In a recent issue of Stanford Medicine, there is a cartoon with two individuals on different sides of a precipice: one is a scientist in a white lab coat, holding a test tube; the other is a preacher with a Bible, looking up to the heavens. The picture suggests that the embryonic stem cell debate is a clash between religion and science, an irreconcilable conflict between two different conceptions of reality. And indeed, many scientists, religious believers, and policymakers see it this way. Certainly many advocates for embryonic stem cell research see President Bush and his ilk as religious zealots, and see themselves as a thousand persecuted Galileos. And many religious believers worry about “man playing God,” and about scientists usurping the divine order.

But framing the embryo question as a clash between religion and science glosses over many important complexities. It is far too easy to presume that religious opposition to embryo research is not rational, but just sectarian piety. And it is far too easy to presume that the public case for embryo research is the most rational case, grounded in the best scientific evidence.

But matters, of course, are not so simple. Religious opponents of embryo research make their moral argument by appealing rationally to the facts of modern embryology. And rational scientists make their moral case by appealing emotionally to the hardships of loved ones suffering from dreaded diseases. To understand the embryo research debate and the larger human ideals at stake within it, we need to explore more precisely what it means to be “rational.” We need to explore the nature of human reason and the limits of human reason. And we need to confront the fact that reason alone cannot fully explain why things happen the way they do, or why we should believe in the first principles—like human equality—that we hold so dear.

The Absurdity of Disease

One must begin with the experience of suffering and disease that drives many scientists to engage in embryo research in the first place. Disease is not entirely rational, of course. Every day, parents shuttle their sick
children to the hospital, and some of these children are diagnosed with the flu and others discover that they have incurable cancer. In the age of modern biology, we can rationally explain how their situations are different. We can explain how the relevant genes and cells and proteins work or fail, at least within the limits of current medical knowledge. But we cannot really explain why one child gets deathly ill and another does not. Now, if two people walk toward a cliff, and one jumps off and the other does not, we can explain rationally why one dies and one lives; we can grasp the connection between human will and the laws of gravity, and perhaps even the circumstances that led to the decision to jump in the first place. And for people who die of lung cancer, we can describe the lifestyle that put them at extra risk (though of course, many people lead high-risk lives and suffer no consequences). But often, sickness is guiltless. It is not jumping off a cliff but being struck by a bolt of lightning. To blame bad genes does not answer the fundamental existential question: Why are my genes bad, and not his? Or why am I still alive, and not my child? The biologist has no real answers to these questions. He can explain how the disease happened, but not why it happened.

In the age of modern science, therefore, we must confront the fact that nature is both orderly and absurd: Nature is orderly, in the sense that we can understand how many biological systems work and how they fail, and we can often use this rational knowledge to fix them. But nature is absurd, in the sense that sickness strikes some individuals and not others for no apparent reason—a fact made dramatically clear by the young faces in the cancer ward. Disease does not strike bad children and spare good children. Disease simply strikes. Nature is amoral, and seemingly immoral. All of us—but especially doctors, who are trained in the most rational techniques—are thrown into a world that is often irrational. We must live with the absurdity of disease, especially the absurdity of the sweet, sick child. And the sick child is the best reason to engage in embryo research, if not finally a morally compelling reason to treat and destroy nascent human life as an experimental resource.

**Medicine’s Quest for Justice**

To most people, it seems like common sense that we should try to cure the sick, especially those likely to die before their time. The virtues of healing are so obvious that we rarely examine the nature of our desire to heal. But is the desire to heal really a “rational” desire? Surely it is a moral desire. We are a compassionate civilization—a civilization that feels the
pain of others, and wants to make it go away. And surely the means of seeking and delivering cures—such as embryonic stem cells—are rational means. A doctor who treated every patient by praying for a miracle would be engaged in medical malpractice.

But is the actual desire to cure a rational desire, a desire grounded in reason? Or is this desire grounded in something more primal than reason—such as the instinctive will to survive, or the selfless capacity for empathy, or the protective instinct of maternal love? This is not an easy question, since it is not easy to say whether any human desire is really grounded in reason, as opposed to reason shaping, serving, or moderating desires grounded in or implanted from somewhere else. Without desire, reason is perhaps impotent. But without reason, desire is often dangerous. And as Max Weber famously observed, there is a difference between “substantive reason” and “instrumental reason,” between the reasons we do what we do and the utility of reason in executing what we want to do.

When it comes to medicine, some might argue that it is irrational to devote so much energy to fighting disease, since in the end all victories are temporary and all losses are final. Faced with the inevitability of suffering and death, a rational person might pursue instead a life of preparation, not resistance—a life spent preparing to die, even from childhood. Perhaps such mystic detachment is the most rational response to the death sentence that is birth. Perhaps we’d be better off spending less money on basic research and more money on death education.

But such a dark view of life is not the modern view of life. It belittles the many goods of this world to see all of life as one long preparation for death. (Though without the urgency of mortality, we might put off all that is good and noble in the belief that tomorrow is forever.) And the desire to cure can be rationally defended, even if the desire itself is not exactly grounded in reason. In the clinical setting, doctors just want to help people. They want to make the sick feel better. But in a deeper sense, modern medicine is an effort to impose rationality on an often irrational world—an effort to meet the absurdity of nature with the orderliness of nature; an effort to give every child a fair chance to live a full and flourishing life. In this sense, science and medicine might be understood as redemptive activities: as the restoration of justice in a world where biological nature often seems unjust. Doctors want people to get what they deserve, and they do not believe anyone deserves to be sick. Medicine is the taming of errant nature by human morality, using nature’s laws as its instrument.

But the pursuit of health and the rejection of death are not the whole
of human morality—even if being healthy is, as Descartes claimed, “the foundation of all other blessings in this life.” Perhaps no one deserves to be sick, but it is also true that no one deserves to live forever. And if extending life were the only or highest goal of being human, then civilization would be in peril—because we would be too cowardly to confront murderous tyrants, or so blood-thirsty for life that we would use the dying to save the living, or so narcissistic that we would never have children, who are our natural replacements.

As biotechnology improves, medicine will achieve more partial victories over nature; we will cure many terrible diseases. But medical science will never achieve its ultimate aim of reversing the death sentence that comes with being born. And so doctors will continue to play the dual role they have always played: they will cure as long as possible and they will care when cures are no longer possible. But what happens when curing and caring come into conflict? What if caring for people with terminal illness interferes with curing people who might yet be saved? To put the question more sharply: Why not harvest organs from a patient who is dying to save three other patients who have a chance to continue living? If the purpose of medicine is to mitigate the absurdity of disease as much as possible, is it rational to let a teenager die rather than use tissues from a dying sixty-year-old to save him? Should the obligation to care for this terminal patient stand in the way of finding cures for the many patients who might suffer in the future?

Reason and Equality

And here we see the other side of our existential predicament: While the death sentence of nature is often amoral, the acceptance of death is often necessary in order to prevent being immoral, at least as we usually understand it. Perhaps it is morally obvious that we should accept death rather than harvest organs from the living. Surely there is an aesthetic objection to disaggregating those who look like us, even if their days are numbered and their lives are miserable. But should we accept death rather than harvest stem cells from destroyed human embryos, which do not look like us at all? And would accepting death for this reason be rational or irrational?

To answer this hard question—perhaps the great bioethics question of our time—we need to examine the first principles upon which our ideas of moral obligation rest. The reason we do not use some individuals as raw materials to help others is because we believe that every living person possesses equal dignity, including those who are weak, disabled, dependent,
and dying. We believe everyone possesses an inviolable right to be cared for, at least in the minimal sense of not being exploited. Even prisoners on death row get medical care, and no civilized society would use them as ready sources of organs. This equal dignity is not a function of what we do, but intrinsic to who we are; it is not an attribute that can be measured according to our deeds, but an unchanging characteristic of our very being.

This commitment to equality is not, I should say, the only view of human dignity. Aristotle seemed to have little problem leaving deformed infants out in the wilderness to die; the dignity he sought to defend was the dignity of human excellence, which the disabled could never achieve. But the belief in the equality of all human beings is the democratic view of human dignity, with roots that trace back to biblical religion. And while there is much to learn from Aristotle about the nobility we often lack, the democratic idea of dignity is, as Tocqueville soberly concluded, more just. So long as we are alive, we are not things and we are more than animals—even when our rational faculties decline, and even when we behave in beastly ways. This democratic belief in human equality can be rationally defended, but it cannot be proved by human reason. It is a commandment we obey or a proposition we seek to uphold, not an indisputable natural fact like gravity.

For those who accept this first principle—the equal dignity of all individuals—the embryo research question centers on whether an embryo is a person or something less than a person. Now, if deciding this question were just a mathematical or even ontological problem—if we were interested simply in the best scientific answer, not the answer that was most expedient for doing science—then it seems to me that the religious opponents of embryo research are the most rational voices in the stem cell debate. If the question is—When does an individual life begin?—then the conclusion that life begins at fertilization is the most rational conclusion. If we trace an individual life backwards biologically—from adulthood to adolescence to infancy to birth to the fetal stage to the embryonic stage—there is only one bright line that separates being from non-being: fertilization. Before fertilization, we have an egg and many sperm; we have many possibilities and no person. After fertilization, we have an individual human life in-process. I was once a zygote, but I was never a sperm or an egg, since the gametes that produced me could have produced someone else.

To be sure, there are other key moments in embryological development, moments that some people believe are more significant than fertilization for conferring human worth: There are the moments when certain
powers—like brain activity or the capacity to feel pain—manifest themselves. There is the moment when the discernible human form first becomes visible. But these moments do not mark the arrival of a new person; they mark the arrival of certain attributes in an existing person. To believe that crossing these hurdles is the prerequisite for human dignity is to deny the first principle that all individuals are equal. It makes our equality conditional, and thus weakened. But for those who really believe that all human individuals have equal worth—regardless of size, or intelligence, or level of dependence—then the most rational conclusion is the view held by many religious believers: the conclusion that life begins at conception. Put differently: To oppose embryo research is to act rationally on the belief that human beings are inherently equal. This position is strictly religious only inasmuch as the belief in human equality is strictly religious.

Scientific Mystics and Liberal Revolutionaries

It is certainly the case that destroying embryos and harvesting stem cells is a very rational activity. It involves testing hypotheses about how nature works and seeking to use natural knowledge to develop rational techniques. It also involves a goal—curing disease—that can be rationally defended. But the moral theories that justify embryo destruction—the theories that most stem cell scientists embrace, whether implicitly or explicitly—are either mystical or revolutionary.

The mystics argue that “personhood” arrives at some murky point along the continuum of development. They appeal to our moral sentiments in claiming that 8-cell embryos should be available for research while 8-pound babies should not be. And they assert that somewhere along the way usable embryos become inviolable infants, even if we cannot say exactly when. But this sensibility—which may be true—is not very rational. It is surely not a scientific argument grounded in biology, but a moral feeling about who is equal and who is not. The scientists are often the mystics, even if they would never admit it.

The more revolutionary defense of embryo research involves the rejection of the very principle that all human beings possess equal worth, and the assertion that human dignity depends on possessing certain attributes—like a developed neurological capacity or a certain number of cells. This view does not abandon reason to follow sentiment; rather, it attacks the very premise that dignity is intrinsic rather than conditional. It attacks the first principle of equality upon which modern democracy is based. It dissents from the idea that “all men are created equal.”
And why not question this founding democratic faith? After all, the belief that all human beings possess equal worth is not the only rational conclusion one might draw from lived experience. In many important ways, human beings are clearly not equal: some are healthy and some are sick, some are on the way up and some are on the way out; some are saints and some are knaves; some are self-aware and some lack self-awareness; some are independent and some are needy; some are excellent and some are average. Is it really so obvious that a retarded child or a demented grandparent is equal to the rest of us? Or that Einstein is equal in dignity to Einstein’s maid? And is it really so obvious that we should sacrifice our plans and projects to care for the retarded, the demented, and the terminally ill? Or that we should abandon our hopes of medical progress to care for frozen embryos?

Indeed, some people argue, quite rationally, that it is senseless to devote medical resources to individuals who are beyond repair or not fully conscious, and that we should focus instead on helping those who are sick today but might flourish again in the future. Rather than holding the belief that all human beings are inherently equal, this view seeks to help as many people as possible to enjoy the fruits of equality, while dealing ruthlessly with those who will never enjoy the fruits of equality, such as retarded children or people with dementia. Such rationalists are at war with nature’s absurdities, but they also know when to cut their losses. They know that some cases are futile, that nature has won her nasty victory.

If the goal of medicine is to correct nature, then curing must always trump caring. The possibility of making human beings equal by making the sick healthy must always trump treating human beings as equals by caring for the dependent. And even though embryos are not beyond repair but on-the-way, their very lack of certain powers (or certain experiential miseries) apparently makes them usable, in this view, in the effort to restore certain powers to those who have lost them. This is both a radical rejection and a radical pursuit of human equality. In the name of the sick whose inequality we lament, we would become inegalitarian supporters of litmus tests for human dignity. In the pursuit of medical justice, we would become unjust. This is true not only in the case of embryo research, but in the case of screening-and-aborting fetuses with genetic disabilities, like Down Syndrome. In the name of health, we would discard the sick; in the name of gaining strength, we would exploit the weak. Whether this is because we cannot see the weak as equal or because we do not believe the weak are equal, the result is the same: the pursuit of equality requires the sacrifice of equality. The pursuit of a rational world, where nature’s
absurdities are conquered, requires the retreat from moral reason in the name of sentimental science, or the retreat from the inherent equality of all human beings in the pursuit of a more egalitarian future.

**The Tragic Choice**

This leaves us with one final question, especially for those who believe in the inherent equality of all persons and the rational conclusions that follow from it. Let us suppose in the future that embryo research or “therapeutic cloning” works as advertised, and that parents one day face the choice between saving their sick child by destroying an embryo or letting their sick child die because embryo destruction is unethical. No parent would ask his doctor to procure fresh organs by dissecting one of the babies in the maternity ward. Familial love in this case is checked by neighborly love—a premise, for now, that everyone accepts. But are embryos our neighbors, in the sense of being inviolable? For those who believe that all human beings are equal regardless of their attributes, the rational answer is unequivocally yes. Even tiny embryos are our neighbors, because each tiny embryo is a life in-process.

But on the precipice between a beloved child’s life and death, the ethical commitment to reason and equality will be put on trial—a modern-day reversal of Abraham and Isaac’s trip up the mountain. Parents will face the ultimate existential predicament: the absurdity of a sick child, the obligation to treat all human beings equally, and the apparent absurdity of letting their child die rather than deliberately destroying an embryo to save him. Believing in the “culture of life” means accepting the concrete reality of death.

Such an act—the act of letting die—will probably make no sense to the world. But it may be what is required to live the commandment of equality in a world where nature does not treat us equally, and to follow the dictates of moral reason in a world that is often irrational. Thrown into a condition that is absurd—being the parents of a dying child—neighborly love and moral reason require enduring what seems absurd. And perhaps only those who believe in divine redemption—who believe that this world’s irrationality will be set right in the next, by God rather than science—can endure the painful witness that reason and equality may require. Perhaps only religious people can see the weak the way God does, and see equality where uncorrected human eyes see only a clump of cells.

That said, I do not believe that modern democracies will ultimately tolerate the death of children in the name of embryos. The state will man-
date embryo-based medicine for underage persons. It will force parents to act in ways that seem more reasonable. But in doing so, the democratic state may cannibalize the very principle of equality on which it rests. It will compel people to act in inegalitarian ways. It will seek a course that seems more reasonable, but one that requires adopting the irrational view that embryos are not persons or the inegalitarian view that some persons possess dignity but others do not. And while I doubt that I could ever be the parent who lets his child die, even if the law still allowed me to do so, I’m not sure I’d want to live in a world where the commandment to treat everyone equally has been abandoned, and where moral sentimentality trumps moral reason.

These are the hard dilemmas—political and existential—that scientific progress has set before us. We would be blind or foolish to ignore the stakes, and in the end, we may face a choice between what is hard and what is horrible. But in this, at least, our time is not unique.