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THE FACE OF DIGNITY: PRINCIPLED OVERSIGHT OF BIOMEDICAL INNOVATION

Rhonda Gay Hartman*

I. INTRODUCTION

Human dignity is intangible, yet luminous. Like opening a window in a dark room, dignity enables us to see our selves intuitively, our existence and evolution. It illuminates our pathway into the future—a future unimaginable prior to bio-scientific innovations that challenge the formerly universal concepts of “human” and “person.” Sustaining human dignity for generations to come is an imperative.

Several generations ago, in a much simpler time, the Supreme Court recognized the struggle “to achieve human dignity in a society so largely affected by technological advances.” Far beyond the technological advances then confronting the Court, today’s bio-scientific innovations present the prospect of irrevocably altering humanity’s unique attributes and imperiling its essence, not by frontal assault, but by incremental approaches. Chimera and cloning

* Correspondence concerning this Essay may be sent to Professor Hartman at the University of Pittsburgh School of Medicine, hartmanr@pitt.edu, where she is affiliated with the Center for Bioethics and Health Law.

Engagements for discussing the ideas expressed in this Essay through interviews and presentations were graciously extended to me by National Public Radio, the British Broadcasting Corporation, and the Université Pierre et Marie Curie (Paris VI). I am grateful for the privilege to participate in this dialogue. It has enriched my thinking about dignity as far more than an eloquent expression. Dignity enables us—and engenders an intelligence that both inspires and inscribes the whole of humanity.

1. See JOHN RAWLS, A THEORY OF JUSTICE 44 (Belknap Press of Harvard University Press 1971) (“There is no reason to suppose that we can avoid all appeals to intuition, of whatever kind, or that we should try to.”).

research perplex us with problems of morality,3 scientific inquiry,4 constitutionality,5 and patentability.6 Dramatic advances in neuroscience7 in conjunction with the emergence of "neuroethics"8 are capturing public attention.9 Questions regarding "immortality" raised by nanotechnology and a research agenda for life-span longevity are inescapable.10 Among the challenges we face in this century are determining what it means to be human and how biomedical science should be guided so as to not fundamentally alter that meaning and the ethic of reverence underlying it.

Confronting these challenges requires a frame of reference for analyzing them. Developing a frame of

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10. See Daniel Callahan, Death and the Research Imperative, 342 New Eng. J. Med. 654, 654 (2000) ("Hardly anyone speaks openly of immortality as the aim, but that is beside the point; it is built into the research imperative."); Thomas Bartlett, The Man Who Would Murder Death: A Rogue Researcher Challenges Scientists to Reverse Human Aging, Chron. of Higher Educ., Oct. 28, 2005, at A15 ("[Gerontologists] shy away from talk about life extension or 'curing' aging and prefer to focus on keeping older people healthy for as long as possible, a goal referred to in the discipline as 'compression of morbidity' or 'healthspan.'"); see also infra notes 168-74 and accompanying text.
reference through which careful analysis yields thoughtful response is no easy task, but it is a necessary undertaking. Biomedical innovation captivates us; it also confuses us.\textsuperscript{11} It now compels us to not transform the human state in ways that disregard dignity. A conceptual framework centered on dignity can illuminate how we think about biomedical innovation and clarify its implications. This framework should guide biomedical advances and uses.\textsuperscript{12} Stated differently, dignity should be the star by which science and society steer, rather than the maypole around which ethical, policy, and legal issues dance after bio-scientific innovation has moved forward and been unleashed.

Although the Supreme Court has never explicitly held that a right to dignity exists, the language of its opinions solidifies dignity's role as a sacrosanct shield against derogating encroachments of humanity.\textsuperscript{13} This suggests that a dignity-centered framework is critical to overseeing biomedical innovation.\textsuperscript{14} By developing the idea of dignity and offering insights into dignity's importance in legal policy

\textsuperscript{11} See Alexander Morgan Capron, "So Quick Bright Things Come to Confusion," 13 AM. J.L. & MED. 169, 169 (1987) (drawing upon William Shakespeare's A Midsummer Night's Dream to describe "the remarkable fruits of biomedicine, from research to health care delivery, that have produced the rich harvest of ethical, social and legal issues that have drawn our, and society's, attention").

\textsuperscript{12} See Richard Horton, Rediscovering Human Dignity, 364 LANCET 1081, 1085 (2004) ("Taking account of human dignity as the over-riding requirement for a decent society might encourage us to reassess what we mean when we speak of improving global human health and advancing human development. The notion of dignity could prove to be a valuable catalyst for such a revision of thought.").


\textsuperscript{14} While I maintain that dignity should be developed as the basis for permitting or proscribing uses of bio-scientific advances, George J. Annas argues that, in order to "tame our tendency toward genocide and to prevent species suicide," international rules are needed against actions that threaten the integrity of the human species, such as genetic engineering, human/machine cyborgs, xenographs, artificial organs and brain alterations, all of which could fit "into a new category of 'crimes against humanity' in the strict sense." George J. Annas, The Man on the Moon, Immortality, and Other Millennial Myths: The Prospects and Perils of Human Genetic Engineering, 49 EMORY L.J. 753, 778-79 (2000).
analysis, this Essay provides a framework for contemplating issues presented by biomedical advances and considering whether a particular advance imperils essential aspects of humankind.\textsuperscript{15}

Moral thought and the ability to analyze and anticipate the future obligate the public to collaborate with biomedical science to direct and delineate the uses of innovation while preserving humankind's constituents.\textsuperscript{16} In discharging this obligation, our collective conscience should neither be antithetical to the benefits of scientific inquiry nor shirk the responsibility to preserve the constituents required for our species' survival.\textsuperscript{17} In other words, public deliberation is needed to supervise and steer bio-scientific progress that increasingly challenges what it means to be human.

This Essay highlights the importance of a dignity-centered policy analysis for biomedical progress by examining a revolutionary advance—transplanting a human face.\textsuperscript{18} Part II explains why dignity deserves attention by addressing its place in philosophy, public policy, and law. Parts III and IV discuss paradigms for personal dignity and dignity for

\begin{itemize}
\item \textsuperscript{15} See B.F. Skinner, Beyond Freedom and Dignity 54 (1971) (comparing the struggle for dignity to a struggle for freedom in its significance); see also Deryck Beyleveld & Roger Brownsword, Human Dignity in Bioethics and Biolaw 2 (2001) (concluding that "a defensible understanding of respect for human dignity is a challenge within practical (and particularly moral) reason"); Richard E. Ashcroft, Making Sense of Dignity, 31 J. Med. Ethics 679, 679-80 (2005) (contending that dignity is "worth exploring in more detail"); Horton supra note 12, at 1081 (suggesting a reconfiguration of dignity as "the study of social relations among human beings and the concepts and values that underpin those relations")
\item \textsuperscript{16} Emile Durkheim eloquently elaborated on this theme:

Thus, the antithesis between science and ethics, that formidable argument with which the mystics of all times have wished to cloud reason, disappears. To regulate our relations with men, it is not necessary to resort to any other means than those which we use to govern our relations with things; thought, methodically employed, is sufficient in both cases. What reconciles science and ethics is the science of ethics, for at the same time it teaches us to respect moral reality, it gives us the means to improve it.

\item \textsuperscript{17} See Paul Ramsey, Fabricated Man: The Ethics of Genetic Control 160 (1970) (foreboding "suicide of the species").
\end{itemize}
humanity. Part IV also illuminates the broader public policy challenges presented by biomedical innovations and why dignity must be central to directing their course.

Dignity denotes both reverence and reserve in this context:¹⁹ reverence for constituents distinct to our species, and reserve in moving forward with biomedical advances, particularly when uses could elementally change those constituents. An overarching inquiry of whether progress should be permitted or proscribed invites finely-grained scrutiny of whether and how a specific biomedical advance should be used.

II. WHY DIGNITY AND WHY NOW?

From transplanting embryonic stem cells into humans to transplanting human faces onto them, bio-scientific strides benefit us while potentially dispossessing us of essential aspects of our shared existence and survival. Put differently, how do we avoid becoming vulnerable to our own innovations?²⁰ Dignity is a compass by which to navigate biomedical progress. Dignity, the singular concept of universal human respect, provides a principled basis for analyzing the unprecedented challenges posed by biomedical innovation.²¹ Although some contend that dignity's ambiguity makes it unsuitable for analyzing biotechnological advances,²² such contentions fail to appreciate its enduring, innate

¹⁹. BEYLEVELD & BROWNWORD, supra note 15, at 9-47.


²². See David A. Hyman, Does Technology Spell Trouble with a Capital "T"?: Human Dignity and Public Policy, 27 HARV. J.L. & PUB. POLY 3, 18 (2003) ("[E]ven if some forms of technology could rightly be deemed 'trouble with a capital T,' human dignity is not an effective policy tool with which to attack that problem."); Ruth Macklin, Editorial, Dignity is a Useless Concept, 327 BRIT. MED. J. 1419, 1419-20 (2003) (asserting that appeals to dignity "add nothing" and that dignity can be eliminated as a concept in medical ethics "without any loss of content"). But see Ashcroft, supra note 15, at 681 (envisioning dignity as "a field of enquiry for some years to come" and concluding that "calls for closing it down as incoherent may be premature"); Horton, supra note 12, at 1081 ("[T]he concept of dignity cannot and, indeed, should not be dismissed quite so easily.").
quality in human existence. This suggests that dignity should not be dismissed prematurely; it, at least, deserves consideration as a potential basis of a normative regime to resolve unanticipated encroachments on the human species and on human rights.

The quintessence of human rights, dignity is a vague though powerful concept. It shapes constitutional rights, standards for bodily invasion, government-engineered classifications, judicial processes, and punishments. Dignity provides the touchstone for preserving one's reputation, and for protecting one's

23. See, e.g., Paul v. Davis, 424 U.S. 693, 735 (1976) (Brennan, J., dissenting) (recognizing "the legitimate expectation of every person to innate human dignity").


25. See OXFORD ENGLISH DICTIONARY 656 (2d ed. 1989); see also Delaware v. Van Arsdall, 475 U.S. 673, 697 (1986) (Stevens, J., dissenting) (quoting RONALD DWORINKIN, TAKING RIGHTS SERIOUSLY 198-99 (1977)).


29. See Deck v. Missouri, 544 U.S. 622 (2005); see also Bloom v. Illinois, 391 U.S. 194, 212 (1968) (Fortas, J., concurring) ("It is the progression of history, and especially the deepening realization of the substance and procedures that justice and the demands of human dignity require, which has caused this Court to invest the command of 'due process of law' with increasingly greater substance.").


32. See Gertz v. Robert Welch, Inc., 418 U.S. 323, 341 (1974) (holding that interests in reputation are at the core of human dignity); Rosenblatt v. Baer,
judgment regarding medical assistance. Not even the Commerce Clause exceeds its grasp, as the Supreme Court demonstrated by vindicating human dignity through economic channels.

Although dignity is central to the analysis of fundamental rights, the Supreme Court has never explicitly held that a right to dignity exists. The Court has invoked dignity largely in dictum when recognizing constitutionally protected interests against actions degrading to humanity. Nevertheless, the Court has made clear that dignity is more than mere incantation; its enduring place in law and public policy as a sacrosanct shield against derogating encroachments of humanity is undeniable. So widely accepted and well understood is dignity that it seems to defy definition.

It is sensible to think of dignity as self-evident. The scarcity of literature elaborating on dignity relative to its ubiquity in human rights discourse reflects this sensibility. Dignity—like liberty, privacy, and equality—is bandied about, invoked with platitudinous rather than pinpointed meaning. It defies precision and yet remains a steadfast

35. As biotechnological advances transgress boundaries of humankind, a right to dignity could be derived from several amendments found in the federal Constitution including the Thirteenth Amendment's guarantee against dehumanization whether from private or public action. For a constitutional analysis that extrapolates the Thirteenth Amendment's elasticity to another context, see Akhil Reed Amar & Daniel Widawsky, Child Abuse as Slavery: A Thirteenth Amendment Response to Deshaney, 105 HARV. L. REV. 1359 (1992).
38. Horton, supra note 12, at 1081 (referring to dignity's "linguistic currency" in advertising and "rhetorical device" in global health). "It is not surprising, perhaps, that some critics describe dignity as a meaningless slogan." Id.
virtue. Dignity unifies us as a species, transcending class and cultural divides. From this intangible virtue comes the tangible expression of moral values in a shared existence.\textsuperscript{40} One such value is that humanity is dignity.\textsuperscript{41}

Timeless philosophical inquiries of "what is man,"\textsuperscript{42} and how to prevent his abolition,\textsuperscript{43} irretrievable loss,\textsuperscript{44} or conceptual change\textsuperscript{45} are especially relevant. Although the human species is not static, components that distinguish humanity ought to be. Dignity's prevalent influence on human continuity and survival is immeasurable. Early philosophers wrote about dignity as both an empowerment and a constraint: humans have an intrinsic moral worth, and as rational beings we have a duty to safeguard this worth through abilities to reason.\textsuperscript{46} Imputed to us as members of the human species is a deontological responsibility for preserving and perpetuating dignity for one another.\textsuperscript{47} Contemporary writings capture this idea of humans' rational ability that gives rise to a collective conscience\textsuperscript{48} and articulates human good by framing long-term rational

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\item \textsuperscript{39} See Fort Wayne Books, Inc. v. Indiana, 489 U.S. 46 (1989) (stating that dignity's lack of scientific measurability makes it "no less real").
\item \textsuperscript{40} MARY WOLLSTONECRAFT, A VINDICATION OF THE RIGHTS OF WOMAN: WITH STRUCTURES ON POLITICAL & MORAL SUBJECTS 90 (Charles W. Hagelman, Jr. ed., Norton 1967) (1792) (assigning value "[t]o comprehending the moral duties of life, and in what human virtue and dignity consist").
\item \textsuperscript{41} See IMMANUEL KANT, GROUNDWORK OF THE METAPHYSICS OF MORALS 96-98 (James W. Elligton trans., Hackett Publishing Co. 1981) (1785).
\item \textsuperscript{42} See RENÉ DESCARTES, MEDITATIONS (Laurence J. Lafleur trans., Liberal Arts Press 1951).
\item \textsuperscript{43} See C.S. LEWIS, THE ABOLITION OF MAN (1947).
\item \textsuperscript{44} It is the human condition, to be disinclined to ascribe special meaning to something until it faces extinction. See GEORG WILHELM FRIEDRICH HEGEL, HEGEL AND THE HUMAN SPIRIT: A TRANSLATION OF THE JENA LECTURES ON THE PHILOSOPHY OF SPIRIT (1805-6) (1983).
\item \textsuperscript{45} FRIEDRICH WILHELM NIETZSCHE, BEYOND GOOD AND EVIL (Marianne Cowan trans., 1955) (1886).
\item \textsuperscript{46} See ARISTOTLE, NICOMACHEAN ETHICS 1178b5-30 (Terence Irwin trans., Hackett Publishing Co. 1985); KANT, supra note 41, at 96-97.
\item \textsuperscript{47} KANT, supra note 41, at 96; WOLLSTONECRAFT, supra note 40, at 39-92; see also HEGEL, supra note 44; FRIEDRICH WILHELM NIETZSCHE, HUMAN ALL TOO HUMAN (R.J. Hollingdale trans., Cambridge Univ. Press 1996).
\item \textsuperscript{48} Conscience and the ability to morally reason are also central to discussions about the relationship between science and religion. See, e.g., David Van Biema, God vs. Science, TIME, Nov. 13, 2006, at 48; FRANCIS S. COLLINS, THE LANGUAGE OF GOD: A SCIENTIST PRESENTS EVIDENCE FOR BELIEF (2006); C.S. LEWIS, MERE CHRISTIANITY (Macmillian Publishing Co. 1952).
\end{itemize}
Precisely because rationality and moral thought distinguish humans, dignity is central to analyzing biotechnological advances. Instrumental to this analysis are inquiries into whether and how these advances ought to proceed prior to altering essential aspects of humanity. This analytical task must not be left for another generation to develop when it may no longer be possible to do so. Facial transplantation raises the prospect of inalienably altering a vestige of humanity once considered inseparable and sacrosanct in shared existence—the human face.

Facial transplants are paradigmatic for considering why dignity should shape public debate and steer scientific progress. While facial transplants are revolutionary in treating disfigurement, they implicate a core of our shared existence—the face, which individualizes and humanizes us. Although visage, which is intrinsically connected with being human, has itself eluded inquiry, the very idea of transplanting faces now compels an inquiry guided by dignity.

III. DIGNITY FOR PERSONS

Unparalleled strides in biomedical science implicate dignity by blurring boundaries of personhood that give meaning to humankind. Those boundaries are transgressed not by bio-scientific ideas, but by the prospect of potentially permanent alterations to the essence of humanity. One

49. See Lewis, supra note 43; Rawls, supra note 1, at 424-33; see also Beyleveld & Brownsword, supra note 15; Ronald Dworkin, Life's Dominion: An Argument About Abortion, Euthanasia, and Individual Freedom (1993); Francis Fukuyama, Our Posthuman Future: Consequences of the Biotechnology Revolution (2002); Leon R. Kass, Life, Liberty, and the Defense of Dignity: The Challenge for Bioethics (2002); Skinner, supra note 15, at 54 (observing that literature about dignity "identifies those who infringe a person's worth, . . . describes the practices they use, and . . . suggests measures to be taken").

50. See Lewis, supra note 43, at 83-84; see also Leon R. Kass, Toward A More Natural Science: Biology and Human Affairs 37 (1985) (expressing our disorientation as to "where we are going" despite being technologically well-equipped).


52. See George J. Annas, The ABCs of Global Governance of Embryonic Stem Cell Research: Arbitrage, Bioethics and Cloning, 39 New Eng. L. Rev. 489,
such essence is the human face, a constant in our shared existence that until now had not been questioned.\textsuperscript{53} This is so because the face is often thought of as inseparable from our state of being.\textsuperscript{54} Like a headache or heartache, it is one's alone.

A face is inscribed with an inherent human dignity. It is the repository of personal particulars associated with image and identity, selfhood and self-perception.\textsuperscript{55} The face has, \textit{a fortiori}, a moral stature in our humanity.\textsuperscript{56} By individuating and humanizing us, visage exceeds fingerprints or DNA in differentiating us from one another.\textsuperscript{57} While qualities such as voice, presence, personality, or intellectual curiosity individuate and make us memorable, the value of a face is undeniable. Even a disfigured, featureless face individuates the life within.

Inestimable relief and respect for disfigured persons arguably justify continued advancements in facial transplantation.\textsuperscript{58} Given the symbolic value of the human face, disfigurement suffered by one person represents a defacement of humankind that resonates with many on a personal level.\textsuperscript{59} Research reveals the difficulty experienced by persons who relate instinctively, as if personalizing the condition, in response to seeing another's disfigured face.\textsuperscript{60} That many persons naturally avert their gaze from someone...
who is disfigured strengthens a bond of "fellow-feeling," thereby deepening a sense of shared humanity that is sensitive to another's suffering.

Facial transplants are intended for a select group of patients "with conditions that cannot be adequately addressed by conventional reconstructive surgery procedures," and promise revolutionary advances in repairing faces disfigured by disease or trauma. Surgeons harvest facial tissue from deceased donors for transplant onto disfigured persons. Present reconstructive surgical methods require multiple skin grafts taken from other areas of the patient's body, resulting in a mask-like appearance. Surgeons envision that transplants will lead to improved bodily functions such as closing eyes and facial expressions that communicate emotions and feelings, as well as enhanced aesthetic appearances. The first partial face transplant recipient demonstrates what pioneering surgeons have maintained—that the patient will neither look like her former self nor the donor, instead adopting a "hybrid" appearance.

Considering whether facial transplant surgery, a non-lifesaving medical procedure, affronts human dignity is critical for determining whether it should continue to advance—and, more importantly, how it should advance. Could it be used, and should it be permitted, as a step toward yet another purely aesthetic procedure? While facial transplants pose restorative promise for dignifying life, their unfettered use implicates myriad concerns regarding human dignity. These concerns may be clustered according to donor

61. NUSSBAUM, supra note 59, at 374-76.
64. See Okie, supra note 18.
65. See Petit et al., supra note 62, at 1429; FACIAL TRANSPLANTATION, supra note 63, at 330-31.
66. See Laurent A. Lantieri et al., Face Transplantation: The View from Paris, France, 99 S. MED. J. 421, 422 (2006); Petit et al., supra note 62, at 1430.
67. Okie, supra note 18, at 893; FACIAL TRANSPLANTATION, supra note 63, at 332.
A. Donor-Related Concerns

1. Donative Process

The removal of facial tissue suggests a metaphysical removal of a decedent's identity, coarsening an intimate component of human life.\(^6^9\) The visual, identifying tissue of a human face is deeply personal.\(^7^0\) Dignity is implicated for persons close to a potential donor; they may be ill at ease with donating the decedent's facial tissue.\(^7^1\) Inasmuch as family bonds with the deceased are linked to a comfort found in genetic similarity, removing the facial tissue deepens that sense of loss and possibly impedes the grieving process.\(^7^2\) Thus, surgeons' methods in approaching and engaging families in a donative decision-making process require careful consideration: the sensitivity to the personal loss must be balanced against altruistic donation so as to not erode public trust in medical morality and competency.\(^7^3\)

Additionally, possible perceptions of corpse mistreatment must not escape consideration. Corpse mistreatment, also known as mutilation, is recognized as a basis for legal recourse and imposition of criminal penalties in both statutory and common law.\(^7^4\) The Supreme Court likewise directed that dignity commands minimizing mutilation and distortion of the human body.\(^7^5\) From a donative discussion standpoint, bodily mutilation and dismemberment fears are the most difficult obstacles to overcome.\(^7^6\) Resentment and

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70. See id. at 20.
71. See id. at 27.
72. See id. at 29-30.
76. Margaret Verble & Judy Worth, Fears and Concerns Expressed by Families in the Donation Discussion, 10 PROGRESS IN TRANSPLANTATION 48, 53-
revulsion could plausibly result from any request of a family for their deceased relative's facial tissue; such a backlash could also galvanize sentiment against gifts of the body generally. Moreover, a surviving spouse or relative might conceivably assert an interest in how the tissue is used due to its personal, visual nature. Should survivors be able to insist on a "deserving" recipient, i.e., a good person? Those possibilities highlight the potential difficulties inherent in a donative decision-making process about facial tissue and the adequacy of tissue supply, especially given anecdotal findings that public support of facial transplants does not currently coincide with donative inclination.

2. Donative Intent

Unlike the "presumed" consent for tissue donation in several European countries, public policy governing organ donation in the United States prefers prior expressions of a donor's intent. This policy engenders dignity that is found in the meaning derived from personal decisions about gifts of the body. In the absence of previously expressed intent, families may decide whether to donate a relative's tissue. Yet the intimate nature of facial tissue—the personage it represents—suggests that only a donor's clear, pre-mortem expression of donative intent should suffice. Because the nature of donation is closely bound with one's persona and is powerfully symbolic of self-giving, the donation of facial tissue should result solely from the personal meaning found in this gift of the body.

54 (2000).


78. Charles Siebert, Making Faces, N.Y. TIMES, Mar. 9, 2003, § 6 (Magazine), at 34.

79. See Ohie, supra note 18, at 893.


81. See id. at 23.

82. See id. at 26-27.

83. See id. at 27.
Any removal of facial tissue for transplant purposes, absent evidence of the decedent's pre-mortem donative intent, arguably entails mutilation of the deceased that is degrading to human dignity. Social norms embodied in laws express reverence for human remains. \(^84\) Indeed, dignity's significance is universally understood in the treatment of human remains, and constitutes the common denominator amidst cross-cultural variance in acts demonstrating "last respects." \(^85\)

Although one prospective face transplant recipient surmised that donors "wouldn't lose anything," \(^86\) the loss, however non-tangible, is real. Removing a face, given its symbolic nature and the personage it represents, without previously expressed permission from the decedent, debases surviving dignity interests that translate to the living. \(^87\) The deceased's surviving interests in his remains merit legal protection. \(^88\) A dignitary property interest, for example, would afford post-mortem dignity beyond the legal fiction of protection provided by tort and criminal laws with regard to the sensibilities of survivors. \(^89\) Dignity, pre- and post-mortem, is not and must not be extinguishable or expendable; it must endure as the "proud hallmark of our law." \(^90\)

A closely associated though distinct question is whether donative intent should be broadened to include the reasons behind a donor's pre-mortem expression of donative intent. In other words, given the personal, symbolic nature of facial

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84. See id. at 19-23.

85. Compare In re Estate of Moyer, 577 P.2d 108, 110 (Utah 1978) (recognizing well-settled policies that a person, once buried, should not be exhumed absent compelling reasons, and that there should be a "reverent regard" for human remains), with David F. Salisbury, Giving Cannibalism a Human Face, EXPLORATION, Aug. 15, 2001, http://www.exploration.vanderbilt.edu/news/news_cannibalism.htm (arguing that post-mortem cannibalism can have positive meanings and motives based on culture and experiences).


87. See Hartman, supra note 53, at 27.

88. I have argued elsewhere for development of a property interest in dignity and identity apart from any ownership interest in objects, regardless of the perceived connection with us, in contrast to the position put forth by Margaret Jane Radin. See id. at 33-35; Margaret Jane Radin, Property and Personhood, 34 STAN. L. REV. 957 (1982).

89. Hartman, supra note 53, at 33.

tissue, should the donor's motivation matter? Altruistic motivation driving a decision to donate facial tissue to someone suffering with disfigurement suggests human dignity, in contrast to donation predicated on quietistic, thoughtless acquiescence. Dignity is found in a sense of service and spiritual rewards that improve others' lives and promote the common good. Facial tissue donation seems consistent with dignity and therefore morally justified when, following introspection and reflection, persons divine meaning in decision making about the nature of this donation. In this way, facial tissue donation translates beyond the donor to humanity, thereby reflecting the moral reasoning that distinguishes humankind.

B. Recipient-Related Concerns

1. Consent Considerations

A persistent concern is whether prospective patients, however willing, should be permitted to undergo invasive, risk-laden, non-essential procedures with uncertain results. While functional and aesthetic improvements are the clear aims of facial transplantation, less clear is whether those benefits can be achieved maximally. Requiring a person's consent prior to any surgical procedure is grounded in human dignity—personal decision making about bodily integrity must be respected.

Yet, informed consent for invasive, innovative surgeries, such as facial transplants, has received minimal policy attention. As a result, laws regarding surgical procedures generally lag behind their advancements. Existing tort theories, such as negligence, are not necessarily transferable to an experimental surgery because standards of competent surgery are not and cannot be established until after patients undergo them. Despite the limited success with partial face

91. HENRY K. BEECHER, RESEARCH AND THE INDIVIDUAL: HUMAN STUDIES 47-62 (1970); see also Hartman, supra note 53, at 14-15 (stating that altruistic meaning and participating in something beyond one's self “cannot be devalued as contributing to personal welfare”).
92. See supra notes 46-49 and accompanying text.
93. Okie, supra note 18, at 893.
95. Peled & Pribaz, supra note 73, at 415 (acknowledging that information
transplants, "current immunologic protocols fall miserably short in preventing both acute and chronic rejection."96 The face transplant recipient’s immune system can reject the “new face” at any time,97 leaving the recipient in a worse position than having never undergone the transplant.98 Consequently, surgeons in several European countries and the United States have qualms about continued advancement until a remedy for tissue rejection is established.99 Bound by their Hippocratic Oath, surgeons theoretically act primarily for a patient’s benefit.100 In promoting beneficence (well-being) and minimizing harm (nonmaleficence), physicians owe a fiduciary duty to their patients that includes refraining from exploiting the latter’s vulnerability for personal or professional gain and avoiding serious exposure to risk whenever possible.101

Facial transplants, like other innovative microsurgical procedures, proceed largely under guidance from national
consensus organizations, but such organizations lack the authority to enforce sanctions. Thus, surgeons primarily determine whether it is ethically sound to allow patients to undergo procedures with both known and unknown consequences. At a minimum, surgical procedures should be validated by research before they become routinely used. The current lack of rigorous oversight of innovative surgeries stands in stark contrast to the strict regulation of pharmaceuticals as they progress from experimental stages to public use. Self-imposed guidelines for facial transplant advancement, such as those adopted by the American Society for Reconstructive Microsurgery and the American Society of Plastic Surgeons recommend standards for informed consent and scrutiny of procedures by specially constituted boards. However, these organizational boards endorse such guidelines with broad discretion and without legal enforcement power.

Moreover, competing regional and professional interests that accompany high-profile surgeries can obscure careful evaluation of the benefit to risk ratio. This signals the increased possibility of overestimating benefits and

103. David C. Cronin II et al., Transplantation of Liver Grafts from Living Donors into Adults—Too Much, Too Soon, 344 NEW ENG. J. MED. 1633, 1636 (2001) (articulating the necessity of regulatory oversight for patient protection).
104. See FACIAL TRANSPLANTATION, supra note 63, at 330; United States Position, supra note 18.
105. See ROBERT J. LEVINE, ETHICS AND REGULATION OF CLINICAL RESEARCH 4-8 (1986); see also Amer S. Ahmed, Note, The Last Twist of the Knife: Encouraging the Regulation of Innovative Surgical Procedures, 105 COLUM. L. REV. 1529, 1536 (2005); Reitsma & Moreno, supra note 102, at 792-801.
106. See FACIAL TRANSPLANTATION, supra note 63.
107. Okie, supra note 18, at 894.
109. Intense focus on forging ahead with facial transplant surgery can compromise surgeons' abilities to appreciate related multidisciplinary considerations and to place patients' health and well-being above professional ambitions. See Walton & Levin, supra note 51, at 417 (admonishing the "self-aggrandizement" of the French team in the "exuberance to become the 'first' to perform hand transplant"); Ahmed, supra note 105, at 1539 (describing the personal and professional inclination of medical practitioners "to plow ahead with previously untested practices").
underestimating risks, and stultifies careful consideration of issues in public policy, law, and research ethics.\textsuperscript{110} Issues in research ethics include the safety and efficacy of innovative surgeries, as well as surgeon involvement in brokering commercial arrangements that allow patients and doctors to share in proceeds of profitable photos and videos of the procedures.\textsuperscript{111} Federal regulatory standards governing clinical research do not necessarily apply to innovative surgeries, further lessening the opportunity for adequate assessment of surgical protocols and tolerable risks.\textsuperscript{112}

Serious psychological and physical risks accompany facial transplants, including the side effects resulting from the immunosuppressive drugs that are necessary following composite tissue allograft.\textsuperscript{113} Additionally, long-term ramifications remain unknown and lessen the justification for proceeding with risk-replete, non-essential surgery. While living with a disfigured face is functionally and psychosocially difficult,\textsuperscript{114} the condition does not affect general health, unlike a failing heart or liver. In contrast to organ transplant candidates, face transplant candidates have other viable options, such as an autologous skin graft.\textsuperscript{115} Aside from the substantial risks, the idea of voluntary, informed decision making about facial transplants seems at odds with patient desperation and despair. The “I want it, I want it!” approach

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\textsuperscript{111} Dr. Bernard Devauchelle, the surgeon who performed the first partial facial transplant in Amiens, France, has reportedly been criticized for brokering commercial arrangements “in which exclusive rights for photographs and video of the operation were given to Microsoft’s Corbis photo agency under an agreement that allows [the patient, Isabelle Dinoire] to share in the proceeds from the materials’ sale.” Craig S. Smith, \textit{As Patient Mends, Transplant Uproar Builds: Questions Aimed at French Doctor}, INT’L HERALD TRIB., Dec. 14, 2005, at 2.

\textsuperscript{112} See Reitsma & Moreno, \textit{supra} note 102, at 793-94.

\textsuperscript{113} See, e.g., Xavier Bosch, \textit{Surgeon Denied Ethics Approval for Face Transplantation}, 363 LANCET 871, 871 (2004); Jocalyn Clark, \textit{Face Transplants Technically Possible, but “Very Hazardous,”} \textit{170 CAN. MED. ASS’N J.} 323 (2004); \textit{FACIAL TRANSPLANTATION, supra} note 63, at 332-34; Petit et al., \textit{supra} note 62, at 1430-32.

\textsuperscript{114} J.A. Butler, \textit{Social Anxiety in Patients with Facial Disfigurement}, 177 BRIT. J PSYCHIATRY 86, 86 (2000).

\textsuperscript{115} Peled & Pribaz, \textit{supra} note 73, at 414-16; see also Hartman, \textit{supra} note 53, at 10, 16.
of a face transplant candidate when she learned of its mere prospect\textsuperscript{116} dramatically underscores whether informed consent in the conventional sense is possible.\textsuperscript{117}

Human dignity is central to legal as well as ethical concerns for informed medical decision making.\textsuperscript{118} Dignitary offenses, embodied in the torts of assault, battery, intentional infliction of emotional distress, and invasion of privacy, are implicated\textsuperscript{119} and further underscore a need to fashion protocols for decision-making processes with facial transplant patients. Any decisional process assumes a threshold capacity for choosing among available options following a doctor's disclosure of information about benefits, risks, and alternatives to recommended treatments or procedures. Underlying this process is the idea of freedom in fostering one's values and preferences. This raises a question about how surgeons should facilitate the consent process with facial transplant patients. The decision-making process for facial transplants merits particularized attention because, \textit{inter alia}, the procedure's novel character makes it difficult to protect patient privacy in the decision-making process due to heightened public curiosity and media scrutiny.

In order to preserve human dignity, should we intervene to prevent vulnerable disfigured persons from undergoing risk-replete invasive surgery?\textsuperscript{120} Interfere with surgeons who advance it? Conscribe personal choice when biomedical

\textsuperscript{116} See Jones, supra note 86, at ED10.

\textsuperscript{117} See Peled & Pribaz, supra note 73, at 415 ("[T]he patients who might consider having this procedure are exactly the ones who might be least able to cope psychologically with their disfigurement.").


\textsuperscript{120} In other realms, laws restrain personal and professional decision making that contravene public sensibilities about preserving human dignity. See, e.g., Gilles Lebreton, Conseil D'État, 13 RECUEIL DALLOZ SIREY 177 (1996) (Fr.) (invoking police power to prohibit dwarf tossing on the ground that it threatens respect for human dignity necessary to the public order). For a discussion of the "lancer de nain" case, see Roger Brownsword, Bioethics Today, Bioethics Tomorrow: Stem Cell Research and the "Dignitarian Alliance," 17 NOTRE DAME J.L. ETHICS & PUB. POL'Y 15, 29-30 (2003).
innovation denigrates dignity?\textsuperscript{121} Closer scrutiny of decisional capacity in this context is warranted due to the potential for the particularly pernicious exploitation of vulnerable disfigured persons. Patient vulnerability can vitiate decisional capability for consenting to \textit{any} surgical procedure, let alone an experimental one. The very patients for whom composite tissue allograft is advanced often experience psychological difficulties borne by their disfigurement; they suffer from conditions that severely impair their overall functioning and quality of life.\textsuperscript{122}

Vulnerability stems from a sense of helplessness and disempowerment. The despair and desperation accompanying disfigurement suggest that face transplant patients are susceptible to external influence and exploitation.\textsuperscript{123} Yet these concerns may properly be addressed not by means of categorical exclusion from deciding whether to undergo innovative surgery, but rather through established standards of individualized patient assessment. Through such a process, physicians and oversight boards could evaluate the degree and type of vulnerability concerns on a case-by-case basis. In that way, the consent process may be tailored to a specific patient, thereby enabling dignity in the pursuit of one’s own ends by confirming one’s inherent value through autonomous decision making.\textsuperscript{124}

\begin{footnotes}
\item[121] See Fukuyama, \textit{supra} note 49 (discussing circumstances in which individual choices regarding biotechnology may entail negative externalities and worsen society).
\item[122] According to one source:

These patients may also be the ones most likely to be more severely traumatized by bumps in the road such as the need for increased immunosuppression postoperatively or the development of a cutaneous malignancy. If such an event occurs, this same person might also be more likely to be noncompliant with their immunosuppressive regimen, thus leading to graft rejection.


\item[123] Carol Levine et al., \textit{The Limitations of “Vulnerability” as a Protection for Human Research Participants}, 4 Am. J. Bioethics 44, 44-49 (2004).
\item[124] See United States v. Drayton, 536 U.S. 194, 207 (2002) (ascripting dignity to the concept of agreement and consent); Planned Parenthood of Se. Pa. v. Casey, 505 U.S. 833, 851 (1992) (equating decision-making empowerment with human dignity). Dignity through autonomous choice that results from an informed consent process may be contrasted with personal requests for assistance in suicide. The latter seems “less a tribute to autonomy than an expression, intended or not, of a person’s social devaluation and lack of dignity”
\end{footnotes}
If, for example, prospective face transplant patients understand the risk of harm and are able to tolerate failure of the surgical procedure, their opportunity to exercise autonomous choice to participate in the surgery could reduce their vulnerability by providing them with an invigorated sense of hope and control. Beyond functional difficulties such as closing one’s eyes to sleep, facially disfigured persons experience loneliness and isolation more acutely than non-disfigured persons. They also tend to perceive themselves as being on the fringe of humanity, shunned from “human” inclusion. Others’ reactions to their disfigurement often deepen this perception and sense of exclusion. As someone suffering with disfigurement attested, “We don’t go out because of the way we look . . . . So disfigured people just shut themselves away. They only leave home at night with hoods over their faces. For them, face transplants could mean a chance at a normal life.” This testament demonstrates the despair and desire of disfigured persons to regain normalcy by looking human again.

Facial transplantation’s transforming promise to restore appearance and provide respite from the physical and psychological pain of disfigurement must not be devalued when assessing whether patients can capably consent. Nor should the dignity found in an altruistic desire to temper others’ painful afflictions be undervalued when determining whether a patient is decisionally capable of undergoing a facial transplant. Thus, permitting a patient to consent to

because such requests suggest “a desperate search not just for social support, but for social confirmation of one’s genuine, inherent value or dignity as a human person.” R. George Wright, Consenting Adults: The Problem of Enhancing Human Dignity Non-Coercively, 75 B.U. L. REV. 1397, 1409 (1995) (applying a Kantian concept of human dignity and rational choice).


126. See Petit et al., supra note 62, at 143; see also Jones, supra note 86 (interviewing Jacqui Saburido, who struggles with facial disfigurement).


129. Newell & Marks, supra note 122, at 179-81.

facial transplant surgery is not intrinsically demeaning to human dignity, but it is demeaning if a patient’s vulnerability makes him susceptible to coercion or exploitation. Judgments made about patient vulnerability and any vitiating impact on a patient’s decision-making capacity must be made not on the ground of vulnerability per se, but on an individualized basis after a careful evaluation of a particular patient’s vulnerability. There is dignity in personal judgment and the pursuit of one’s own ends. In the context of facial transplants, patients should be able to choose to collaborate in clinical innovation. As the Supreme Court recognized, the concept of “agreement and consent should be given a weight and dignity of its own.”

2. Selection Considerations

As facial transplant procedures progress, criteria for selecting the recipients become particularly important. Some contend that facial transplants should be reserved for those suffering from severe disfigurement as a result of disease or trauma. This notion raises the issue of defining what constitutes disfigurement. While research suggests that a universal concept of disfigurement exists, degrees of disfigurement may still be influenced by systematic and subjective elements. Disfigurement, like disability, is primarily a social construction shaped by cultural norms.

Given the perception that facial transplants are meant for patients who cannot be remedied by conventional

131. See Nancy S. Jecker, Protecting the Vulnerable, 4 AM. J. BIOETHICS 60, 60-62 (2004); see also United States Position, supra note 18, at 430 (contradicting the notion that facially disfigured patients are “markedly impaired” by citing to studies confirming “that the severity of deformity does not necessarily correlate with distress”); Peter H. Schuck, Rethinking Informed Consent, 103 YALE L.J. 899, 900-01 (1994) (deriving dignity from deference to personal choices).


133. See Lantier, supra note 66, at 422 (“Face transplantation should be considered a potential medical solution to provide relief to suffering for a few number of patients. This suffering comprises physical distortions and functional disabilities that lead to social exclusion and psychological repercussions.”); Petit et al., supra note 62, at 1432.

134. Terwee et al., supra note 60, at 196-98.

135. See Adrienne Asch, Distracted by Disability, 7 CAMBRIDGE Q. HEALTH CARE ETHICS 77, 77-87 (1998).
reconstructive surgeries, human dignity should limit the procedure to only those persons for whom transplanting facial tissue would restore both a sense of being and normal functionalities. Severely burned, featureless, and virtually faceless persons would be eligible to receive facial transplants under such a policy; these are, after all, the persons inspiring this innovative procedure. Limiting the use of facial transplants in this way maintains dignity because it benefits people without derogating the symbolic value of the face and the core aspect of humankind it represents.

In contrast, broadening the pool of potential facial transplant recipients could lead to a scarcity of donor tissue and related medical resources, with wealthier persons utilizing the procedure for identity makeovers or as a remedy for unsatisfying cosmetic surgery. Among the considerations that compel our attention, which include fair access to medical procedures and a corrosion of norms defining medicine's role, is a class-based gentrification that could conceivably result between those who have access to sophisticated surgical techniques and those who do not. Facial transplantation should not be permitted to become the next facelift or other enhancement procedure and derogate the face's symbolic meaning. Rather, it should be reserved for reconstructive purposes in order to prevent the deprivation of human dignity and the depletion of skills that are instrumental to medicine's determinant end, which is to repair and restore natural human functions.

Moreover, the misuse of facial transplantation could erode the mystique that qualities revered in human existence are not manufactured. By suggesting an aversion to self-

136. Okie, supra note 18, at 890; Petit et al., supra note 62, at 1432.
138. Pharmaceuticals, too, should be reserved for reparative purposes. Propranolol, for example, demonstrates promise for relieving the acute symptoms of posttraumatic stress disorder, and for restoring persons who suffer with it to their former natural state of functioning. See Peter Gorner, Drug Eases Pain of Bad Memories, CHI. TRIB., Mar. 2, 2006, at C1. Thus, research on propranolol should advance for this limited use; it should not be used as a 'mental cosmetic'—"[a] drug[l] that will allow us to airbrush our identities by selectively erasing or enhancing memories." James Morgan, A Fix To Forget It: A Miracle Pill Could Banish Bad Memories. But Is That So Wise?, HERALD (GLASGOW), Apr. 25, 2006, at 11.
139. See SKINNER, supra note 15, at 53-56.
worth through imitation and inauthenticity, enhancing therapies depreciate humanity by abating personal effort and excellence. Analogously, injecting performance-enhancing steroids or genetically enhancing embryos—or purchasing a Nobel Prize—each ineluctably suggests diminution of human dignity by affording an alternative explanation "for which the individual himself has previously been given credit." Each lessens a unique, intrinsic value of persons by making non-meritorious and commensurable that which had heretofore been considered meritorious and noncommensurable. Enhancement surgeries also reduce one's chances of being admired for inexplicable qualities inherent to individuality. While nature's gifts may not be readily apparent, they should not be eclipsed by impulse of mastery without inquiry and appreciation. Precisely because they are not fully understood, human attributes inspire awe. This notion is bolstered by increasing anti-

140. See Donna Tommelleo, Ruth's Family Gives Bonds Cold Shoulder, PITTSBURGH POST GAZETTE, May 11, 2006, at C-1 (reporting reaction by Babe Ruth's family members in response to Barry Bonds' second place stature in the all-time home run rankings).


142. SKINNER, supra note 15, at 59.

143. KANT, supra note 41, at 45-54; SKINNER, supra note 15, at 49-53.


145. See Michael J. Sandel, Statement at the Meeting of the President's Council on Bioethics, Session 4: What's Wrong with Enhancement (Dec. 12, 2002), available at http://www.bioethics.gov/transcript/dec02/sessions4.html (articulating considerations that "combat our tendency...to ride roughshod over the given without interrogating it or appreciating it").

146. See SKINNER, supra note 15, at 53 ("[I]t is therefore not surprising that
Cosmetic surgery sentiments that intimate societal desire for elevating individuality's mystique, rather than subjugating it to mimicry and conformity through surgical measures embedding the preferences of one generation in the next.\footnote{\textit{See Matthew Westwood, The Ugly Face of Flawless Beauty, AUSTRAlijAN, May 28, 2004, at 14; Mary Tannen, Unnatural Selection, N.Y. TIMES, May 2, 2004, § 6 (Magazine), at 78.}}

Given that personage and self-worth are, in a metaphysical sense, imputed to the face, to what extent should transplant patients be involved in the selection of donative tissue that is visible? The transplanted tissue impacts post-surgical recovery by affecting psychological acclimation and compliance with demanding immunosuppressive regimens.\footnote{\textit{Peled & Pribaz, supra note 73, at 414-15; Hartman, supra note 53, at 13-14.}} For example, an early hand transplant failure was precipitated by the recipient's noncompliance with immunosuppressive drugs because he wanted the transplanted hand to be removed.\footnote{\textit{See Marco Lanzetta et al., Human Hand Transplantation: What Have We Learned?, 36 TRANSPLANTATION PROC. 664, 668 (2004).}}

Dignity is further implicated when considering the psychological impact that is attached to the specific physical attributes of the selected tissue. In order to maintain human dignity, standards should be devised for the selection process related to the recipients—limited solely to those persons severely disfigured by disease or trauma—as well as for the selection\footnote{\textit{See, e.g., Jones, supra note 86 (interviewing a prospective face transplant recipient, who desired to see pictures of the potential donors with the option to reject the facial tissue if she “didn’t like their appearance, or . . . had a bad feeling about them”).}} of donor tissue from persons who expressed pre-mortem intent to give this personal, profound gift of their body.

The intimate nature of the donative tissue suggests that a supply surplus is unlikely, and thus, the unsavory prospect of payment for facial tissue is not implausible.\footnote{\textit{See, e.g., Michael J. Sandel, What Money Can’t Buy: The Moral Limits of Markets, Tanner Lecture on Human Values at Brasenose College, Oxford (May 11-12, 1998), available at http://www.tannerlectures.utah.edu/lectures/sandel00.pdf.}} Payment for facial tissue would contravene human dignity given the tissue's symbolic, personal nature. This reasoning is similar
to the salient debasement and dehumanization arguments central to bans on organ payment.\textsuperscript{152} For someone whose face has been disfigured by trauma or disease, donated facial tissue that could restore "normal" appearance and social inclusion would—and should—be priceless in the purest sense. Accordingly, facial transplants could be a meaningful step toward restoring a sense of dignity for disfigured persons.

IV. DIGNITY FOR HUMANITY

Facial transplantation is part of a larger context for considering the role of biomedicine and its uses. Dignity is central to exploring whether particular biomedical advances degrade the intrinsic worth found in humankind. By implicating the unique attributes of humanity, these advances should capture societal attention. So, too, is society responsible both for inquiring into the issues, and for guiding bio-scientific innovations. The discharge of this responsibility requires society to demarcate the boundaries of humanity in the face of biomedical transgressions.

A. Biomedical Strides, Law, and Policy

The strides in genetic engineering\textsuperscript{153} require us to consider their effects on humanity with dignity in mind—quite literally, what it means to be human and the essential elements that comprise humanity. Among those strides, the process of preimplantation genetic diagnosis (PGD) is illustrative.\textsuperscript{154} Although understanding a genetic profile

\textsuperscript{152} Hartman, \textit{supra} note 53, at 23-26.


\textsuperscript{154} Following fertilization of gametes \textit{in vitro} and prior to implantation of the embryos in a woman’s uterus, the embryos are genetically screened so that parents may decide which embryos to implant. See \textsc{President’s Council on Bioethics, Beyond Therapy: Biotechnology and the Pursuit of Happiness} (2003); Francis Collins, Statement at the Meeting of the President's Council on Bioethics, Session 5: Genetic Enhancement: Current and Future Prospects (Dec. 13, 2002), available at http://bioethicsprint.bioethics.gov/transcripts/dec02/session5.html. For an analysis about the uses and implications of PGD, see Note, \textit{Regulating Preimplantation Genetic Diagnosis: The Pathologization Problem}, 118 HARV. L.
presumably enhances humankind, PGD generates concerns about defining its “proper” and “therapeutic” uses, as well as determining which characteristics are “unacceptable deviations and disabilities.” PGD’s use gives rise to potential individual and social harms, and to serious questions regarding what information prospective parents may rely upon in their preimplantation decision making. That which appears reasonable on an individualized basis may be problematic from a collectivized societal standpoint, leading to impenetrable class chasms.

Neuroscience’s demystification of the inner workings of the human mind, however noble an endeavor, similarly requires careful scrutiny. Recent advances have dramatically improved our understanding of brain function, giving rise to numerous ethical implications. As a result, “neuroethics” is rapidly developing into a major field in its own right, as new neuroscientific techniques continue to cast light on human behavior and invite inquiry into brain imaging’s implications that include our concepts of personal responsibility and free will.

Neuroscientific strides also generate the prospect of synthesizing humans with machines, thereby creating a new organism. Human-machine hybrids present questions

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155. See President’s Council on Bioethics, supra note 154; Collins, supra note 154. See generally Adrienne Asch, Prenatal Diagnosis and Selective Abortion: A Challenge to Practice and Policy, in THE DOUBLE-EDGED HELIX: SOCIAL IMPLICATIONS OF GENETICS IN A DIVERSE SOCIETY (Joseph S. Alper et al. eds., 2002).

156. See Asch, supra note 135, at 77-87.


158. Regulating Preimplantation, supra note 154, at 2777-78.

159. For erudite explorations of neuroscience and its dimensions, see, for example, Kandel, supra note 7, and Wilson, supra note 7.


161. See Kandel, supra note 7; Neuroscience transcript, supra note 9.

162. See NEUROETHICS, supra note 8; Jonathan D. Moreno, Neuroethics: An Agenda for Neuroscience and Society, 4 NATURE REVS. NEUROSCIENCE 149, 153 (2003).

163. See Robin Marantz Henig, Looking for the Lie, N.Y. TIMES, Feb. 5, 2006, §6 (Magazine), at 47.

164. See generally Ray Kurzweil, THE SINGULARITY IS NEAR: WHEN
about personhood—what comprises it, along with the allegory of rights ascribed to human gradations. These questions suggest consideration of whether dignity constitutes a protectible penumbral right within the Fourteenth Amendment's concept of liberty. Another consideration is whether such hybrids implicate a form of enslavement within the meaning of the Thirteenth Amendment's proscription of dehumanization.

The trajectory for anti-aging technologies continues to unfold as well, notably nanotechnology for re-engineering and re-creating human biological systems at the molecular level. Put simply, a side effect of curing and preventing debilitating diseases is significant life-span extension. Insofar as technology is aimed at forestalling death, the prospects for living not just longer, but indefinitely, are inescapable, altering a natural cycle of human evolution and prompting consideration as to whether (and to what extent) its course should be directed.

The reasonable goals of reducing premature death and compressing morbidity notwithstanding, a research agenda

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166. U.S. CONST. amend. XIV (prohibiting deprivation of liberty by the government without due process of law).
167. U.S. CONST. amend. XIII (proscribing slavery or involuntary servitude, whether by private or public action, and giving Congress plenary power to enforce it); see also Amar & Widawsky, supra note 35.
171. See Harris, supra note 169, at 59 (urging us to "start thinking now about how we can live decently and creatively with the prospect of such lives").
172. "Compression of morbidity" is defined as "a shortening of the period of poor health before death." Callahan, supra note 10, at 655. Although the idea behind it has been around for several hundred years, only in recent years has there been any evidence of achievement. Id.
and technological advancements directed at increasing life expectancy may bring about unparalleled problems of "mortals" versus "immortals." Configuring a dignity-based policy framework for overseeing those advancements and foreseeing related problems now could lessen the necessity of making intolerable choices later. The radical extension of life is destined to make any conceptualization of natural death difficult, raising uncertainty about how humankind will value the living.

While the challenges are unprecedented, they are not meaningfully different in terms of their challenge to humanity. They suggest a more designed, mechanical human structure and evolution; they also suggest the need for a normative and less mechanical analysis. A deontological, dignity-based framework should be applied to sort out and determine the implications for humanity. While bio-scientific advances are stimulating, their acceleration must not outpace public deliberation.

B. The Need for Principled Public Oversight

Although technological strides strengthen our sense of shared humanity, their rapid nature has prevented adequate opportunity for public policy guidance. The increasing prevalence of genetic testing and screening, along with experimental, innovative surgeries with virtually no regulatory oversight, underscore this point. Scientific strides may astonish us, but they must not shunt public discourse and policy analysis when the potential for the disintegration of unique human attributes exists.


174. As John Harris explains:

[W]e might be facing a future in which the most ethical course is a sort of generational cleansing. This would involve deciding collectively how long it is reasonable for people to live in each generation, and trying to ensure that as many as possible live healthy lives of that length. We would then have to ensure that, having lived a fair inning, they died—either by suicide or euthanasia, or by programming cells to switch the aging process on again after a certain time—to make way for future generations.

Harris, supra note 169, at 59.
1. Standards for Innovative Surgical Procedures

The tendency to over-prioritize biomedical advancement corresponding under-prioritizes patient protection. In contrast to the scientific realm, where rigorous testing, refutation and peer review are staples prior to deeming a hypothesis viable, the lack of an adequate scientific assessment of surgical innovation pre-performance is a longstanding norm within the practice of medicine. As facial transplants demonstrate, innovative surgical procedures tend to proceed without rigorous testing and regulatory oversight.175 A year prior to the first partial face transplant performed in France, the French National Ethics Advisory Committee found that inherent risks of the procedure made it unethical.176 This prompted criticism of surgeons who seemingly bypassed proven procedures and avoided addressing ethical concerns in a rush to be the first to perform a face transplant.177

Consequently, the "standard" practice often emerges after the experimental procedure has been performed on patients.178 Most innovative surgical techniques, including allograft transplant techniques for the face and hands, proceed ad hoc, influenced only by voluntary compliance with the guidelines from national consensus organizations.179 In contrast to the strict regulation of medical devices as they progress from innovative stages to general use, determinations about whether to progress with innovative surgeries rest primarily with doctors free from oversight.180 While patients may be willing to undergo procedures with

175. Peled & Pribaz, supra note 73, at 415-16.
176. Bosch, supra note 113, at 871.
178. See Lanzetta et al., supra note 149, at 664. The International Registry of Hand and Composite Tissue Transplantation, for example, reports on hand transplant progress and repositis information about composite tissue transplantation, "thereby providing a unique opportunity for participants to keep abreast of the latest developments by sharing their experience." Marco Lanzetta et al., The International Registry on Hand and Composite Tissue Transplantation, 79 TRANSPLANTATION 1210, 1210 (2005).
179. Reitsma & Moreno, supra note 102, at 792-95.
180. See supra notes 102-04 and accompanying text.
unknown consequences in order to collaborate in clinical innovation that promises a positive outcome, surgeons must not abdicate their responsibility to ensure the safety of their patients.  

2. Professional and Institutional Oversight

Of no less concern is the existing regulatory gap that allows surgeons to move ahead with innovative surgeries in the absence of any, let alone rigorous, public oversight. Extant federal regulations impose restrictions on human subject research, but do not regulate invasive, innovative surgeries per se. If surgical procedures are not structured as research, they may evade federal regulatory oversight altogether.

Even assuming that surgical techniques are styled as human subject research within the purview of federal regulations and IRB review, such review does not cover the entire range of conduct and care appropriate for patients of innovative surgical procedures. In addition to the structural and systemic problems endemic to IRB review, the concerns now raised by biomedical challenges were not contemplated by the policies on which present federal legislation and regulations are based.

More specifically, the concerns presented by biomedical

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181. Peled & Pribaz, supra note 73; Petit, Paraskevas, & Lantieri, supra note 96, at 14-16.
182. See Reitsma & Moreno, supra note 102, at 793-95; see also supra notes 102-104 and accompanying text.
183. See, e.g., 45 C.F.R. § 46.101(a) (2004). For one writer's position on this "murky zone," see Ahmed, supra note 105, at 1537-44, 1561 (providing a comprehensive discussion of why innovative surgery must be brought into the regulatory fold).
184. See Reitsma & Moreno, supra note 102, at 793-801.
185. Marginal monitoring processes, insufficient expertise, and conflicts of interests are among the problems. See President's Council on Bioethics, Reproduction and Responsibility: The Regulation of New Biotechnologies 201 (2004) (discussing the statement of Ezekiel J. Emanuel to the Council on September 12, 2002, which identified problems with IRB review for research involving human embryos); see also U.S. Dep't Health & Human Services, Institutional Review Boards: A Time for Reform 7-9 (1998); Annas, supra note 52, at 489 (finding IRB safeguards inadequate for research subjects or society).
innovation move beyond safeguarding individual bodily integrity to species preservation, which was not part of the policy underlying IRB review.\textsuperscript{187} Thus, elucidating essential aspects of humankind and determining whether a specific bi-scientific advance could elementally alter them should not be entrusted solely to institutional oversight. Rather, the oversight must be a societal task that reflects a collective public conscience.

3. Dignity as Central to the Bio-Science-Society Interface

The catalysis for biomedical innovation must result from collaboration between science and society. Face transplants present the potential to alleviate suffering and to transform the lives of a select group of persons for whom current reconstructive techniques are ineffective. They also implicate not just individual interests, but societal judgment about tolerable risk allocation. Thus, public oversight of the consent process for innovative surgeries, including facial transplantation, is needed. The unique attributes that comprise humankind, such as the face and the humanity it represents, heighten this need. That oversight should include calibrating in advance the protocols for risk assessments and how they should be communicated to prospective patients.

Human dignity is the core to a cohesive approach to judge biomedical progress. Dignity is a powerful lens that enables us to assess the progression and the crucial challenges ahead. Societal stewardship is compelled from dignity’s time-honored place in human existence, pre- and post-mortem.\textsuperscript{188} It is critical to undertake a finely-grained inquiry of the gauntlet of difficult questions presented by technological innovations through a public vetting process prior to staking out positions based on pre-conceived notions.\textsuperscript{189}

Public deliberation about facial transplantation does not threaten, but rather, legitimizes—dignifies, if you will—its progress and use. Society should collaborate with science in a manner consistent with human dignity in order to guide bio-scientific progress and usage. This includes sustaining its

\textsuperscript{187.} Hartman, supra note 53, at 35-41.
\textsuperscript{188.} See PA. CONS. STAT. ANN. § 5510 (West 2004); Dickerson & Assocs. v. Dittmar, 34 P.3d 995 (Colo. 2001).
advancement while limiting its clinical application when appropriate.

The clarification of priorities and issues related to specific biomedical advances is needed to catalyze public policy. Identifying relevant interests and framing issues in a dignity-centered regime are threshold to policy development. In the context of facial transplantation, defining an interest in the human face that preserves a value sacrosanct to personhood is one such priority. Another priority is to enrich policy through research. Research regarding the psychological implications of facial transplants on donative decision making is needed. Also meriting studies are the psychological impact and behavioral aspects of receiving another's facial tissue, along with the integration of tissue symbolic of the decedent's personage.190

Human dignity is manifested through altruistic donation, which is the touchstone of existing federal and state transplant policies. Yet other compelling considerations that implicate human dignity are notably absent. The symbolic nature of a face and whether (and how) it should be harvested for another's use were not considered in developing the current laws. Indeed, the policies underlying the National Organ Transplantation Act191 and Uniform Anatomical Gift Act192 fail to contemplate the distinct interests that deserve immediate public discussion and debate.

Because existing laws fail to consider unique issues related to biomedical innovations such as transplanting facial tissue, they offer inadequate oversight. Facial transplantation commands particularized policy development; the refinement of its scope and use should be a matter of public discourse. Informed public discussion that defines priorities and focuses on human dignity should precede any policy that reflects a collaboration between science and society. This collaboration is critical for steering progress when a specific use of biomedical innovation involves

190. Other issues compelling study include "quality of the functional recovery, aesthetic result, [and] long term outcome of the graft..." Lantieri, supra note 66, at 423.
constituents of humanity.\textsuperscript{193}

It is a noble calling—public "noblesse oblige" in the best sense—for society to collaborate meaningfully with scientists, particularly as innovation increasingly strikes at human quintessence. Short-term goals and long-term strategies can be devised for specific biomedical advances through a society-science collaboration using a dignity-based scheme, rather than leaving such policy developments to a future generation when safeguards may no longer be viable.

Biomedical technology affords us the intriguing dilemma of achieving greater understanding about humankind while destroying its mystique. Arguments against biotechnological progress altogether, however, conflict with human dignity. There is human achievement inherent in explaining the inexplicable, which, in turn, merits admiration.\textsuperscript{194} That is an extraordinary thing about science—it takes ideas and gives them ability. But the ideas must neither be ill conceived nor ill considered. Society must determine the benefits of them through a dignity-centered framework that focuses on the threatened harm to humankind's essential aspects. Specific uses that fundamentally diminish the value and meaning of being human should be constrained.

Any inquiry regarding biomedical technology should examine whether a specific use of it benefits or degrades humanity, invoking philosophical and jurisprudential ideas about dignity.\textsuperscript{195} Bio-scientific pursuits must not proceed unguided. However, society must foster bio-scientific inquiry and innovation,\textsuperscript{196} because they promote dignity by enabling

\textsuperscript{193} See Annas, supra note 14, at 768 (admonishing that "[h]umans must inform science, science cannot inform (or define) humanity").

\textsuperscript{194} See Skinner, supra note 15, at 58 ("Science naturally seeks a fuller explanation ... its goal is the destruction of mystery. The defenders of dignity will protest, but in doing so they postpone an achievement for which, in traditional terms, man would receive the greatest credit and for which he would be most admired.").

\textsuperscript{195} See Whisenhunt v. Spradlin, 464 U.S. 965 (1983); Paul v. Davis, 424 U.S. 693 (1976); see also Kant, supra note 41, at 96-97.

\textsuperscript{196} For a thought-provoking discussion about scientific inquiry within the meaning of the federal Constitution, compare James R. Ferguson, Scientific Inquiry and the First Amendment, 64 Cornell L. Rev. 639 (1979) (contending that laws regulating scientific research are constitutionally infirm), with John A. Robertson, The Scientist's Right to Research: A Constitutional Analysis, 51 S. Cal. L. Rev. 1203 (1977) (defending the constitutionality of laws regulating scientific research). Additional treatment is found in Barry P. McDonald,
and empowering humankind. Thus, societal stewardship serves as a gateway for scientific ingenuity to optimize human benefit while safeguarding unique human attributes threatened by that ingenuity.

Face transplants are paradigmatic for exploring questions raised by bio-scientific advances that increasingly implicate humanity and the way we think about the human state. Informed public examination of a technological innovation is vitally important for driving its advancement. Examining dignity-related issues is essential to prevent undue constraints on what could ultimately prove revolutionary in enhancing individual lives. A face transplant’s restorative promise is incalculable, as it holds the potential to instill a sense of self and dignity in a disfigured person. As such, it should be thought of as an extraordinary procedure used for a narrow purpose in limited circumstances given its impact on a core constituent of humanity—the face.

Facial transplantation has materialized. Thus, the very idea of “transplanting” faces should be taken seriously. So, too, should the consequences and implications for human dignity spur public deliberation about the procedure. The value of the human face to our shared existence is vital to this deliberation.

V. CONCLUSION

Assessing the progress and use of biomedical science through a dignity-centered analysis may ultimately prove Nietzsche wrong—we are not destined to transcend human nature and the moral sense that characterizes our species.

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197. See UK Gets Face Transplant Go-Ahead, BBC NEWS, October 25, 2006, http://news.bbc.co.uk/2/hi/health/6083392.stm (reporting that British surgeons of the Royal Free Hospital in London have received permission from the National Health Services Ethics Board to proceed in their preparations to perform the first full face transplant). See also Altman, supra note 177, at A6; Iain Hutchison, Face Transplants: Is the Genie Out of the Bottle?, 99 S. MED. J. 427, 429 (2006); Joseph Kahn, China: Face Transplant for Victim of a Bear Attack, N.Y. TIMES, Apr. 15, 2006, at A5.


199. See NIETZSCHE, supra note 47.
Never before has biomedical science demanded more focus on human dignity. Stunning bio-scientific strides increasingly strike at the strength of humankind—our unique attributes and meaning found in human *qua* human. The increasing refinement of biomedical technology coupled with a propensity to destroy human parameters strengthen dignity's role in assessing biomedical challenges to fundamental aspects of humankind. By challenging a remaining vestige of image and identity vital to humankind, facial transplants are paradigmatic for the importance of a dignity-centered approach to adjudge biomedical progress and usage.

According to the Supreme Court's unwavering vision of dignity's shield against the encroachment of humanity's intrinsic worth, it is sensible to think that dignity must be central to any decisional process about non-essential, experimental procedures with extensive risks and untold consequences. As facial transplantation advances, society must consider the value of a human face and its meaning in our shared existence. If humanity is dignity, then the face is its imprimatur.

 Constituents that distinguish us as human must be preserved. Society has a deontological responsibility to monitor biomedical and surgical advances, particularly the uses of such advances and whether they unacceptably transgress constitutive aspects of humanity. This task cannot—and should not—be entrusted solely to professional and institutional oversight.

Now more than ever, the transcendent, time-honored value of dignity should emerge as the standard by which society navigates technological advances that challenge humanity with elemental change. Dignity is central to assessing and preserving qualities distinct to our species. By protecting human worth against encroachment, dignity frames the questions that beset us about whether a specific innovation should advance and how it should be used. Dignity must also shape our responses.

Dignity deserves far more focus for delineating the scope and scale of bio-scientific progress. By offering insights into the importance of dignity, this Essay provides a primer for

legal policy analysis related to biomedical innovation. Human dignity enlightens the issues raised by this innovation and illuminates the charting of a future course. No less at stake are the constituents that distinguish humanity. These must be secured, now and for the future. We are the stakeholders. For in the end, the face of dignity is—and should remain—human.