite, as the truly unknowable source of this desire. Christianity, too, acknowledges the wonder of the desire. As the rabbi Jesus Christ is reported to have said shortly before he died: "Verily, verily, I say unto you, he that

believeth in me, the works that I do shall he do also; and greater works than these shall he do; because I go unto my Father" (John 14:12).

Greater works: We are called to act in such a way that we overcome the ill effects of being rotten with imperfection. I suspect that as we continue to meet this challenge, there will continue to be many moments of boredom, melancholy, anxiety, homesickness, shuddering, and repugnance. With any degree of success, joy, perhaps, might brighten our world. Such joy, however, must not be allowed to instigate a false sense of security whereby we make ourselves susceptible to the disease of being rotten with perfection. Postmodern wisdom offers itself as a reminder of the danger here; it promotes itself as always being up for the challenge. From our finite perspective the challenge appears infinite. Being the metaphysical creatures that we are, however, the challenge should inspire action on our part. Despite whatever burdens it may bring about, the continuing development of biotechnology is certainly one way to meet the challenge (Rothman & Rothman, 2003; Tuhus-Dubrow, 2007; Harris, 2007).

Both the PCB and Kass deserve credit for instigating public moral argument that makes us attentive to the potential downside of the biotechnological revolution. As the distinguished bioethicist and legal scholar Nancy King (2007) puts it, "If Kass didn't exist, someone would have to invent him." Indeed, is it the case, for example, that these developments will transform the contentment and gratitude associated with being parents? Will the production of "better" children lead us to treat "defective" children unfairly? Will our success in pushing back death result in our becoming less appreciative of the human beauty of character, virtue, and moral excellence? Will the wisdom of repugnance be lost to future generations? Will anything less than perfection be pathology (Kass, 2007b, 2007c, 2007d)?

I know of no postmodernists or posthumanists who would dismiss the relevancy of such questions. The perfection of human being, its complete way of being incomplete, is forever calling us into question, forever forcing us to deal with our natural limitations and extraordinary powers, forever calling for moral responsibility and open-mindedness. Feynman is right: Cosmologically speaking, we "are only in the beginning." "We must maintain an open channel" in order to avoid being "dumb" and "ignorant." We must overcome our tendency to be close-minded. I cannot see how the Creator of the Infinite (*Ein Sof*) would disagree. Open-mindedness is a necessary condition for appreciating the otherness of infinity and the question of perfection that it raises. Postmodern religious thinkers emphasize this point throughout their writings (e.g., Breech, 1989; Caputo, 2001; Levinas, 1998).

Kass, it seems to me, is too forgetful of the point. His rather shallow reading of postmodern wisdom lacks hermeneutic charity. Who can say for sure that a postmodern future, with its biotechnological developments, is not a part of God's plan? Who can say for sure that human godliness—our ability to exercise speech and reason, freedom in doing and making, and contemplation, judgment, and care—will not be operative as human beings interface ever more closely with our biotechnological inventions? Have we reached the point in human evolution where our natural limitations cannot be improved without ruining the "true" nature of what we are supposed to be—in the long run? (Davies, 2007). Nature calls. Human existence calls. Otherness calls. With the biotech-

nology debate we metaphysical creatures find ourselves in a rhetorical situation where the question of perfection is necessarily before us and where public moral argument continues to be essential. Where art thou?

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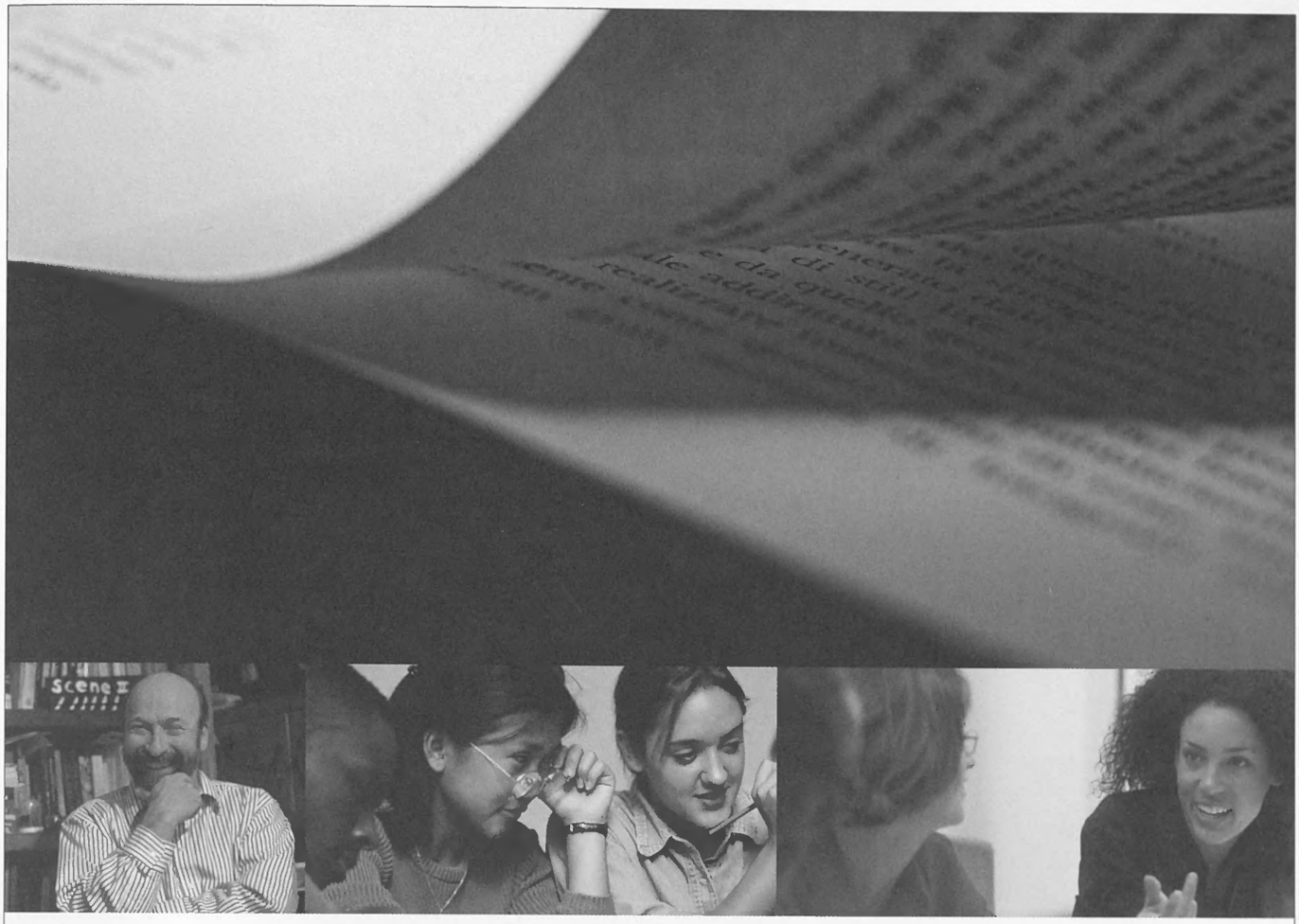

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