

# 5. Bioethics and the Reconfiguration of Biopolitics



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## Bioethics and the Reconfiguration of Biopolitics

In the Diagnostic Excursus, working somewhat schematically, I sought to recapitulate and recompose the elements of human dignity in terms of pastoral power, and to do so with reference to the two venues I have examined thus far: the Vatican at the Second Vatican Council and the United Nations in its work on the Universal Declaration of Human Rights. As I proposed there, it seems to me that the figure of human dignity and the effort to turn that figure into a practice can usefully be thought about as a restylization and reconfiguration of the principal elements of pastoral power as it was constituted in its classical form. I also pressed the point that my claim should be taken in a strictly technical and precise sense. In both of these venues, one ecclesial and one political, the challenge was to take up an ancient mandate: *omnes et singulatim*—care extended to all and to each one. The object of concern at the center of this mandate was not the Christian soul in relation to the flock. Nor was it the juridical citizen in relation to the nation. And the object was certainly not the biopolitical body in relation to the population. Rather, the object

of concern was the human in relation to humanity, understood as inherently and primordially dignified.

Unlike the classical model of the Christian pastorate, the mandate to care for all and for each one was not carried out in connection to the traditional equipment of ecclesial and political governance. The goal, after all, was not to create technologies to cultivate or to regulate the daily conduct of conduct. Rather, and in consonance with the archonic, the goal was to discern and moderate those things that violate or compromise the essential character of things human so as to design practices whereby dignity might be protected and allowed to be. Human dignity is archonic, which is to say its moral rectitude and authority are immanent. Human dignity is nomic but not autonomic, one might say. It demands care but it does not care for itself. What it requires is that a space—conceptual and practical—be cleared in which the human can be what it is essentially. Traditional ecclesial and political equipment must be reformulated or new equipment invented so as to discern where human dignity is in danger and what range of other practices need to be restrained. In the case of Vatican II, the church was conceived as uniquely positioned to facilitate hermeneutic equipment: developments of the contemporary world must be read as signs so as to orient humans to a true ontological calling. In the case of the United Nations, human dignity was conceived in such a way as to call for equipment of recognition and self-moderation with the understanding that the United Nations could, through human rights, position itself to facilitate such equipment.

My proposal and working hypothesis is that actors in both venues faced a similar challenge: to constitute themselves as responsible for and capable of caring for human dignity. In the course of this challenge being taking up, human dignity was conceived as archonic. Conceived as archonic, human dignity was made the anchor point and object of a distinctive mode of reasoning about and caring for things human. This distinctive mode amounted to a reconfiguration of pastoral power. Human dignity, in an archonic mode, is a problem of pastoral power.

This brings me to my third case: the formation and development of the U.S. President's Council on Bioethics (PCBE)—the U.S. federal bioethics committee constituted under the presidency of George W. Bush.<sup>2</sup> I will begin this third part of my inquiry by saying a word about why I selected U.S. federal bioethics as a third case, about the significance of the other cases in relation to it, and, finally, about how I will proceed.

By any of several measures the U.S. President's Council on Bioethics is not as significant as either of the venues in my other two cases. No other event in the last century compares to the Second Vatican Council in terms of ecclesial transformation, with the possible exception of the rise of nondenominationalism in the United States. No other venue of international politics has the profile of the United

Nations, recognizing that other multinational and nongovernmental organizations are obviously crucial venues of international power in connection to questions of dignity and rights. The President's Council—or federal bioethics commissions per se for that matter—is not at the authorial apex of any worldwide community, nor is it global in scale or reach, despite the fact that many of its actions have served as a triggers for bioethical activities in other governmental settings. Moreover, the outcome of its legacy with regard to the care of human dignity is quite different, as I will explain in this chapter and the next.

Keeping all of this in mind, however, the President's Council does share crucial characteristics with the other two cases, characteristics that make it particularly interesting for my study. In the first place, as I noted in the introduction, the PCBE was a venue that took up the challenge of constituting itself according to the double proposition that human dignity is a uniquely worthwhile object of concern and that the work of developing modes for thinking about and protecting human dignity is a uniquely urgent one. In the second place, although it did not take itself to be uniquely qualified to care for human dignity in anything like the same way as the Vatican or the United Nations, the President's Council did take its work to be momentous and exemplary. In quite a deliberate fashion, the council took as its first order of business the task of rethinking the meaning and purpose of bioethics, giving focused attention to the extent to which bioethics is capable of—in their words— "securing human dignity." The stated goal of this initial work was to demand something more of ethics in relation to science generally, and biology in particular, so as to invent a form of practice consonant with that demand. To quote the first chair of the council, Leon Kass, the goal was to establish the terms and practices of a "richer bioethics."3 The metric of that richer bioethics would be human dignity.

In the third place, and perhaps most significantly, as of the early years of the twenty-first century, bioethics had become a trading zone within which human dignity was being rethought and reconfigured. Human dignity had, over the course of the last decade of the twentieth century, increasingly been invoked as a principal mandate and guide for ethical and regulatory interventions into a growing array of bioscientific endeavors. This broad use of dignity, however, had generated a number of basic conceptual and practical blockages: attempts to connect human dignity to the objects and practices of the genomic and postgenomic life sciences served to problematize the term's previous meanings and uses. On the one side, this problematization produced conceptual stasis and philosophical fragmentation. Yet on the other side, despite such stasis and fragmentation—or even by way of such stasis and fragmentation—the phrase "human dignity" continued to circulate as the object and objective of an ever expanding catalogue of possible practices. One outcome of all this is that prior conceptions of human dignity and the practices

connected to them began to be retooled and put to work in the name of problems that were ostensibly similar to those in relation to which the term previously had been defined. That is to say, if human dignity was said to be at stake in biology and biotechnology, this was assumed to be the same object of care that had been put at risk by sovereignty and secularism. The upshot is that the meaning and function of human dignity as a central object of ethical concern was put to work in relation to a new problem, and, thereby, its hermeneutic and politically moderative capacities were put to the test and ultimately reconceived.

The President's Council on Bioethics is one particularly important site at which the logic of human dignity was taken up as the object of focused work on the relation of human worth and the biotechnical body, a site at which a concerted effort was made to design, develop, and carry out practices calibrated to this archonic logic. Where the Vatican offered designs for ecclesial equipment in relation to the problem of interpreting the meanings of the modern world, and where the United Nations offered political equipment in relation to governmentality and sovereign nations, the President's Council offered designs for ethical equipment for work on the relation of the human body to the emerging life sciences and their technologies.

In both of the first two cases I argued that, for different reasons, human dignity was conceived according to a particular ontology: the archonic. With the President's Council the archonic is once again characteristic, as I will show. And, like the first two cases, the reasons for figuring the human as archonic are likewise distinctive. In Gaudium et spes human dignity is conceived as archonic in response to the demand that the church's magisterium be put to work as an instrument of pastoral care for the modern world. Human dignity, in turn, was defined by way of a supernatural call constitutive of human nature. In the Universal Declaration human dignity is archonic by way of a series of procedural exclusions. Human dignity is formulated as that object of care which speaks for itself in such a way that it need only be recognized and declaimed. In the work of the President's Council, or, at least in the council's early work, human dignity was conceived as archonic by way of another shift in the mode of reasoning: the council was faced with the challenge of demonstrating an inner connection between the problem of human worth, the nature of nature, the character of contemporary biotechnology, and the problem of security. As I will describe, this configuration of variables changes a bit in the council's later work. But what the council's work on and with the figure of human dignity demonstrates throughout are the difficulties and tradeoffs attendant to thinking about and trying to define human dignity in relation to the material body and the materiality of science.

In bioethics generally, and in the President's Council specifically, the appeal to human dignity during the early part of the twenty-first century was figured in such

a way as to require bioethicists to take up both types of equipment examined in the previous cases—the hermeneutic and the moderative—connect them, and give them cooperative form. In the first place, the attempt was made to establish an interpretive framework through which the relative differences and correspondences between the essence of things human ("the truly human," as the council put it) and the goals, practices, and contexts of biotechnology need to be discerned. In a fashion similar to the Vatican, the challenge is something like "reading the signs of the times" so as to evaluate those signs according to a naturalized conception of the truly human—humans are called to be human, and science cannot be allowed to upset or violate that syllogistic dictum. In the second place, an attempt was made to situate human dignity in a position of critical adjacency to the apparatuses of government. In a fashion not dissimilar to the United Nations, the members of the President's Council were quite deliberate in fashioning a conception of human dignity as that which ought to moderate and inflect the practices of government. The members of the council embraced the notion that they were "not politicians" and were therefore free from the pragmatic constraints of government. Despite this, a politics of human dignity was nonetheless put forward as capable of modulating existing modes of governmental reason. To this extent human dignity, once again, was put forward not so much as an external constraint on governmental practice but as a point of self-limitation; human dignity was put forward as that object whose nature needs to be taken account of in the governance of science: the nature of human dignity will indicate to us whether our practices really can deliver the goods we think they can. Unlike the United Nations' declaration, in which human dignity is connected to the goods pursued in the exercise of state power, the President's Council on Bioethics put forward human dignity as an object and an objective of ethical intervention into contemporary scientific spaces as well as into the economic, academic, and political spaces in which biotechnological goods are promoted and pursued. In this sense, despite their refusal of identity with politics, the members of the PCBE put human dignity forward as crucial to the art of governing science. So the first point of significance is that the President's Council formulates human dignity in an ontological mode consistent with figurations at the Vatican and the United Nations.

The second point of significance is that the President's Council, from an analytic point of view, attempts to articulate and bring together hermeneutic and moderative practices similar to what we saw elaborated in *Gaudium et spes* and in the Universal Declaration of Human Rights. An important clarification needs to be made here. Given these parallels, an obvious question is: to what extent did the members of the President's Council draw on or otherwise model their efforts on discourses and practices that originated with the United Nations and with the Vatican? On a simple level the answer has to be that the uses of human dignity formulated

in these venues had to have had some effect on the council's deliberations, given their scope and importance. That being said, the extent to which one could draw direct explicit links to the formulations from these other venues is not an easy one to answer. One would need to take a more carefully historiographical approach to the question. For my purposes here, it is enough to recognize that the work of the PCBE can be thought of as taking place within a durational problem space shared with the Vatican and the United Nations: like these previous venues they problematized human worth through the language of dignity with the aim thereby of turning human dignity into an object of practice for the inflection of power. No doubt the PCBE would not have proceeded the way they did if human dignity had not been enshrined in these other venues, but there are no linear lines of conceptual or pragmatic inheritance that can be drawn between the efforts of the council and these previous events. This is, in part, because there are multiple intervening developments that shaped the council's work. In addition to prior efforts to define human dignity, the council would simply not have taken up the problem of human dignity the way that it did if not for the debates in the United States and elsewhere over human embryonic stem cell research; the attempt to connect those debates to the abortion controversies, and thus to draw American evangelicals and Roman Catholics into a shared political orbit; the rise of the biotechnology and pharmaceutical industries as major forces in the development of the biological sciences; the completion of the first stage of the human genome project; the widespread belief that DNA holds the secret to human identity; the increased profile of bioethics in public life; and the attacks of September 11, 2001, and the subsequent attempt to connect bioethics to a rhetoric of security. So, though one can find rather direct points of connection between the formulations of the Vatican and the United Nations and the thinking developed by the President's Council and its members, the influence of such points of connection cannot be disentangled from other events.

Hence, to take once again Foucault's advice offered in relation to other significant "intersections between jurisdiction and veridiction"—and this is the third point of significance—"I do not think that we need to look for—and consequently I do not think we can find—the cause" of how and why the President's Council took up human dignity in an archonic mode. We need to pay close attention to the range, influence, and interactions of the multiple conditioning factors in play. We must be willing to refuse the terms of what might be cast as a "Kantian analytics," in which the goal is to identify necessary conditions of possibility. The goal, rather, is to examine these reconfigurations of human dignity as the actualizations of possibilities among others. These are contemporary events, which is to say that although constrained and formed by the recent past, they are also characterized by a measure of irreducibility in relation to that past. Perhaps it can be put this way: the

aim of analysis, as I am pursuing it here, is not simply the discovery of the conditions of possibility for how human dignity has been figured but to characterize what has been made actual. In this way, my analysis might facilitate the further work of giving form to new possibilities. In this manner, the stakes of inquiry consist in diagnosing the logic according to which distinctive modes of thought and practice have been and are being produced, so as to discriminate the forms they have taken, the capacities and incapacities of those forms, and how they are continuing to shape contemporary life.<sup>8</sup>

Having said all this, it is obviously important to keep in mind the fact that the past does weigh on the present, even if not to the point of overdetermination, and much of the material in this chapter will be genealogical. The ramifications of Vatican II and *Gaudium et spes* continue to shape contemporary Roman Catholic bioethics in direct and explicit ways, both in the United States and elsewhere. The United Nations has worked to formally connect developments in both genomics and embryonic research to the Universal Declaration on Human Rights. And members of the President's Council spent time as prominent figures in both of these other venues. In this sense the conditioning effects of the Vatican's work on human dignity, as well as the United Nations' work, can be said to have had a rather straightforward influence on the work of the President's Council.

Genealogical analysis of these ramifications and connections would no doubt bring to light other significant dimensions of the contemporary problem space. Such historical analyses free up thought and multiply contingencies precisely at those places where historical or anthropological constants were most expected. The problem today, however, is different from those taken up under what one might call a mode of "the history of the present." The problem today is precisely that the concept of human dignity and the equipment associated with it has simultaneously been put in question while continuing to be mobilized in ever more diverse problem spaces. During the 1990s and 2000s bioethics was exemplary in this regard. It is in view of this mobilization and remobilization, as well as the conceptual and pragmatic breakdowns that accompany the use of human dignity in bioethics, that I have selected the particular cases in this book. I think that these cases not only tell us something about the way in which the figure of human dignity has been fashioned but also something about the shaping effect of particular conceptual and pragmatic circumstances on this work of figuration, and the interdependencies among human dignity, the venues in which it is thought and rethought, and the equipment that has been proposed as a means of turning human dignity into a practice. The work of the President's Council, like Vatican II and the United Nations, is worth exploring in this regard.

So, to put it more concisely: this third case will provide a brief and schematic ac-

count of the rise and formalization of federal bioethics in the United States and will mark the particular shifts introduced by the President's Council's work on human dignity relative to that history. My account will describe modes, objects, and objectives of ethical practice that were taken to be strategically appropriate to previous developments in biology and medicine and that were subsequently made generally normative for the practice of bioethics. A first goal is to establish a set of analytic contrasts. The President's Council attempted to move beyond what Leon Kass and other influential members cast as the perceived shortcomings of prior bioethical modes by trying to demonstrate the externalities and critical limitations of those modes—that is, showing what they leave out as well as showing the cost of such exclusions. Whatever one makes of the council's work and the ramifications of that work, it is worth taking seriously the fact that in rethinking the practice of bioethics, both in terms of the formulation of ethical obligations as well as activities and capacities, the council attempted to discern what a "bioethics commission" is and what it is not, as a venue capable of facilitating the governance of science. Moreover, council members attempted to understand what the price to be paid is when these limitations are overlooked, underappreciated, or overstated. This is really what was taken to be at stake in the quite deliberate, systematic, and sustained self-constitutional work of the President's Council on Bioethics. Their stated worry was that the objects, modes of reasoning, and jurisdictional practices of bioethics had become dangerously insufficient. Something more was demanded from power. Hence a proposal for a different bioethics: one centered on human dignity.

Looking toward the concluding portions of my inquiry, I signal once again what I take to be at stake. The stakes of my analysis are not altogether dissimilar to those articulated by the President's Council—though their first-order aim of defining human dignity so as to care for it can only be said to be my own if it is recognized that I want to take up a second-order relation to what they have done. I think that the deliberations of the President's Council (and my analytic deliberations too, for that matter) form part of what constitutes human dignity today. To cite Rabinow again: representations are social facts, mine no less so than the President's Commission.9 I also think that today it is time to put to the analytic test the functions and limitations of prior modes of ethical reasoning and practice, the truth claims produced by those modes, and the equipment connected to them, again, my own as much as others'. My aim is to diagnose the logic and limitations of human dignity, understood as archonic, not so much to embrace or denounce those limitations but to situate them as part of the historical event of human dignity. This means, among other things, getting clearer about the logic and effects of the archonic as it has been mobilized in new domains and connected to new practices. In this way one might be prepared to study the fashion and extent to which other ways of thinking about

things human, and other modes of care, might be given form and opened up as a result of the contemporary ramifications of the stated goal of caring for human dignity.

#### BIOETHICS AND BIOPOLITICS

Since the 1960s, concerns regarding the capacity of the life sciences to understand and cope with the ethical and ontological ramifications of their own developments have been brought to articulation by an increasing number of actors, individual and institutional. Speaking schematically, we can say that working through a series of events, problems, and venues from the 1960s forward, these actors began to connect their concerns to a discrete number of topics and thereby began to consolidate their work, eventually creating regularized and authorized genres of discourse and practice. By the mid-1970s "bioethics" as a term and as a specialized domain of practice had been formally and institutionally situated alongside biology and medicine, and the bioethicist had been authorized, alongside the biologist and physician, as a specialist in thinking about the meaning and worth of health, the body, science, and technology.<sup>10</sup>

In this section, I will review how these early bioethical formations developed, stabilized, and shifted. Proceeding in a manner that is no doubt too schematic and linear, and therefore that risks oversimplification, I will examine three bioethical "ensembles" or "assemblages," each consisting of events, problems, and venues in which the question was posed and reposed of how it is bioethics should be practiced and of how the norms of bioethical reasoning should be institutionalized and put to work in the world. The three ensembles that I will examine are (1) efforts to think through and establish mechanisms for protection of human subjects of research in the 1970s, (2) developments connected to the human genome initiatives of the late 1980s, and (3) responses to cloning and embryonic stem cell research in the 1990s and in the first decade of the twenty-first century. My examination will be relatively brief given the scope of each of these three assemblages and given that there is already a large collection of work devoted to these three ensembles. My goal is to specify enough about each ensemble to throw into relief critical shifts in the modes, objects, and objectives of bioethics—shifts that preceded the work of the President's Council and in relation to which the council often tried to distance itself. I will spend more time on the first ensemble than on the other three. The reason for this relative weight is that several members of the President's Council, Leon Kass in particular, picked out the developments connected to human subject research as the bioethical "other" in relation to which they called for new practices grounded in the defense of human dignity.

Throughout this section two points of orientation should be kept in mind. The first is that although bioethics is occasionally discussed as if it were a timeless domain with stable and self-evident objects and objectives, it is—as is true of many disciplines today—a heterogeneous and contested collection of practices, institutions, and actors. Bioethics first coalesced around a specific number of problems and situations, and its initial methods and modes were elaborated accordingly. Its practitioners and institutions have since had to deal with a range of new problems and circumstances and thus have had to rethink core practices regularly.

The second point of orientation is that the rise to predominance of human dignity as a term in bioethics has been neither inevitable nor straightforward. No doubt those who have worked to enshrine human dignity as the centerpiece of bioethical reasoning would disagree. It is true that since World War II the idea of dignity has frequently been set forth not only as an a priori limit on the moral and political excesses of scientific practice and as an anchor point for the elaboration of new, ostensibly more ethically sound, modes of practice.11 What is more, as I tried to show in regard to Vatican and the United Nations, human dignity had already been conceived as immanent, absolute, and universally obligatory.<sup>12</sup> Accordingly, the invention of hermeneutic and protectionist equipment had been in the works for at least several decades, and the effects of that invention, and the concurrent institutional transformations, had been felt globally.<sup>13</sup> Many in bioethics had made the concept of human dignity central to their work from the earliest days of bioethics forward, especially those connected to Catholic traditions of moral theology. The President's Council on Bioethics is distinctive, and its work is unprecedented in bioethics, however, insofar as it was the first federal bioethics commission for which the protection of human dignity was put forward as a founding and defining mandate.

#### ENSEMBLE I: HUMANS AS BIOMEDICAL SUBJECTS

In the United States in the 1960s, serious discourse about the ethics of biological and biomedical research began to move from informal channels of communication among researchers to more formal and public interactions between select biologists, doctors, and philosophers and theologians. These formal interactions consisted primarily of conferences and published articles, the details of which have subsequently been catalogued by several of the major players involved.<sup>14</sup> The early conferences were especially crucial to what would be the formalization of a new scholarly field: by the 1970s the early participants, most connected to elite academic circles, began the arduous work of learning to adjust and remake settled practices of problem specification and modes of thinking and engagement, with all such adjustments en-

tailed in terms of self-formation, overcoming blockages, and the eventual creation of new forms of expertise and authority.

Assessing these early developments in quite general terms, it is fair to say that at the outset no one was equipped to deal with the questions being posed, which ranged from the moral salience of using artificial organs, to how to prioritize recipients for transplantation, to the meaning of death. The capacities needed to deal with these questions needed first to be invented and then put to the test. The theologians involved, most of whom, initially, were Christian, concerned themselves with discerning the extent to which developments in biology and medicine raised genuinely new ethical and theological questions and hence the extent to which traditional theological resources and modes of analysis could simply be applied or needed to be more fundamentally reworked.<sup>15</sup> Philosophers, for their part, found themselves working in problem spaces where the stakes and constraints of thinking were by and large more pragmatic and instrumentally consequential than work conducted in other academic settings. Obviously philosophers had long been concerned with practical matters. But with the exception of those few philosophers who had had occasion to contribute directly to other political situations, most of the scholars involved had been intellectually raised on metaethics as part of the dominant trends in U.S. philosophy departments in the mid-twentieth century.<sup>16</sup> For the first time, to quote Daniel Callahan's rather pointed assessment, philosophers (among whom he counted himself) had to "say something about real life." The biologists and doctors arguably had to adjust most of all. They had to confront directly the limited resources within their own disciplinary traditions for conceptualizing questions of significance. In addition, they had the most to risk in terms of their established institutional authority by allowing nonbiologists and nonphysicians to help set the agenda. In short, the pragmatics and situational constraints of the ethics of biological and biomedical research required the cultivation of new capacities for everyone involved.

In the early 1970s, forums of interaction were regularized, and normative practices began to stabilize. One case of this regularization and stabilization stands out as particularly important to the genealogy of the President's Council: developments concerning biomedical research on human subjects. From the point of view of the council's work, early thinking about the ethics of research with human subjects was cast as definitive of the purposes and frameworks for moral reasoning that would subsequently become "bioethics." Said differently, when the members of the President's Council called for a "richer bioethics," they were, more or less, referring to bioethics as it was formulated in response to the problem of human subjects research. In this light, I will outline elements of these prior developments that did, in

fact, become characteristic of a major segment of institutional bioethics, elements that members of the PCBE, its chair Leon Kass in particular, took as exemplary of its limitations.

Several events mark off the problem space in which the ethics of research with human subjects took form. Particularly consequential were the revelations of deception and exploitation that characterized a series of government-funded biomedical studies. Of these the Tuskegee Alabama syphilis studies had particularly catalytic effects on the formation of bioethics, and they have since come to stand in for the dangers of nonregulated medical research. Prior to 1972, when a *New York Times* story about Tuskegee first broke, a number of researchers and philosophers had thought about, and published articles on, the question of how research with human subjects should be conducted. Likewise, prior to 1972, there was a history of the regulation of such research, particularly in the wake of the Nuremburg Trials. But research with human subjects became a political problem of a different caliber once the *Times*' story was published. Where the ethics of the conduct of research with human subject had been taken to be a question for the scientific community, it now received sustained governmental and public attention.<sup>18</sup>

The Tuskegee studies began in 1932 and lasted until they were framed as matter of ethical crisis and violation in 1972. The purpose of the study was to understand the "natural history" of syphilis in untreated patients. The studies were by no means secret. They had been sponsored by the U.S. Public Health Service. The studies targeted over six hundred black men, mostly poor and mostly uneducated. The men involved were never told they were involved in a study of syphilis, never told they had syphilis, and never told that their conditions were treatable. As a result, not only did the men suffer unnecessarily, so did their partners and children.

As I noted in the Diagnostic Excursus, the term biopolitics has been made to circulate widely in academic venues, and as it has been used to explain such a broad swath of objects and events, there is some risk of analytic imprecision attendant to taking it up. Biopower can easily explain nothing by explaining too much. Keeping this in mind, carefully defined, the term biopolitics does seem to apply to the kind of power relations and veridictional practices characteristic of the Tuskegee affair. These power relations were characterized by a willingness on the part of researchers to let certain population groups die in the name of helping others to live. Indeed, when the principal researchers in the study were called to account for their work, the benefits to "society" were put forward as the justifying rationale. This tradeoff, made in the name of public health, was ultimately taken to exemplify the moral deficits of a bioscientific mode of research that takes no account of the effects of research on the individuals directly involved. What came to be seen as particularly nefarious in all of this was that the bioscientific claim to generating health seemed

to have no intrinsic principle of self-limitation, other than what might be needed for the technical design of a successful study. As I noted in Chapter 2 with regard to governmentality more generally, biopower only finds its limits in the nature of the object and the ends of power: one only knows one has intervened too much or too little when one fails to achieve the amelioration of the health, wealth, or security of the population.

The affective response generated by the media coverage in 1972 was shock and outrage, exemplifying the changing American political ethos. The justifications offered up by public health officials for the Tuskegee studies were strongly countered by a mix of claims that the researchers had violated the subjects' common humanity and civil rights. The *New York Times* story emphasized that "human beings" were made to serve as "guinea pigs." The expression of outrage was compounded by the fact that the studies had been tracked by individuals in relevant research communities through published results for almost half a century and had regularly been reapproved for ongoing funding. The tone and affect of the *Times* report was crucial to how the politics would subsequently unfold: it connected the treatment of the Tuskegee men by the U.S. government to widespread repulsion over Nazi medicine. The fact that the deception and exploitation of the Tuskegee studies had been justified in the name of public health at the cost of the individuals involved tightened the affective ties of this connection.

Other studies, such as research with mentally disabled children at the Willowbrook State School in Staten Island, who were intentionally given hepatitis, were cast in the same moral light as Tuskegee. The revelations and their framing helped catalyze efforts, already underway by members of the U.S. Congress, to form new oversight bodies dedicated to the ethics of research conducted with federal funds. The most meaningful of these proposed bodies were government bioethics commissions. The first commission would finally be established in 1973: the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, or "the National Commission," as it was subsequently called. Among other things, the National Commission was designed and brought into being to transform the affect of outrage and betrayal into practices of ethical analysis and regulation.<sup>20</sup>

The work of the National Commission proved to be crucial to the founding of bioethics. It constituted the first serious attempt by the U.S. government to establish ethics as a formal part of the government apparatuses concerned with the biological sciences. Previously, the U.S. government's involvement in the creation of bioethical apparatuses had been limited and ad hoc. Questions pertaining to the appropriate conduct of research had certainly circulated through the internal channels of individual funding agencies, but these informal practices only began to be

formalized when Walter Mondale held congressional hearings, in which he (unsuccessfully) called for the formation of a President's Commission on Health Science and Society. Teddy Kennedy likewise sponsored senate hearings, which focused particularly on the question of research on human subjects and fetal research.<sup>21</sup>

A question circulated throughout these early efforts: to what extent should biomedical research be subjected to oversight and regulation in the name of goods beyond those of health, and if so, which goods, and what would be the price, scientifically and politically, of such oversight? The Mondale and Kennedy hearings included a parade of elite biomedical researchers arguing that both public health and U.S. dominance in research would be compromised if mechanisms were created in which nonmedical specialists were given power to intervene in research. "Bioethicists" from newly created research centers at Georgetown University in Washington, D.C., and the Hastings Center in Hastings, New York, also testified. These scholars recounted a litany of ethical problems that nonregulated research had produced. If scientists emphasized the goods of maximizing health and accelerating U.S. wealth, bioethicists emphasized the rights of individual persons and vulnerable communities.<sup>22</sup>

In the end, these hearings, along with the growing public outcry over Tuskegee and Willowbrook, intensified the demand for a distinctive kind of venue capable of connecting ethics and the regulation of biomedical research. The practical question continued to be: what must a bioethical venue, constituted as a government commission serving in the executive branch, be capable of doing? One initial answer was that such a commission must be capable of formulating "principles" that could be transformed into "regulations" that could, in turn, interface with the potential goods of scientific research. Such potential goods were framed by Senator Kennedy as consisting primarily in "society's demands for the advancement of knowledge" and "the rights of its individual members." What he meant by either "society" or "the rights of the individual" was not yet clear. The challenge, in any case, was to establish a venue capable of inventing bioethical equipment indexed to the goods of research and public health as well as the well-being of the individuals participating in research.

In 1974, Public Law 93-348 created the National Commission to take up the task of sorting out the terms of this challenge. The congressional mandate specifying the responsibilities of the National Commission, however, had the effect of overdetermining how the members of the commission might go about their work. <sup>24</sup> Among other things, the commission was asked to identify the criterion or criteria according to which ethically "favorable" research on human subjects could be discerned from unfavorable research. It was expected that this would be done by discerning those principles that underlie research with human subjects when it is done ethi-

cally and by formulating mechanisms for reforming research in view of such "immanent" principles.

One culmination of the commission's work was the publication of the so-called Belmont Report.<sup>25</sup> The report had lasting effects. The principles it enumerated became standard for bioethics and were taken up and recirculated in research centers and authorized publications: if the principles laid out in the report began as principles for the conduct of federally funded research on human subjects, they became principles of bioethical thought and practice per se. This legacy, on one level, is surprising given the pains the authors took to be quite context specific in their design of the report. For example, the commission members actually delayed answering the question of which principles should be enshrined in regulations for their first three years of work so that they could work through a series of specific cases of abuses of research subjects—for example, research with children, with prisoners, and with the mentally handicapped. The general principles articulated in the report, in short, were formulated through a careful meditation on the specific contours of the research domains that would be regulated through the use of those principles.

In the end, the Belmont Report offered three principles for research, which, in turn, were connected to three regulatory practices thought to be appropriate to existing scientific and institutional practices. The principles were: respect for persons, beneficence, and justice. The practices were: the requirement of informed consent, risk/benefit assessment, and the just selection of the subjects for research.<sup>26</sup> The philosopher Stephen Toulmin, a member of the commission, summarized the challenge at the heart of the commission's mandate in this way: "the central question is how to reconcile protection of individual rights with fruitful pursuit of the collective enterprise."27 No doubt this is right—up to a point. How to reconcile a competing set of goods was indeed the core problematic. But more needs to be said, particularly in light of how human dignity would later be mobilized. The central question might also be put like this: Who is the human figured as a subject of research? And, what needs to be done to care for that figure of the human? Framed this way, this question has three principal components, which form a single anthropological grid: first, the human needed to be defined; second, research needs to be defined; and, of course, the relation between them needs to be defined.

The first question: what is the human as a subject of research? The first answer: the human subject of research is a person, strictly speaking. <sup>28</sup> This means that the human as the subject of research is not only a biological body or a statistical member of a population—although the human must be these as well for biomedical research to proceed. Likewise the human is also not just the subject of health and vitality—although the practice of cost/benefit analysis suggests that this way of thinking about things human must be a predicate of research as well. So, in addition to being

addressed as a biological body or part of a vital population, the human must also be an individual person. The history of thought on the ethical meaning of person-hood since Kant need not be rehearsed here. It suffices to say that, among other things, the person is that figure of *anthropos* defined by the capacity for and right to reasoned autonomy, reasoned self-rule. The research subject is therefore cast by the National Commission as an individual capable of making informed choices.<sup>29</sup> So, in answer to the question "what is the human as a subject of research?" the first answer is that it is not just a biological body or part of a living population. The subject of research is also a person on whom research must only be conducted after a reasoned choice has been made to participate in research. A certain anthropological heterogeneity is in play, which needs to be tolerated and sustained—the human is a body, part of a vital population, and also a consenting person.

If the human as a research subject is a consenting person, the human is also a figure and subject of justice. 30 Research subjects are selected for inclusion in research and can be selected more or less justly. The outrage over Tuskegee, after all, was not only expressed in relation to the fact that human persons were deceived, though it was certainly this. It also was expressed in relation to the fact that the humans who had been deceived had been picked out for exploitation because they belonged to groups with less access to power. Anthropologically it follows that in the Belmont Report the human is not only an individual but also a member of specific collectivities. These collectivities are themselves vulnerable to the excesses of power exercised through science.<sup>31</sup> The report not only called for practices of informed consent but also for the just selection of research subjects. Justice and personal freedom are put forward as mutually balanced principles in the Belmont Report, and the two are not arranged in any kind of hierarchy, either ethical or anthropological. Perhaps this goes without saying, but the fact that the human is a figure of justice and not only a figure of reasoned autonomy is often overlooked in accounts of the work of the National Commission. For example, Albert Jonsen, a commission member whose writings have become a standard reference on the history of these events, recounts the arguments several of the commissioners put forward concerning the human as person, but the human as a concern of just selection is left more or less underexamined.

In any case, with regard to the question "what is the human as a subject of research?" the answer is that it is not just a biological body or a member of a vital population, but, in addition to these but without excluding these, the human is a person on whom research must not be conducted until that person has made a reasoned choice to participate, and the human is also a member of collectives that must be included or excluded from research on the basis of just access. What counts as ethically sound research, it is taken to follow, is not just technical breakthroughs

and medical advances. It is research that constitutes itself in reference to person-hood and justice.

Again, an anthropological heterogeneity: the human is conceived as a single object constituted of elements of heterogeneous scale and quality (individual persons and vulnerable collectives, as well as biomedical bodies and vital populations). This anthropological plurality is perhaps not surprising given the philosophical and political constraints within which these matters were taken up. As Jonsen put it, work on the commission, with its deadlines, diversity of members, and policy stakes, required a certain tolerance for theoretical indeterminacy as a means of facilitating practice. In this it differed from the consideration of the human in the constitutional work of the President's Council, as we will see.

So, the first element of the question—what is the human as a subject of biomedical research?—is a consenting person and, potentially, a member of a vulnerable population. This is the figure that needs to be protected from abusive research practices. But if bioethics is going to care for this human as a subject of research it must, of course, be capable of answering the question: what counts as research? What kind of goods are at play in research? How might these goods be understood such that it is clear what is at stake relative to the human who is the subject of research?

Jonsen, in recounting the commission's history, makes a point, to which he does not give very much attention but that concerns a matter proving to be quite significant. The point he makes is that when the National Commission took up the task of defining what constitutes "research," they "implicitly abolished the long cherished distinction between therapeutic and non-therapeutic research."32 Jonsen reminds his readers that in other key works, such as the Helsinki Declaration, and even in other National Commission documents this distinction had been central. In the Belmont Report the question of whether or not the human needs to be protected from research does not turn on the distinction between therapy and nontherapy. Rather, the question turns on the goal of "the generalization of knowledge." Why is this significant? First: in the first major publication of the President's Council, this will be reversed. For the President's Council, the question of research and protection will once again involve the distinction between therapy and nontherapy. Human dignity, as the council considers it there, requires this distinction, as I will show. Second: emphasis on the "generalization of knowledge" places the weight of ethical concern on a balance between the direct goods and rights of the individual person and the goods that can be derived more broadly beyond the individual involved. This metric of balance, which proves vital to the commission and their heterogeneous anthropology, does not appear in the council's work on dignity; balance will not be an approach commensurate with the logic of dignity.

The question follows: what are the goods of research, and, relative to the indi-

vidual subject, do they come at too high a cost; where does this balance lie and what does it consist in? The commission's answer—which is framed as the definition of research—involves making a connection between the practice of cost/benefit analysis, the definition of research, and the free participation of the subject. Let me quote the definition: "'Research' designates an activity designed to test an hypothesis, permit conclusions to be drawn, and thereby to develop or contribute to the generalization of knowledge (expressed, for example, in theories, principles and statements of relationships). Research is usually described in a formal protocol that sets for an objective and a set of procedures to reach that objective." What is the objective of research? It will certainly vary from protocol to protocol, but if it is to count as research, it will include at least the goal of contributing to the generalization of knowledge. What is it then that the subject needs to be protected from? Paying too high a cost for the benefit of generalizable knowledge. A contrast is made between the direct goods received by the individuals involved and the generalizable goods of scientific knowledge, and that contrast is figured as requiring balance.

Now, the third element: the relation between the human subject and research. The first question is: what is the human? The second: what is research? The third is: how should we understand the relation between the human and research such that we know what to do? Several years before the National Commission took up its work culminating in the Belmont Report, a study of human experimentation was organized by the American Academy of Arts and Sciences. As a result of this study, quite a famous article was produced and published by the philosopher Hans Jonas, in which Jonas attempts to lay out how the goods of research and the figure of the individual could be interfaced as a balancing of goods.<sup>34</sup> All of the commission members were familiar with Jonas's essay.

Jonas puts in question the notion that social and individual goods and rights exist in an ethical asymmetry of kind and not only degree. He argues instead that the individual should be thought of as the site of rights as well as freedom and that science should be thought of as a means by which goods are produced. The goods of research are melioristic whereas the rights of the individual are obligatory. The challenge in his view is not to pick one over the other but rather to interface them appropriately. And what does he propose? Very briefly put: if the pursuit of science is not a right but rather a means of generating goods, then its pursuit is not a matter of obedience but rather is a matter of the exercise of freedom. This is Jonas's point of emphasis: "participation in research must be seen, in all its aspects and for all participants, as an exercise in freedom." It follows that "Society cannot infringe on individual rights for the production of its future goods." What society means here is not clear, except that it is obviously a domain of goods distinct from the rights

and freedoms of any specific individual. The thing to be noted is the frame by way of which Jonas takes up the problem. Research on humans as subjects is, in the first place, a juridical matter consisting of rights and freedoms. The challenge: how do these limit scientific research? They limit research only in that science must proceed on the basis of the exercise of personal freedom. We might say that utility must result from the gratuitous exercise of the free individual.

So, if the relation of the human person and research is a matter of the exercise of freedom, if it is a matter of creating a situation of proper balance between not two kinds of goods but rather between rights and goods, what kind of ethical practices does this call for? No doubt several kinds of mechanisms might have been put forward as possible answers. But in line with the congressional mandate, the report offers multiple principles. The human is that thing characterized by multiple and heterogeneous truths and goods: the human is a person of consent, a member of communities prone to justice and injustice, a biological body that can be studied, an element of vital populations whose health can be normalized. There is a kind of elective affinity or even correspondence between this multiplicity and the multiplication of principles. Multiple principles are advanced as metrics according to which judgments can be made about which research programs are to be pursued and how they are to be pursued. On an equipmental level, then, what is needed? Something like a hybridization of principalism and casuistry. On the one hand, how do we know subjects are protected? Informed consent. But how do we know if consent is informed? We must review protocols. How do we know research will be beneficent? We must calculate anticipated benefits and costs. And so on. The point is that the relation of the person and research is mediated through the use of principles that, in a case-by-case fashion, will balance the multiple goods and truths bearing on the human as a subject of research.

The multiplication of principles generates two outcomes. The first is the production of a mechanism according to which favorable biomedical research could be discriminated from unfavorable. This means that the principles enumerated had a double status as both givens (these are the principles that underlie good research) and as objectives (research must be done in this way in order to be good). The principles, then, are metrics of discrimination. The point is not that they function to put research in question, per se. Nor are they designed to make research thrive scientifically. Rather, they are a recalibration of the terms according to which research could proceed, and could proceed as both useful and legitimate. This means—and this is a second aspect—that the mode of bioethical reasoning and practice called for was not one that would stop research per se. Nor was it a matter of establishing a hierarchy of standards whereby the "real" or "good" goal of research could be used to

trump other purposes (for example, the rights of the individual or the social goods of science). The multiplication of principles functions as a practice of discrimination and balance, as instruments of limitation and as well as reorientation.

Broadly speaking it is not surprising that the commission's work centered on persons and the exercise of principles. It was, after all, carried out largely through the guidance of the philosophers on the commission, all of whom had been trained in liberal philosophical traditions (the inclusion of justice is a bit more surprising in this regard and can be attributed as much to the insistent work of Commissioner Karen Lebacqz and the affective effects of Tuskegee as to any other factor<sup>36</sup>). As I pointed out in Chapter 3, and as is well known, since the seventeenth century the individual as a juridical figure, as the site of fundamental rights and freedoms (whether these are endowed by God, nature, reason, etc.), has been invoked as an external limitation on the otherwise nonlimited aims of biopolitical reason. Keeping in mind that biopolitical reason continued to thrive in the postwar years through the venue of the welfare state, it is nevertheless the case that important points of resistance formed at precisely those points at which biopolitics was taken to have become paroxysmal and excessive.<sup>37</sup> That resistance was sometimes articulated in terms of the inner logic of governmentality (for example, government has done too much because our sciences were wrong, our implementations too hasty, and the like). But it was more often articulated by way of the appeal to a metric and an ethical outside. Human dignity was one of these. The judicial figure of the person as the bearer of rights and freedoms was another.

The work of the National Commission is distinctive in this regard. The multiplication of principles operates not by way of setting the absolute and essential against the variable and normalizable. The challenge, keep in mind, was not how to establish the outside limits of research but how to orient research according to the nature of the object at play and at risk, that is, the human subject. The human person is not a conception of things human that sets fixed limits on scientific practice. This is crucial to keep in mind. With the exception of attention to the just selection of research subjects, no a priori limits were placed on research. Rather, variable limits were set. Further, the standard of variability is an ensemble of principles: respect for persons, beneficence, justice. Unregulated research was taken to be vulnerable to the excessive exercise of power. And the standard for determining what counts as excess was obviously not limited to technical success. Rather, the individual person was put forward as that which can make a reasoned choice to limit the power relations embedded in the drive of scientific research by choosing not to participate. However, the human person can also choose to give herself over to the objectives of research. The person marks one passage point through which research can proceed and proceed legitimately. A kind of parallel was created between judicial figures and biopolitical figures of things human: on the one side persons and communities, on the other bodies and populations. This parallel allowed for the principle of balance to be a mode of ethics by way of which the biopolitical was not undone but rather reconfigured. In this way the individual person, conceived as both the object as well as freely consenting threshold of medical research, is perfectly capable of simply reproducing rather than limiting or balancing out the biopolitical. As figures of biomedical research and participants in health care, subjects of research, as any number of sociologists have shown, are positioned such that the only choices that are allowed to count as reasonable are those that conform to the goods of governmental reason—the amelioration of populations and the measured delimitation of that amelioration.<sup>38</sup>

The point here is that emphasis on the human as a consenting person, at the level of the design of ethical practices, is a significant fact that must be accounted for. A range of formative practices are made to follow from it. The form of the relation between ethics and biology is calibrated to it. And this form will have a certain functionality, certain outcomes, and, of course, certain limitations. In order for it to do what it does, it must forgo other possibilities. The biopolitical understood as the normalization of the social is put alongside of a juridical rationality centered on the person. The excess of events such as Tuskegee is not taken to call for absolute or fixed limits. It is taken to call for the variable limits predicated on informed consent and just selection. Bioethics as a practice involving the identification, articulation, and application of principles is made to be a way of producing a space of scientific practice and governmental regulation capable of balancing a set of goods and aligning those goods through the play of mutual production and limitation.

Jonsen points out that, in the end, the person as the object of ethical concern is as much a logical predicate of a certain ethical practice as it is an actuality. If we were to analyze the actual practices and situations that unfolded in relation to this emphasis on this choosing person, we might indeed find vectors for the reproduction of the "neoliberal subject," as the sociologists warn us we will, and hence very little real delimitation of biopolitical reason. But on one level that would be beside the point: at the level of design and the level of the invention of bioethical practice, in the face of a specific problem and a specific mandate, the human person needed to be not so much a given, an actuality—although it was certainly taken to be these—so much as a logical condition for the promotion and regulation of a specific set of goods and practices. The human person in research was the object and objective of ethical work.<sup>39</sup>

Let me return to the question of human dignity for a moment in order to track the trajectory of my analysis. If the conception of the human at stake in human subjects research is the human as person, and if the defining characteristics of the human person are reason, freedom, and participation in particular communities, then it appears perfectly consistent that the ethical practices advocated by the commission, practices suited to the existing infrastructures of biomedical research, consisted in informed consent and just selection. In this problem space and under this metric, such practices can be cast as both urgent and necessary, affectively suited to the conditions of excess to which the commission was, indirectly, addressing itself: there cannot be another Tuskegee. It is also clear how these practices could be reconciled with the goods of research: research must pursue the ends of generalizable knowledge, but only if it passes across the threshold of an individual's consent to participate. Autonomy, self-rule, must be assured in the course of research. This means that a certain anthropological multiplicity is accepted: the human can be treated both as a biomedical object and as a person.

Now, this calculation will change considerably with human dignity—a different result following from a different problem space and different metric. The charge for the President's Council, as we will see, will be a familiar one, one that has now been circulated for years in relation to biomedical controversies such as abortion: what is life such that it should be protected? What is dignity as a marker of human life? If the answers to those questions involve an archonic figure of the human, if the defining characteristics of things human are essential, self-justifying, and commanding, then the question will again be: which ethical practices must follow? But those that follow will be those issuing from the command of dignity. Human essence will be that which cannot be violated and must be protected. And that essence will no longer be autonomy. Even the person will not be allowed, cannot be allowed, even by way of its free and consenting personhood to violate the archonic. The archonic, after all, is not autonomous. It is nomic. It commands, but it does not rule or protect or otherwise care for itself. It is not autonomous, and so it must be vigilantly guarded. What is more, because it is essential and primordial, the archonic does not tolerate any kind of anthropological multiplicity as a strategy of balancing principles and practices. If research violates it in any way, it must be categorically rejected. We can begin to see here why the distinction between therapy and nontherapy will matter to the President's Council: the question will become "which forms of research violate the archonic?" It might be said with regard to the ethics of human subject research that the modes of power in play are characterized as a balance of the juridical and governmental. The question that will tacitly be taken up by the President's Council will be whether or not the modes of power are sufficiently pastoral.

#### **HUMANS AS GENOMES**

In the late 1980s, human genomics was made to be the major focus and concern for bioethics. In the United States, the biggest government-funded research project

in molecular biology, the Human Genome Project, as a condition of funding, included a designated percentage of funds to be dedicated to "Ethical, Legal, and Social Implications." As a bioethical problem space, genomics was not really a matter of human subject research. As such, in major publications, conferences, and commissions the problem of the human person as the object of ethical analysis and concern began to recede from view. Of course it did not disappear from view, and questions of genomics, personal identification, and the consenting of genetically related populations would continue to form a major part of the work and concern of professional bioethicists. But the question of experimentation with human subjects, the question of consent, the specter of paternalistic medicine, and the question of the just treatment of population groups would be dealt with through more or less stable institutional apparatuses, such as Institutional Review Boards. However, on one level with genomics the person is no longer the central object of concern. The protection of the person is no longer the only, or even in some cases, the principal objective. As such, the modes and forms of practice that are elaborated as pressing or appropriate are no longer predominantly calibrated to the balancing of personal freedoms and social goods. Or, to be more precise, while much of the infrastructure of bioethics continues to frame most problems as though they were questions of balancing freedoms and goods, a different set of questions indexed to a different figure of the human will begin to show the limitations of that prior framing and the infrastructures attached to it.

So, what was at the center of this inflected problem space if it was not the human subject? It was the problem of human essence, now taken up as the question of the genome. On both biological and ethical fronts the object of thought, intervention, and care was not exactly "the human" or "humanity." It was something closer to "humanness." Past ethical anthropologies and practices were taken by many to be insufficient to the prospect, and provocations introduced by genomics cast it as the science that would "read the book of life." A rather wide range of new bioethical formulations and solutions were proposed for how to move forward.

Of course the problem of human essence was far from new. To paraphrase what Jean-Luc Marion has said of his own work: one studies the human precisely because the human is that animal who has long been a mystery to itself. Indeed, even the problem of human essence in connection to the genetic sciences had a fairly long history prior to the genome projects. The theologian Karl Rahner called for caution in face of the "new powers" of molecular engineering during the buildup to the debates over *Gaudium et spes*. <sup>40</sup> The challenge of trying to understand things human in terms of essences obviously has a long and venerable, if discontinuous and fraught, history.

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With genomics, however, something distinctive happened relative to this history. The blockages and difficulties were singular to the extent that the question was not exactly "what is the human?" or "what is human essence?" but rather: to what extent is the human, in its essence, a genome? And what should and should not be done in light of our answer to this? In what way is the genome a synecdoche for things human, found in its most essential form? Paul Rabinow put it rather nicely when he wrote that for more and more people around the world genomes are taken to "contain precious information that tells the truth about who they, and their pets and plants and food, really are and provides clues to what their future holds." The question is: how did genomics become a matter of human essence, and how did this reconfigure bioethics?

As with other significant conjunctures involving shifts and recombinations of thought and practice, contributing factors could be proliferated at length: the rise of the biotech industry, the insertion of global capital into the life sciences, innovations in computational technology, and the like. In all of this three factors stand out. First, the event most obviously central to this problematic was the proposal and funding of the Human Genome Project (HGP). The project was carried out over the last decade of the twentieth century by an international consortium of publicly funded labs led and coordinated by the United States but involving labs from many other countries. By 1998 the public project would have a private competitor, Celera, led by Craig Venter. 42 Using different technologies, and each imbued with a different ethos, the competitors nonetheless shared two central goals. The goal was to determine the sequence of the three billion base pairs that make up the DNA in the human chromosome. The second was to determine the position and spacing (that is, map) of the so-called expressed genes in the human body. These first two goals were basically technology challenges. The problem was creating and coordinating computational technology and facilities. It was widely expected (or at least widely proclaimed) that realizing these two goals would catalyze a revolution in the molecular biosciences generally and biomedicine in particular. 43

The second factor was the rhetoric of essentialism, which imbued political debates about the stakes and significance of the project from the outset. 44 This rhetoric took many forms but almost always centered on the question I have already noted: to what extent is the genome the essence of things human and indeed the essence of all living things? The question was circulated, if tacitly, by those promoting as well as those challenging the project. Certain phrases and mantras appeared with increasing frequency: the genome as the "code of codes," the "book of life," "the blueprint" of human nature. This last was a particular favorite of the directors of the Human Genome Project. Writing in 2001, near the end of the project, Director Francis Collins offered an extended metaphor that exemplifies the notion that the

human genome was the essence of humankind: "It's a history book—a narrative of the journey of our species through time. It's a shop manual, with an incredibly detailed blueprint for building every human cell. And it's a transformative textbook of medicine, with insights that will give health care providers immense new powers to treat, prevent and cure disease." In the years since the end of the first phase of the project, the rhetoric used to assess the significance of the genome has taken on a decidedly more modest tone. Whatever the genome projects delivered, it was not the "code of codes," at least not in the essentialized and determinative sense that the early breathless rhetoric implied. The accomplishments of the projects were significant to be sure, but to paraphrase Sidney Brenner, it was the end of the beginning for genomics and certainly not the secret to life.

It bears noting that, as critics of genetic essentialism pointed out all along, the idea that the genome was the essence of human life was clearly a dubious one even to the biologists. It was well understood that there is no overly deterministic causal line running from the human genome, understood as the full complement of genetic material, and the full range the physiological aspects of human life. Genetic material, whatever its significance, does not overdetermine who we are in any strict sense. In February 2001, when the findings of the Human Genome Project and Celera Genomics were concurrently published, the broader scientific community was surprised to discover that the human genome contains roughly thirty thousand genes; a far cry from the numbers predicted just years earlier. Among others, the network scientist Albert-László Barabási noted at the time that the worm C. elegans has twenty thousand genes and only three hundred neurons whereas "our extra 10,000 genes have to account for the billion nerve cells present in our brain."46 It was, as it were, not all in the genes, which was obvious to biologists but not to those listening to them. Nonetheless—and this is the crucial point here—those promoting the Human Genome Project as well as the critics of genomic and genetic intervention largely framed the terms of the debate as a question of discovering or protecting human essence. Even those who reject the notion that the genome was definitive were still caught by and in this framing. This meant that the ethical question at the center of things, basically from the outset, was whether or not the human is in essence a genome, and what needs to be done about it.

The third factor in connection to all of this, as I've already mentioned, was the creation of a massive bioethics component connected to and funded by the Human Genome Project: the Ethical Legal and Social Implications project. ELSI was far larger and better funded than any other bioethics project to date. The goal of ELSI, obviously, was to consider what the range of nontechnical implications of the genome projects might consist in. ELSI was created essentially through a political deal made between Senator Ted Kennedy and James Watson, then the director of

the HGP. The deal was that 3 to 5 percent of the overall HGP budget, which at the outset was three billion dollars, would go to ELSI, to be distributed to ethicists, legal scholars, and others to think about and produce work (research papers, policy recommendations, PBS videos, and so on) telling us what the implications of research might be. The word "implications" was crucial and defining. A second side of the deal between Watson and Kennedy was that the ethicists would do their work basically outside and downstream of the biological research. Those working on the ELSI grants could have regular interaction with genomic researchers, but the ethical research itself did not have any upstream role in shaping the scientific agenda.

Not surprisingly, the better part of the questions raised by the ELSI scholars were not new. As Eric Juengst and Al Jonsen, among others, argued at the time many of the core issues presented by the genome project had been thought about in other settings. Indeed, these issues had been a core part of bioethical discussions of genetic research and engineering at least since the publication of *Splicing Life* by the President's Commission in 1982. \*\*Splicing Life\* in fact detailed many of the themes and problems that would form part of the core list of topics for the first phase of ELSI grants. Among these were a set of very specific concerns, including governmental oversight, public education, genetic screening and diagnosis, and somatic cell intervention.

Also included in the report was a discussion of what Jonsen called the "amorphous and vague feeling that we can do things we have never done before and that we may change the human species for the worst." This amorphous feeling was articulated as a concern that geneticists were "interfering with nature" or intervening on "the sense of personal identity" or as concerns over limits to "the malleability of human nature." Which is to say that Splicing Life did in fact put on the table, in a rather serious and direct way, the question of genetic science and the essence of things human. But Jonsen and Juengst overstate the similarity of the Human Genome Project and past work on the ethics of genetics insofar as the ethos and institutional situation within which this was all developing was distinctive. In familiar usage, ethos refers both to "an accustomed or cultivated venue" as well as "capable ethical practices." The space of practice at the interface of bioethics and the cultural venue of the genome projects was not at all that of genetic engineering in the late 1970s. 49 Practices, capacities, expectations, and conceptualizations had changed. There is no doubt that, philosophically speaking, the questions posed with the Human Genome Project had been posed before. But those questions had never been catalyzed and structured by the persistent and globally spread specter of what Ted Peters has called the "gene myth." That is, the notion that genomes "contain precious information that tells the truth about

who they, and their pets and plants and food, really are and provides clues to what their future holds."50

#### HUMANS AS LIFE

With the Human Genome Project we see a shift in bioethical emphasis from humans as subjects of research and the excesses of biopower to an emphasis on the problem of human genomes as essential and defining. Speaking broadly and schematically we can say that another shift takes place with human embryonic stem cell research. With stem cell research other problems and questions are taken up as particularly urgent, with another set of objects and objectives. Again, as with genomics, the point is not that other questions and objects disappeared entirely, nor is it that the issues and debates connected to stem cell research are radically new. Rather, the point is one of emphasis, ethos, and the focus and form of practice.

In the November 6, 1998, issue of *Science*, James Thomson and his collaborators from the University of Wisconsin announced that they had successfully derived human embryonic stem cells (hES cells). The announcement was accompanied by two ethically significant pronouncements. The first was that derivation of hES cells represented a revolutionary step in the treatment of degenerative diseases. The cells offered the potential of permanent repair of failing organs—"regenerative medicine" as it was coined. The prospect of regenerative medicine, as one researcher framed it, was styled as constituting "a totally new value paradigm for clinical therapeutics." The second pronouncement came from the U.S. Conference of Catholic Bishops, given as testimony to the U.S. Congress several days later. Because hES cell research entails the destruction of the embryo, the bishops pronounced the research morally illicit. The therapeutic potential of the research represents a "good end" pursued by way of "an evil means." Embryonic stem cell research must be judged "fundamentally wrong." The means were considered evil, of course, because the destruction of the embryo amounted to the destruction of human life.

Although the debate over stem cell research has proliferated ethical positions, in the United States questions amounting to a tradeoff of lives cared for between the embryo and the patient remained central, until the creation of so-called Induced Pluripotent Stem Cells more or less took the need for the disaggregation of embryos off the table. As debate over this tradeoff unfolded and intensified, differences of political consequence among "human life" as an object of ethical concern and "human persons" or "human nature" or "human essence" began to show themselves. These various figurations had previously circulated in something of an interchangeable fashion in talk of bioethics, but with the problem of human life, particularly when

articulated as the question of the moral status of the embryo, the differences among these became a matter of pressing concern.

Two words of background. The first scientific. Human embryonic stem cell research is ontologically significant, as is by now well known. It is a basic biological truism that all cells come from cells, as Rudolph Virchow first asserted in the 1850s. The large majority of the cells in the human body are, as it were, highly differentiated and developmentally fated. This means that they have highly specialized functions within specific systems and limited life spans determined by a certain number of cell divisions. When embryonic stem cells were first derived they constituted a class of cells that are neither developmentally fated (they are, as the biologists put it, "pluripotent"), nor do they die off after a certain number of divisions (thus, the infamous designation that they are "immortal"). The point is that, given these particular ontological features, many researchers, particularly in the response to Thomson's successful derivation, believed that embryonic stem cell research would bring about a revolution in medicine. Degenerative diseases would no longer need to be treated through the rather temporary measures of intervention and symptom amelioration but might be susceptible to regeneration. All that was needed, we were told, was the ability to direct and manage the capacities of stem cells.

A second fact about stem cells concerns the ontological status of the early embryo. In order to derive stem cells, the early blastocyst needs to be destroyed. This destruction revealed something ontologically interesting: embryos not only have the potential to become babies; they also (or at least their same cellular material) have the capacity to produce cells that might save the lives of patients. For supporters of embryonic stem cell research, this ontological variability was a matter of relations and a matter of hope. It was a matter of relations in that Thomson et al. discovered that when placed in a medium other than the inside of the blastocyst, the cells of the early embryo exhibited capacities that they would never have exhibited if either left in a Petri dish or implanted in a womb. It was a matter of hope in that, given these remediated capacities, the lives of patients suffering from degenerative disease might be saved.

Hence the second background point. For at least two decades prior to the derivation of stem cells the Roman Catholic magisterium had been thinking intensely about the status of the early embryo. This was done first in relation to the question of abortion, then in relation to in vitro technologies. In the course of this work a number of positions were established that became theological and ethical precedents for evaluating stem cell research. Among the work produced was *Donum Vitae*, which directly addressed the question of the moral status of the embryo, and it did so with frequent reference to the Pastoral Constitution *Gaudium et spes. Donum Vitae*, however, introduced a consequential shift in terminology. In *Gaudium* 

et spes the question of human dignity was developed in relation to the human as individual on the one hand and as the community of humanity on the other. Human dignity was a matter of this relation human—humanity. With the embryo, neither individual persons nor communities appeared to be at stake. As such, the question of the human as a "unified totality" of body and soul, and that which is called in its nature to union with the supernatural, had to be transposed from the object "human person" to the object "human life." One of the subtleties of the early stem cell debate that was often overlooked by proponents is that the position staked out by the Roman Catholic magisteria, a position echoed by other Christian groups, was never that the embryo is a human person. It is that the embryo is a human life.

The shift that took the arguments of Gaudium et spes and applied them to the embryo does not need to be rehearsed in detail. It should only be mentioned that at the core of the matter were two propositions. First is that Donum Vitae defines human life as a union of the mother, father, and a divinely implanted soul. Second is that this union shows itself in a natural and self-directed tendency to union with God. Donum Vitae postulated that, although biology could never tell us when the soul is implanted by God, it does tell us that in the union of the gametes a novel genome is produced. It also tells us that this genome naturally directs the embryo down a developmental pathway toward personhood. This means that both origin and goal of the human are genetically united, in the broad sense of genetic as the unfolding of potentialities. The genome is a kind of proxy and image of the archonic. Of course, under closer scrutiny neither biological proposition really holds the philosophical weight put on it. Genomes are not always novel. And genomes do not direct the embryo in any strictly "self-directed" fashion; interactions with the mother's body are vital to the fetus's formation. Be this as it may, Donum Vitae, although drawing on arguments from Gaudium et spes, shifted the site of human dignity to human life as a kind of biological minimum.<sup>54</sup>

Certainly the question of the status of the embryo was not the only question in play. As I mentioned, any number of positions, questions, and framings were set on the table. But, much like the question of the person in human subject research and the question of the essence of human life in genomics, the problem that came to dominate the stem cell debate centered on which form of human life should be saved: the life of the embryo or the life of the patient. The common object and objective in this was biological life. Was it licit or not to disaggregate the early blastocyst in the name of saving the life of patients?

One of the more prescient insights of Professor Leon Kass, of the University of Chicago, was his diagnosis of the state of affairs in biotechnology and bioethics as they were being transformed by the stem cell debate.<sup>55</sup> He noted that the problem became not just an ontological or metaphysical matter proving or disproving the

moral status of the embryo but a political question of which form of life ought to be made to live. Kass's assessment may not have accounted for the variety of discursive positions taken up in the debate over stem cell research, but it proved consequential on two counts. First, in rather neat terms, Kass summarized the principal blockage point at the level of political and ethical practice in the stem cell debate and connected this blockage to quite a specific bioethical object and objective. Second, Kass took the state of affairs in the debate over stem cell research to be exemplary of contemporary bioethics more broadly. Whether or not Kass's generalizations were warranted was certainly debated. But they nonetheless served as a central rationale in his efforts to constitute the President's Council on Bioethics as a venue that would focus its bioethical efforts on the care of human dignity.

### THE PRESIDENT'S COUNCIL ON BIOETHICS

Three shifts of problem space and three shifts in mode of practice: the problem of human persons and the social good of research taken up as a matter of balancing principles; the problem of the nature of human essence taken up as a matter of opening or restricting research downstream of the human genome; and the question of the worth of forms of life, addressed as the protection of the embryo or the amelioration of the patient. With all of this in mind I pose again the question raised in the introduction to this chapter: what changed with the President's Council on Bioethics? The answer is presumed in my selection of it as a case: what changed is that human dignity was made the central matter of concern. But human dignity was already circulating in bioethics. The Vatican responses to stem cell research had invoked dignity. The U.N. declarations on genomics and cloning connected human dignity to the life sciences. So why focus on the President's Council? The answer is that the council, in a manner comparable to both the Vatican and the United Nations, figured human dignity as both the object and means of their selfconstitution. The effects of that figuration, as measured by a legacy of perpetuation and proliferation, however, proved quite different.

It is worth rehearsing the immediate circumstances within which the President's Council was created. Three elements are relevant. The first is that, four years after the first successful derivations by James Thomson, research on human embryonic stem cells was nowhere close to delivering on its core promise: to revolutionize medicine. Researchers were not surprised by this. The prophets of revolution had anticipated a long road from the outset. What this means is that the question of the medical worth of the research remained open and hotly contested.

The second element is that embryonic stem cell research had proven to be at least as significant politically as medically. By 2001—the year in which the President's

Council was formed—embryonic stem cell research had been given a place alongside abortion and evolution as a political and moral litmus test among a certain religious segment of U.S. voters. What this meant, among other things, is that in the first year of George W. Bush's presidential administration, stem cell research became a first order of business. His administration asserted that his political base as wanting immediate action on the restriction of federal funds for embryonic stem cell research, research that had been funded under the previous administration.

In August 2001 Bush gave his first significant policy address. It was on stem cell research. In that address he stated that he wanted his policies to "foster and encourage respect for life in America and throughout the world." At first glance, of course, this position does not seem at all surprising. It appears to reinforce a connection between stem cell research and abortion politics. But what makes it unexpected was that Bush did not appeal to the moral status of the embryo, or at least not directly. Rather, he advocated limiting federal funding on the basis of the idea that stem cell research per se (and not only because of the destruction of the embryo) made human life vulnerable to devaluation by making embryos effectively available to commodification. In this way, he said, it made human life vulnerable to dehumanization (and again, not just because the embryo was taken to be a human life as such). In that same address the president announced the creation of his bioethics council, to be organized and chaired by Leon Kass. The executive order stated a central mandate: "fundamental inquiry into the human and moral significance in developments in biomedical and behavioral science and technology."57 It would only later become clear that Kass had, more than anyone else, shaped the mandate.

The third element that structured the work and development of the President's Council, and thereby the development of bioethics under the council, is on one level quite obvious but nonetheless almost always overlooked. That is to say, it is a factor that does not show up in assessments of how and why they attempted to change the objects and objectives of bioethics. This third element is the events of September 11, 2001. The attacks of 9/11 served as a political vector that changed, or at least deeply inflected, the stated rationale and problem space of most dimensions of governance in the United States. This includes bioethics. In the immediate aftermath 9/11, stem cell research was displaced from what had been a position of central public attention and concern for several years. In the ensuing months and years, the attacks and the security environment that they helped give rise to introduced two changes that bore on the commission's reading of bioethics. The first and most pronounced is that biosecurity emerged as a problem comparable to and connected to bioethics as a site of sustained concern. The second (and this is what I will focus on) is that the post-9/11 security environment inflected the terms on which bioethics could be justified. Indeed, security remains a matter of central concern for bioethics, as can be seen in the work of subsequent federal bioethics commissions. It has not, however, remained definitive, per se, except in as far as questions of "risk" are held up as especially pressing. In the case of the President's Council, however, its mandate, its initial composition, and its set of tasks were brought to articulation within and through a security ethos generated by 9/11.

The first meeting of the President's Council was convened on January 17, 2002. Leon Kass opened that meeting and inaugurated the work of the council with a statement summarizing his assessment of the state of affairs in biotechnology and bioethics therein.<sup>58</sup> He began by arguing that the stakes of biotechnology and bioethics and the stakes of a post-9/11 security environment are integrally connected. Of course, on one level his argument was a device, a rhetorical way back into the concerns of bioethics given a political situation in which security had been made the only matter of consequence. Kass acknowledged as much: "everyone today is paying attention to terrorism"; "the stakes of bioethics, which seemed so important only a few months ago, now appear to be less significant"; "resources have been diverted"; and so on. But nonetheless Kass's view of the connection between bioethics and security was quite serious and needs to be considered as such. It was not only a substantive proposal for the reconfiguration of bioethics; it also became an official articulation of the council's understanding of the difficulties and dangers of biotechnology today and the relative shortcomings of bioethics in the face of such dangers.

So, what was Kass's proposal? It began with an acknowledgment, which was not, as it were, a concession. Most think, he acknowledged, that in a post-9/11 environment the work of the bioethicist will be more difficult: resources and attention will be diverted, the familiar issues will seem to be relatively less significant, and energy for policy disputes over biology will dissipate in the face of the "real" problems of security. The events of September 11, he pointed out, not only turned attention away from stem cell research, which had seemed so pressing for so long, but had delayed the organization and animation of the President's Council itself, a delay that might be taken to indicate a diminishment of priority and concern for the place of bioethics in contemporary governance.

However, Kass asserted, things can be made to move forward differently, in a more relevant fashion, and the President's Council can help facilitate this difference. Kass proposed to his audience that the events of 9/11 had brought a "new moral seriousness" to the United States. He suggested that Americans had for too long been debilitated by an unthinking and easygoing "relativism." With 9/11, or since 9/11, Americans could again see "evil as evil." They have a "deepened appreciation of human finitude and vulnerability." He suggested that a kind of moral and politi-

cal fog had been lifted, which has had the effect of putting Americans in a moral frame of mind such that they will not only be able to recognize the evils, threats, and vulnerabilities of international terrorism, but also the evil, threats, and vulnerabilities presented by biotechnology. In the face of both the advance of terrorism and in the advance of biotechnology, a kind of alertness and moral vigilance is realized. This moral vigilance tells us that something fundamental is in danger that must be secured. And what is endangered? Our humanity. Or, as Kass put it, a "truly human" way of life. The post-9/11 ethos allows for bioethics to be carried forward with a new vigilance, a new object, and a new objective: the work of securing the truly human.

What warrants this diagnosis? Kass proposed that the life sciences and their technological powers constitute a threat, and he gravely suggested that the nature of that threat is not easy to identify. It is a subtle, ambiguous, and often hidden threat. Unlike terrorism, this threat is not obvious. Why so? "The evils we face, if indeed they are evil," are intertwined with a series of goods "which we keenly seek." Research, he stated, is pursued in the name of "cures for disease, relief for suffering and preservation of life," "commitment to compassionate humanitarianism," and "freedom of inquiry." All of this is, of course, good. That is, so far as it goes. So what is the problem with research and its array of goods? "The greatest dangers we confront in connection with the biological revolution arise not from principles alien to our way of life but rather from those that are central to our self-definition and well-being." This was the heart of Kass's provocation: the goods that we seek through medicine and science, goods we take to be definitive of our form of life, actually, and quite despite ourselves, put us in danger.

Kass insisted that the problem we face is not proper to biology per se. The problem that we encounter in biology and biotechnology is created and made to operate by the contemporary ethos within which technoscientific research has been elaborated. That ethos is market driven, oriented toward the mastery of nature, and characterized by the celebration of the individual. Actions and choices made by individuals, actions and choices made in the name of individual and economic goods, are likely to have aggregate effects that are both unexpected and tragic. They are unexpected because we think we are acting in the name of core goods. They are tragic because despite the fact that our motives are pure, the world fashioned through and by those motives will aggregate to self-destruction. The aggregate effect that Kass put forward and offered up as the central and defining concern of bioethics is the erosion of those things constitutive of "truly human" life. Biotechnological research, conducted in the name of otherwise good principles, is "taking us down the dehumanizing path toward a brave new world." We must be alert to the forces and practices taking us down this road and vigilantly steer another course. "Thus

just as we must do battle with the antimodern fanaticism and barbaric disregard for human life, so we must avoid runaway scientists and the utopian project to remake humankind in our own image."

So, the problem, the threat, for Kass is that free research, ramifying according to utopian images, is likely to culminate in the erosion of humanity. The problem for bioethics, then, is not, as it may have been with the question of human subject research, the balancing of the freedom of the person and the generalizable goods of science. And is not in this sense a matter of balancing the juridical and the biopolitical. After all, according to Kass, research is now a site of the exercise of freedom, the exercise of freedom in the name of both individual as well as corporate goods. The problem is that this exercise of freedom needs to be shepherded. Biotechnology is a pastoral problem. We cannot be allowed to remake humankind in the image of our individualized and immediate goods; such freedom is precisely what puts us in danger.

So who can shepherd us away from this slide down a dehumanizing path? The challenge must fall to bioethics. But what kind of pastorate is bioethics today? Can the apparatuses and practices of bioethics help secure us against the drive to remake humankind in our own image? The answer, of course, depends on what one takes bioethics to be. In his opening address Kass indicated two definitions. The first concerned a domain of problems, the second a form of expertise. Kass noted with evident pride that "very few" on the council were bioethicists of the "expert variety." Most members come to bioethics from other disciplines in order to engage a domain of problems that have a "supreme significance." These are problems constituted "at the many junctions between biology, biotechnology and life as humanly lived." The question, for Kass, was whether bioethics as a form of expertise was capable of inflecting the biotechnological sciences away from a dehumanizing path.

Following and inflecting a set of distinctions offered by Hannah Arendt, Kass then proposed a brief etymological exercise. He asked those in attendance, what is this "bio" in the term "bioethics"? It means "life," of course. Bioethics is the ethics of life. But what does the term life mean? The Greek bios, Kass went on, should be distinguished from the Greek zoe. Zoe is a term that designates life as such, animate or animal life. Bios by contrast is a term that designates a "course of life or a manner of living or a human life as lived." Animals, Kass concluded, have zoe. Only humans have bios, "life lived not merely physiologically but also mentally, socially, culturally, politically and spiritually."

Although not prominent in bioethics, the *biosl zoe* distinction had in other circles become a prominent one. Though first introduced by Arendt, the distinction was taken up by Giorgio Agamben and made the turning point of his assessment of biopolitics as the character of the age. The hidden truth about politics in the modern

world is that human life is subjugated to forms of power that target not "humans" as political animals, as Aristotle famously put it, not humans as animals with a *bios*, but rather humans as bearers of "bare life," animals reduced to *zoe*. The use of the distinction by Kass to define the stakes of bioethics was not altogether different from Agamben's. The "ethics of life," he stressed, must not be only a question of *zoe*, a question of preserving bare life. The "ethics of life" must be made a matter of *bios*, of life as humanly lived, a matter of life composed of mental, social, cultural, political, and spiritual and not only physiological affairs. Bioethics must take seriously the work of producing truth about life humanly lived—the *logos* of *bios*. In a strict sense, the life sciences must not be the only form of biology in play.

On Kass's rendering, the insufficiency and even danger of bioethics was that it had become an exercise in the *logos* of *zoe*. According to Kass's diagnosis, this had happened in large part through the debate over stem cell research. Both sides of the debate, as he framed them, had reduced the argument to the "life principle." The "life principle," he explained, presumes that what is really at stake in bioethics is the protection and preservation of life. Both those supporting and those rejecting embryonic stem cell research lay claim to saving human life. There are those who think that stem cell research saves the lives of patients. There are those who think that we must save embryos that would be destroyed if research continues. In both cases, a sort of sheer "vitalism" consumes bioethics. The question in the stem cell debate is not actually whether life is at stake. Everyone seemed to agree that it is life that is at stake. The question, rather, is *which life* matters most. As such, Kass concluded, the stakes of bioethical reasoning and practice have been made to devolve onto *zoe* and not onto *bios*. If it is really "life humanly lived" and not "life as such" that is under threat today, then bioethics in a vitalistic mode will not do.

Kass acknowledged that bioethics as shaped by the stem cell debate is not characteristic of all bioethics. But the "bioethics of the bioethicists," as he cast it, the ethical discourse and practices of those assigned the role of experts, will not help us any more than the polemics of stem cell research will. In a book published shortly after he gave his opening address, Kass argued that the bioethics of bioethicists cannot help us preserve a truly human way of life because they take as the object of their concern the figure of the human as a person. The object and objective of establishment bioethics, on this account, is the human as elaborated in the controversies over human subject research. This Kantian figure, as he described it, only bears on matters of reason, choice, and beneficence—the very goods he had insisted become tragic when attached to biotechnological research. Bioethics, whether of a vitalistic or personalist variety, cannot help us, according to Kass's diagnosis. Hence the need to reorient bioethics: neither the protection of life nor of persons will forestall dehumanization.

So, what is the way forward? All of this was prolegomena to a question: "How ought we to do bioethics and do it well?" In the first place, doing bioethics well would entail attending to "the deep character of human individual and social 'bio." In the second place, it would entail attending to how this "deep character" interfaces with "findings of biology and the technical powers they make possible." This presents a series of challenges that Kass will insist the council take up before proceeding to work on any specific case of biotechnical development: what counts as a truly human life? What is the relation of the truly human and developments in biotechnological research? What future is likely to unfold, in an aggregated and unexpected fashion, when the "truly human" is drawn into the space of biotechnology? And of course, what is to be done? How can the truly human be secured?

The first answer, which Kass only alluded to in his opening address but which would be elaborated in the course of the council's deliberations, is that bioethics must cultivate new forms of hermeneutical practice: the meaning of the human and the meaning of science need to be discerned. The second answer is that bioethics must cultivate instruments of reorientation. There is something not altogether different from a governmental logic in play: the goal of bioethics is to regulate science in the name of favorable and unfavorable outcomes. Such regulation should not be established on a juridical basis of rights and freedoms. The question is not whether science is legitimate or illegitimate. The question is: what is the nature of the object to be attended to, and what is the relative "naturalness" of the relations and practices that bear on that object? That object, of course, is the truly human. Science must be intervened on so as to produce futures in which the truly human is secure. A twist in all of this, and the basis for a claim to a unique capacity to care for things human, is Kass's suggestion that science can violate the truly human without really knowing it. It is in this light that Kass challenged the President's Council to (1) provide an account of the "truly human" so that (2) scientific practices can be evaluated as either contributing to or detracting from the human. As this challenge was taken up, the question would no longer be "does research contribute to generalizable knowledge?" but, rather, "is research a matter of therapy (that is, research that reinforces and sustains the truly human), or is it a matter of enhancement (research that risks taking us beyond the truly human and thus opening up the human to tragic violations and losses)?" The "truly human" will be summarized in the phrase "human dignity."

In a fashion not dissimilar to the Second Vatican Council and the United Nations, in his opening address, Kass proposed that bioethics (in my terms) must become a new kind of pastorate and that the President's Commission must become an exemplary pastoral venue. The object of the pastoral power exercised by bioethics will be the "truly human" articulated as human dignity. The challenge will be

to demonstrate the nature of truly human life so as to establish the terms of such a life in the face of biotechnological developments that might otherwise compromise it. Among other things, such violation will turn on the distinction of therapy and enhancement, a distinction that proves quite difficult to make given the frequent confluence between the objectives of healing and amelioration. The danger in all of this, he insisted, is that bioethics will not be up to the task. Neither a commitment to persons nor a commitment to life will be enough. What's more, it is precisely the attractiveness of these goods that might push biotechnology toward the path of dehumanization. If today biotechnology is both dangerous and tragic, so too is bioethics. Bioethics must take up a new mandate: the work of interpreting the truly human and the aggregate effects of science pursued in the name of other goods. Which is to say that the work of a new bioethics is to foster a pastorate of human dignity as that which must be secured.

Kass's opening remarks turned on a connection between terrorism and biotechnology. The two on some level are obviously not the same kind of threat. But the stakes in his framing coincide and the mode of practice called for coincides as well. There is a need for moral vigilance, and the challenge is to find ways of giving form to such moral vigilance. Kass proposed that security opens a zone in which a single task must be taken utterly seriously: "safeguarding the human future." If terrorism represents a threat to our humanity from without—an "antimodern fanaticism and barbaric disregard for human life"—biotechnology risks being a threat from within—a "utopian project to remake humankind in our own image." How ought we do bioethics and do it well? In such a way that we remain vigilant in our attention to possible threats to human bios. Both the "inhumanity of Osama bin Laden on the one hand and the post-human Mustafa Mond, Aldous Huxley's spokesman for the brave new world, on the other," challenge bioethics to safeguard "the good life, of humanization and dehumanization." The task of bioethics does not need to be the balance of personal freedom and social good, not the manipulation or protection of the genome, and not a vitalistic calculation. Perhaps all of these have their places, albeit secondary ones. The primary task needs to be to secure what is truly human. It is not incidental that Kass's title was Life, Liberty, and the Defense of Dignity. Working out the terms of such a defense was the constitutional task of the President's Council.