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Human Uniqueness and Human Dignity: Persons in Nature and the Nature of Persons

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"Humanity itself is a dignity." Immanuel Kant sought a universal human dignity with his respect for persons.[1] His high-principled claim continues, endorsed by the nations of the Earth, in the Preamble to the United Nations' *Universal Declaration of Human Rights:* "[R]ecognition of the inherent dignity...of all members of the human family is the foundation of freedom, justice, and peace in the world.[2]

Such dignity is a core concept getting at what is distinctively human, commanding special moral attention. Our dignity figures in our personal identity, first at basic levels, where dignity is inalienable and common to us all, and further at developmental levels, where dignity can be achieved or lost, recognized or withheld. A person who has "lost his dignity" behaviorally is not thereby a person whom we can treat as without dignity in the native entitlement sense. A person's dignity resides in his or her biologically and socially constructed psychosomatic self with an idiographic proper-named identity.

At both levels, we should think *of a gestalt,* more than some quanitative scalar quality. Dignity is an umbrella concept (something like

freedom, love, justice, integrity), which makes it at once inclusive and comprehensive, and yet raises issues of scope and precision.[3] The plan here is to see whether we can make some progress toward recognizing distinctive human worth by articulating the ways in which humans differ from nonhuman animals. We will spiral around a constellation of interrelated capacities, as often consulting what scientists are discovering as we are listening to the humanists. Awareness of the gulf separating humans from all other species can sensitize us to our potential for dignity.

This could be important in an age when it is philosophically and scientifically fashionable to "naturalize" all phenomena, human behavior included. The skeptic will say that we here are resisting accepting human continuity with animal nature, exaggerating the dichotomy between humans and their nonhuman ancestors. Our reply is that just this human capacity to present arguments such as those we are here producing establishes this discontinuity and the dignity for which we are arguing. Paradoxically, the more we discover that we are products of an evolutionary process, descended from the apes, the more we find that the capacity we humans have to demonstrate this—requiring paleontology, genomics, cladistics, anthropology, cognitive science, neuroscience, philosophy, and ethics—distinguishes us from the rest and disrupts the continuity demonstrated. Our concern here is not primarily medical, but this search might highlight understanding of what in humans we especially seek to protect, both in medicine and elsewhere in human affairs.

Nature and Culture

Human dignity results from both (1) the *nature* of and in human nature and (2) the *culture* in which humans comprise their character. Humans live embodied lives. This embodiment, not itself undignified, is necessary but not sufficient. Our human biology opens up vast new possibility spaces in which our dignity can be (indeed must be) further nurtured in culture. In this respect, mixing our biological finitude with cultural refinements, we radically differ from animals. This search for such dignity, it now seems, is an all and only human assignment.

This search is anti-reductionist; we resist the claim that a human is "nothing but[5]" an animal. Peter Richerson and Robert Boyd find "that the existence of human culture is a deep evolutionary mystery on a par with the origins of life itself. ... Human societies are a spectacular anomaly in the animal world."[4] The human transition into culture is exponential, non-linear, reaching extraordinary epistemic powers. To borrow a term from the geologists, humans have crossed an unconformity. To borrow from classical philosophers, we are looking for the unique *differentia* of our *genus.*

Animals do not form cultures, at least not cumulative transmissible cultures. Information in wild nature travels intergenerationally largely on genes; information in culture travels neurally as persons are educated into transmissible cultures. Animals inherit some skills by copying the behavior of others, but genetics remains the dominant mode of intergenerational information transfer. The determinants of animal and plant behavior are never anthropological, political, economic, technological, scientific, philosophical, ethical, or religious. The intellectual and social heritage of past generations, lived out in the present, re-formed and transmitted to the next generation, is regularly decisive in culture.

The term "culture" is now commonly used of some animals, which is done partly by discovering behavior of which we were previously unaware, but also by revising the scope of the term "culture" to include behavior transmitted by imitation. In this sense culture is present not only among primates, but among birds, when they learn songs or migration routes from conspecifics. If so, we need another term, super-culture, for the human cultural capacities, or at least more precision in distinguishing kinds of culture.

Opening an anthology on *Chimpanzee Culture,* the authors doubt, interestingly, whether there is much of such a thing: "Cultural transmission among chimpanzees is, at best, inefficient, and possibly absent." There is scant and in some cases negative evidence for active teaching of the likeliest features to be transmitted, such as tool-using techniques. Chimpanzees clearly influence each others behavior, and seem to intend to do that; they copy the behavior of others. But there is no clear evidence that they attribute mental states to others. They seem, conclude these authors, "restricted to private conceptual worlds."[5]

One way to gauge this is to inquire about intentional teaching, which involves the effort to transfer ideas from mind to mind. There is little critical evidence for such teaching in nonhuman animals; the best such evidence is still equivocal. One can trim down the meaning of "teaching," somewhat similarly to reducing the definition of "culture," and find noncognitive accounts of teaching. Interestingly, a recent study suggests a form of teaching not in the primates, where it is usually looked for, but in wild meerkats. Adults differentially cripple prey for their young to hunt, depending on how naive the juvenile hunter is.[6] Many predators release crippled prey before their young, encouraging their developing hunting skills.[7]

But if teaching is found wherever individuals have learned to modify their behavior so that the naive learn more quickly, then teaching is found in chickens in the barnyard, when the mother hen scratches and clucks to call her chicks to newfound food, with the chicks soon imitating her. The meerkat researchers conclude that they exhibit only simple differential behavior, responding to the handling skills of the pups, without the presence of ideas passing from mind to mind. There need not even be recognition (cognition) of pupil's ignorance; there is only modulated behavior in response to the success or lack thereof of the naive, with the result that the naive learn more efficiently than otherwise. There is no intention to bring about learning, and such behavior falls far short of customary concepts of teaching, undoubtedly present in ourselves.

Indeed, teaching in this differential behavior sense is found even in ants, when leaders lead followers to food.[8] If we are going to interpret such animal activities as (behavioral) teaching, then we need a modified account of (ideational) teaching, where teacher deliberately instructs disciple. In this sense of teaching, Bennett G. Galef concludes, "As far as is known, no nonhuman animal teaches."[9] Richard Byrne finds that chimpanzees may have glimmerings of other minds, but he sees little evidence of intentional teaching.[10]

Although chimpanzees collaborate to hunt or get food, Michael Tomasello and his colleagues conclude "with confidence" that "chimpanzees do not engage in collaborative learning. ... They do not conceive of others as reflective agents—they do not mentally simulate the perspective of another person or chimpanzee simulating their perspective. ... There is no known evidence that chimpanzees, whatever

their background and training, are capable of thinking of other interactants reflectively."[11] "Nonhuman primates in their natural habitats ... do not intentionally teach other individuals new behaviors."[12] Daniel Povinelli and his colleagues conclude of chimps: "There is considerable reason to suppose that they do not harbor representations of mental states in general. ... Although humans, chimpanzees, and most other species may be said to possess mental states, humans alone may have evolved a cognitive specialization for reasoning about such states."[13] Without some concept of interactive teaching, of ideas moving from mind to mind, from parent to child, from teacher to pupil, a cumulative transmissible culture is impossible.

Humans, then, can participate intensively in the knowledge and skills that each other has acquired. Such capacity to encounter ideas in others who serve as role models gives rise to estimates of the worth of these others and, reciprocally, of their estimate of one's own worth. This will at first include estimates by the disciple of how expert is the teacher, and by the teacher of how well the disciple is doing. These are already value judgments; they will begin simply but, once launched, will grow more complex, involving deeper senses of achievement and worth among the interactants. For example, we are here engaged in such "collaborative learning" about human dignity, in conversation with both scientists and humanists. But this involves respect for the wisdom and perspective of others, and efforts both to recognize and to improve upon them, and that brings us to the threshold of human dignity.

This collaborative learning is what has produced human cultures. Human dignity includes the capacity for growing into and assimilating a cumulative transmissible culture. So part of one person's dignity may be that he is Scots, raised not only on that landscape but into that culture. She is a southern lady, declining now in her latter years, and altered in her original views on racial segregation (the result of collaborative learning), but still firm in her classic embodiment of the culture of the Old South and what it meant to be a woman of dignity. Animals, failing such cultural heritages, fail in such possibilities of dignity.

Human Dignity and Animal Integrity

This "separatist" approach we are using here, distinguishing humans from animals, could have undesirable results if it led us to devalue (nonhuman) animal life. Research over recent decades has increasingly shown sophistication in animal minds.[14] One ought to respect life, both animal and human. Nevertheless, human life carries a dignity that merits an especially high level of respect. Recognition of the intrinsic values in nature needs careful analysis, ongoing in environmental ethics. This will include a welcome appreciation of animal integrity. But we should also be discriminating about human uniqueness, and that obligation is encapsulated in the idea of "human dignity"

We would not, for instance, attribute "dignity" to rocks or trees, nor even to the Grand Canyon or a giant sequoia, though we might find them majestic or sublime.*

We would puzzle over whether a bear or an eagle has "dignity" while never denying their charismatic excellence. We say that the Thomson's gazelles run with grace, without thinking that their flight from the approaching cheetah is dignified. There are parallel problems with "virtue," going back to the Greek *areté.* "Virtue" has the root idea of some effective "strength"; *areté* was at times applied to "excellence" in animals, found in diverse forms in diverse kinds. Nevertheless, "virtue" and *areté,* like "dignity," have come principally to refer to the highest human potentials and achievements. Can we be discriminating about our human dignity without losing discernment of the worth of animal excellences?

Critics will ask whether it might be a mistake to look to other beings less complex than we are to understand what we are (the genetic

* Etymology is not much help here. The Latin *dignitas* refers to worth, merit, desert, and honor, but also to rankings of all kinds. In Middle English, the modern uses are present, such as worth, honor, nobleness, as well as rankings applied to nonhurnans. The *Oxford English Dictionary* (2nd ed., Oxford: Oxford University Press, 1989) cites from 1594: "Stones, though in dignitie of nature inferior to plants"; and from 1657: "the dignity and value of Fruit-trees." Even planets have more dignity in some positions of the Zodiac than others. From 1751: "There is no kind of subject, having its foundation in nature, that is below the dignity of a philosophical inquiry." The word "human" is derived from *humus,* Latin for "earth" or "soil," but that is of little help in understanding its present meaning.

fallacy). If there has been any evolutionary emergence in humans, the whole idea of an emergent quality is that it cannot be predicted or understood by looking at (or reducing things to) the simpler precedents. True, we do not learn what it means to be human by studying chimpanzees. Nevertheless, with animals as a foil, if we can gain some account of the thresholds we have crossed, we might get a more focused picture of the human uniqueness and of our resulting dignity.

Terrence W. Deacon puts this pointedly: "Hundreds of millions of years of evolution have produced hundreds of thousands of species with brains, and tens of thousands with complex behavioral, perceptual, and learning abilities. Only one of these has ever wondered about its place in the world, because only one evolved the ability to do so."[15] Oriented by such a worldview, a person can choose his or her goals, thoughts, and career in ways that animals cannot; this capacity to give self-direction to one s own life, with whatever realization of it has been accomplished, is worthy of intrinsic respect. These traits are both threshold and aristocratic.

Biologically, there is a distinctiveness to being human not found in other animals. This dignity is *ipso facto* democratically present in human beings, a legacy of our phylogeny, unfolding and actualized in the ontology of each person. Simultaneously, this suite of traits opens up the space of possibilities such that, psychologically, there can be comparative success and failure in this actualization. One can more or less realize these ideational, idiographic, existential, and ethical opportunities common in basic senses to us all, but in which some are more and less gifted, fortunate, encouraged, resolute, and successful than others. Dignity matures with the continued perseverance of a meaningful life project.

A chimp cannot ask, with Socrates, whether the unexamined life is worth living, much less be shamed for not having done so, or troubled by failure to live up to its goals. "Man is the only animal that blushes. Or needs to." Mark Twain takes from *Pudd'nhead Wilson's New Calendar* this folk wisdom about embarrassed dignity, impossible for animals.[16] "They knew that they were naked" *(Genesis* 3:7). If, in the course of medical treatment, one covers up the patients nakedness, there is decency, dignity. With animals, there is nothing to cover. If we should discover that animals can blush or know that they

are naked, we might have to revise our beliefs about their dignity. Until then, let this separate human dignity from animal integrity.

Ideational Uniqueness

> But, if a universe were to crush him, man would still be more noble than that which killed him, because he knows that he dies and the advantage which the universe has over him; the universe knows nothing of this. All our dignity consists, then, in thought.[17]

Pascal's insights have been reinforced in contemporary biology and animal behavior studies. As philosophers from ancient Greece onward have claimed, humans are "the rational animals." Scientific research continues to confirm this ideational uniqueness. Humans are remarkable among all other species in their capacities to process thoughts, ideas, symbolic abstractions figured into interpretive gestalts with which the world is understood and life is oriented. Evidence of that comes from studies in the nature of language and in neuroscience. This is a constitutive dimension of our worth, our dignity.

Stephen R. Anderson, a linguist, concludes:

> When examined scientifically, human language is quite different in fundamental ways from the communication systems of other animals. ... Using our native language, we can produce and understand sentences we have never encountered before, in ways that are appropriate to entirely novel circumstances. ... Human languages have the property of including such a discrete infinity of distinct sentences because they are *hierarchical* and *recursive.* That is, the words of a sentence are not just strung out one after another, but are organized into phrases, which themselves can be constituents of larger phrases of the same type, and so on without any boundary.[18]

The result is "massive differences in expressive capacities between human language and the communicative systems of other animals":[19]

> No other primate functions communicatively in nature even at the level of protolanguage, and the vast gulf of discrete, recursive combinability must still be crossed to get from there to the language capacity inherent in every normal human. We seem to be alone on our side of that gulf, whatever the evolutionary path we may have taken to get there.[20]

This ideational uniqueness involves complex use of symbols. Ian Tattersall concludes:

> We human beings are indeed mysterious animals. We are linked to the living world, but we are sharply distinguished by our cognitive powers, and much of our behavior is conditioned by abstract and symbolic concerns.[21]

Similarly, Richard Potts concludes:

> In discussing the evolution of human critical capacities, the overarching influence of symbolic activity (the means by which humans create meaning) is inescapable. Human cultural behavior involves not only the transmission of nongenetic information but also the coding of thoughts, sensations, and things, times, and places that are not visible. All the odd elaborations of human life, socially and individually, including the heights of imagination, the depths of depravity, moral abstraction, and a sense of God, depend on this *symbolic coding of the nonvisible.*[22]

This means of course that humans can form a symbolic sense of self, with its dignity.

The nature and origins of language is proving, according to some experts in the field, to be "the hardest problem in science."[23] Kuniyoshi L. Sakai finds: "The human left-frontal cortex is thus uniquely specialized in the syntactic processes of sentence comprehension, without any counterparts in other animals."[24] The result is our mental incandescence.

We now neuroimage blood brain flow to find that such thoughts can reshape the brains in which they arise. Genes make the kind of

human brains possible that facilitate an open mind. But when that happens, these processes can also work the other way around. Minds employ and reshape their brains to facilitate their chosen ideologies and lifestyles. Our ideas and our deliberated practices configure and reconfigure our own sponsoring brain structures.

Joaquin M. Fuster, a neuroscientist, finds that in human brains there is an "emergent property" that is "most difficult to define":

> As networks fan outward and upward in associative neocortex, they become capable of generating novel representations that are not reducible to their inputs or to their individual neuronal components. Those representations are the product of complex, nonlinear, and near-chaotic interactions between innumerable elements of high-level networks far removed from sensory receptors or motor effectors. Then, top-down network building predominates. Imagination, creativity, and intuition are some of the cognitive attributes of those emergent high-level representations.[25]

This is what philosophers call "top down" causation (an emergent phenomenon reshaping and controlling its precedents), as contrasted with "bottom up" causation (simpler precedent causes fully determinative of more complex outcomes). Quantitative genetic differences add up to qualitative differences in capacity, an emerging cognitive possibility and practical performance that exceeds anything known in previous evolutionary achievements. This native endowment and potential, more and less actualized across a person's career, comes to constitute his or her dignity. Some trans-genetic threshold seems to have been crossed.

Geneticists decoded the human genome, confirming how little humans differ in their protein molecules from chimpanzees,* only to

* Humans may differ in protein molecules from chimpanzees by only some *3* percent. But they do have nearly 400 percent more cerebral cortex. Also, the microscopic fine structures of synaptic connections are much more open and complex; see Michael Baiter, "Brain Evolution Studies Go Micro," *Science 3*15(2007): 1208-1211. The human postsynaptic membrane contains over a thousand different proteins in the signal-receiving surface. "The most molecularly complex structure known [in the human body] is the postsynaptic side of the synapse," according to Seth Grant, a neuroscientist (quoted in Elizabeth Pennisi, "Brain

realize that the startling successes of humans doing just this sequencing of their own genome as readily proves human distinctiveness. Humans have made an exodus from determination by genetics and natural selection and passed into a mental and social realm with new freedoms,

J. Craig Venter and over 200 geneticist co-authors, completing the Celera Genomics sequencing of the human genome, caution:

> In organisms with complex nervous systems, neither gene number, neuron number, nor number of cell types correlates in any meaningful manner with even simplistic measures of structural or behavioral complexity. ... Between humans and chimpanzees, the gene number, gene structures and functions, chromosomal and genomic organizations, and cell types and neuroanatomies are almost indistinguishable, yet the developmental modifications that predisposed human lineages to cortical expansion and development of the larynx, giving rise to language, culminated in a massive singularity that by even the simplest of criteria made humans more complex in a behavioral sense. ... The real challenge of human biology, beyond the task of finding out how genes orchestrate the construction and maintenance of the miraculous mechanism of our bodies, will lie ahead as we seek to explain how our minds have come to organize thoughts sufficiently well to investigate our own existence.[26]

This "massive singularity" of our ideational uniqueness introduces massive dignity.

Idiographic Uniqueness

"Man, in a word, has no nature; what he has is ... history." José Ortega y Gasset pinpoints, with emphasis, the human idiographic uniqueness. He continues: "Expressed differently: what nature is to things, history, *res gestae*, is to man."[27] More carefully put, nature too has a

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Evolution on the Far Side," *Science* 314 (2006): 244-245.

history—natural history, but humans superimpose on their nature a remarkable capacity to experience and to individuate their narrative careers. Humans have a capacity for enacted individuality that is not otherwise known in the animal world. This makes possible biography, transcending the biology on which it is superimposed.

Again, we must use some care. All nature is natural *history*, generating distinct individuals as well as historical times and geographical places, and one sometimes needs to make that point. Each bat is particular. A mother bat, who has been out all night catching insects, can return to Bracken Cave in Texas and find and feed her own pup in total darkness, among millions of other bat pups. Such animal skills result from the biological requirement that mothers and their young recognize each other, if the best-adapted are to survive. Humans and many animals have immunologically unique bodies. Such particularity is welcome in the natural world.

Meanwhile, humans remain unique in their escalated degrees of freedom, their voluntary intentional actions, guided by these new powers of cognitive and symbolic thought, analytic reason, and conscious aspiration. While most creatures respond to somatic biological and ecological circumstances, humans are drawn into a future by constructed visions of their fullest flourishing, by their ideologies. We enact ourselves as interpreted story; each person enjoys constructing his or her idiographic storied residence on Earth.

In the vocabulary of neuroscience, we map brains to discover that we have "mutable maps." Michael Merzenich, a neuroscientist, reports his increasing appreciation of "what is the most remarkable property of our brain: its capacity to develop and to specialize its own processing machinery, to shape its own abilities, and to enable, through hard brainwork, its own achievements."[28] For example, with the decision to play a violin well, and with resolute practice, string musicians alter the structural configuration of their brains, to facilitate the differential use of left and right arms, fingering the strings with one and drawing the bow with the other.[29] Likewise, musicians enhance their hearing sensitivity to tones, enlarging the relevant auditory cortex by 25% compared with non-musicians.[30]

With the decision to become a taxi driver in London, and with long experience driving about the city, drivers likewise alter their brain structures, devoting more space to navigation-related skills

than do non-taxi drivers. "There is a capacity for local plastic change in the structure of the healthy adult human brain in response to environmental demands."[31] Similarly, researchers have found that "the structure of the human brain is altered by the experience of acquiring a second language."[32] Or by learning to juggle.[33]

So our minds shape our brains. The authors of a leading neuroscience text use the violin players as an icon for us all and conclude: "It is likely that this is an exaggerated version of a continuous mapping process that goes on in everyone's brain as their life experiences vary."[34] This brain is as open as it is wired up; the self we become is registered by its synaptic configurations, which is to say that the information from personal experience, both explicit and implicit, goes to pattern the brain. The informing of the mind, our psychological experiences reconfigure brain process, and there are no known limits to this global flexibility and interactivity. "Plasticity is an intrinsic property of the human brain."[35]

Nature endows human persons with the capacity for distinctively particular, self-reflective biographies. Embodied we humans are, and limited by flesh and blood, but there are no such limits to what humans can think or to the imagination of our minds. The possibility space is endlessly open. In a study of infinity, John D, Barrow considers what is in effect a mental infinity (though technically a massively large number):

> By counting the number of neural configurations that the human brain can accommodate, it has been estimated that it can represent about $10^{7000,000,000,000}$ possible "thoughts*—for comparison there are only about 10^{80} atoms in the entire visible Universe. The brain is rather small, it contains only about 10^{27} atoms, but the feeling of limitless thinking that we possess derives not from this number alone but from the vastness of the number of possible connections that can exist between groups of atoms. This is what we mean by complexity, and it is the complexity of our minds that gives rise to that feeling that we are at the centre of unbounded immensities. We should not be surprised. Were our mind significantly simpler, then we would be too simple to know it.[36]

Animal minds are too simple to know such things. That we humans have such potential to forge endless thoughts and imaginations, and to incorporate these into our unique biographies, is evidence of our dignity.

Despite the contributions of science in confirming such uniqueness, this search for the dignity latent in idiographic uniqueness will not be straightforward science. Science has little interest in particulars for their particularity after they have been included as instances of a universal type. It has little interest, for instance, in proper names as essential to its content. An ethical account, however, will retain an interest in particulars both for their constitutive power in enriching the universal model and as loci of value. It admires proper names no less than theoretical models.

The human mind creates for itself a unique person, a human being placed in a community of other humans, with its own embodied self-consciousness in the midst of others equally idiographic. Humans are reared over decades in families, from which they acquire their identities, characters, habits, neighborhoods, networks of support, commitments, worldviews. Animals too can be social, but an animal's surroundings do not constitute for it this self-reflective ideational, narrative, biographical identity. The person can follow a biography, cradle to grave, as no animal can.

The person knows the name of his or her father, mother, sisters, brothers, hometown, the favored or disliked math teacher, the day of his or her marriage, a career (or hopes thereof). With chimpanzees, if a brother departs and disperses to another troop for a year and then returns, brother does not remember and recognize (re-cognize) brother. Chimps take their family and troop cues from whoever is nearby and do not have the concept of "brother." But humans cognize such family relationships; this family identity enters into their personal identity—a narrated story line. A human life makes sense from a distinctly individual point of view, in ways that differ from animal life.

Michael Tomasello continues:

> Any serious inquiry into human cognition, therefore, must include some account of these historical and ontogenetic processes, which are enabled but not in any way determined

> by human beings' biological adaptation for a special form of cognition.... My central argument...is that it is these processes, not any specialized biological adaptations directly, that have done the actual work in creating many, if not all, of the most distinctive and cognitive products and processes of the species *Homo sapiens.*[37]

Other mammals are also constituted by their relationships, but they do not display these kinds of self-reflective cognitive understandings. We can form ideas of other minds, and of our own mind in encounter with other minds, and this, already by virtue of that capacity alone, accentuates human talents. But in the exercise of this skill, we form estimates of the embodied mental states in ourselves and in others whom we encounter. In such activity the possibility of dignity gained or lost arises.

Such powers and performance will variously be limited by disease, juvenile condition or aging, economic and cultural circumstances, failure of will, past successes and defeats, sometimes by coercion from others, but dignity can remain in the potential for development, for regeneration, or in the courage and resolution with which one faces such threats, struggling to retain a dignified quality of life.

Existential Uniqueness

Only humans are "persons," enjoying "existential uniqueness." "Human being" is perhaps a biological term, but "person" refers to the further existential dignity associated with an experiencing subjectivity with personal identity, a phenomenological "I" conserved with ongoing agency and responsibility. We can wonder whether neuroscience has (or ever will have) access to how the multiple streams of perception, images, and ideas are melded into such an experiencing "I." Mark F. Bear and his colleagues, somewhat revealingly, call this problem "the Holy Grail of neuroscience."[38] The difficulty is in understanding how thoughts in the conscious mind form, re-form, or, more accurately, *in-form* events in this brain space to construct an inhabited first-person with direct self-awareness.

The term "personality" is sometimes used of animals, usually to

mark individual variations of temperament, arousal, sociability, curiosity, and similar traits. Jennifer A. Mather and Roland C Anderson give an account of the "personalities of octopuses."[39] They hardly intend that these are persons; rather they borrow that term to describe their differentiated individuality. This is more accentuated in higher animals. But such "personality" is a behavioral, not an existential claim, more metaphorical than literal.

With humans we need, somewhat provocatively, the term "spirit" to get past the consciousness that is present in animals and capture this self-reflective inwardness. We need what the Germans call *Geist* or what existentialist philosophers call *Existenz.* Each person has a lone ecstasy, an *ek-stasis,* a "standing out," an *existence,* where the I is differentiated from the not-I. Only in humans is there such *genius* (recalling the Latin connotations).

Animals do not feel ashamed or proud; they do not have angst. They do not get excited about a job well done, pass the buck for failures, have identity crises, or deceive themselves to avoid self-censure. They do not resolve to dissent before an immoral social practice and pay the price of civil disobedience in the hope of reforming their society. They do not say grace at meals. They do not act in love, faith, or freedom, nor are they driven by guilt or to seek forgiveness. They do not make confessions of faith. They do not conclude that the world is absurd and go into depression. They do not get lost on a "darkling plain" (Matthew Arnold, *Dover Beach).* They do not worry about whether they have souls, or whether these will survive their death. They do not reach poignant moments of truth.

Animal particularities are mute; humans can articulate their individual biographies. A persons narrated story line—with a normative fiction setting a gap between the real and the ideal, and introspectively orienting the real—produces a *persona,* a lived presence to which each self has privileged access. There is an immediately given self, always in encounter with opportunity and threat. We experience romance and tragedy. This idiographic inwardness becomes a proper-named Presence, an "I," an ego. Such an "I" confronts others as "Thou."[40] This is the elation of auto/bio/graphy, not yet intellectual in the child, often not in the adult, but always existential and impulsive from our psychic depths.

Neuroscience has imaged much of the brain, only to realize that

it was imaging brains or, more accurately blood flow in brains, and not thoughts articulated in the minds of persons. There has been little or no success in correlating the flow of mental representations (as when the story unfolds in a novel) with the details of neural architecture, even though one can map some of the synaptic connections and reconnections. What will neuroscientists think when, imaging their own thinking brains, they ask one another how it is that one species has gained the capacity to do this, discuss the significance of such neuroscience, and watch the brain images of their discussion? Neuroscientists too are existential selves, historical persons with careers, each a subjective "I" in the midst of "Thous," even when they make "it-objects" of their brains.

The capacity for one person to take the mind of another, mind-reading as it were, produces in humans their capacity to be insulted and belittled, or to be respected and treated with dignity. Not only can we learn from others, but we can learn what they think of us—not just how they treat us (animals can learn that), but their point of view toward us. 1 can take up the ideational perspective of others, but that means I can infer their ideational perspective toward me. Relationships become interpersonal.

Such a "person" can suffer affliction by verbal insult (including omissions), of which animals are incapable, although animals can be ostracized. A human being can self-reflect about his or her status and encountered behavior in the view of others. "I am being treated poorly here, perhaps because I am poor." "I wonder if I should complain, or just be glad to get minimal emergency room service." "I was wrong about that woman being a nurse; she's a doctor. The nurses are more respectful than are the doctors. They treat me like a real person." Animals have no such capacities.

Bertrand Russell analyzes how, with language, humans can experience themselves biographically and present that biographical self to others. Animals can do neither. "A dog cannot relate his autobiography; however eloquently he may bark, he cannot tell you that his parents were honest though poor."[41] But a person can tell you that; indeed, for many persons, the fact that they and their parents have been honest, though poor, is the linchpin of their dignity.

With humans, the medical therapist is likely to work with a patient's face, hands, genitalia with more awareness of personhood,

as would not be the case for a veterinarian with animals—think of hands versus paws, for instance. The human face has evolved progressively refined features of self-expression, with more than thirty finely tuned muscles of facial expression and vocal control. This facilitates the subtle communication of moods, desires, intentions, personality, character. Animals too pick up subtle behavioral cues, as when they play, or when they recognize that a predator is hungry. But humans take a slur of profanity as an affront to their dignity—unless the remark is said with a sly smile, which can turn it into a compliment.

Within minutes of birth infants turn their heads and eyes toward faces, and within days they discriminate between the face of the mother and that of a stranger. Humans have a spectacular capacity to recognize faces; a person can distinguish his wife or his brother from any of the other six billion persons on Earth. Soon after birth, animals may imprint on parents; perhaps the human capacities arose from such animal precedents, initially selected for their survival value. Animals too notice eyes, and they react as if there is somebody there, even if they have no theory of mind. But such capacities for being present and for detecting presence in others—myself a person here, another person there—have in humans escalated into qualitatively different domains,

Animals do not have a sense of mutual gaze in the sense of joint attention, of "looking with." "Nonhuman primates in their natural habitats...do not point or gesture to outside objects for others; do not hold objects up to show them to others; do not try to bring others to locations so that they can observe things there; do not actively offer objects to other individuals by holding them out."[42] They do not negotiate the presence of an existential self, interacting interpersonally with other such agents, in the process of thinking about and pursuing goals in the world. Animals do see others in pursuit of the food, mates, or territories they wish to have; but they do not know that other minds are there, much less other spirits. This capacity for referencing others as distinct, intentional, existential selves like ourselves gives rise to an enhanced sense of the worth of such fellow humans, parallel to our own worth.

The principal focus of many discussions of human dignity is autonomy. A violation of such autonomy shuts down this distinctively human openness for particular life-imagination, construction, and

responsibility. Violations of human dignity typically involve unjustified constraints on such chosen ideas, beliefs, attitudes, feelings. This may be by abuse, vilification, and ridicule, or by overlooking and neglect. Psychotropic drugs can be used to impose conformity and obedience. Medical treatment or hospital care can be insensitive to such freedom, so far as it remains in the patient.

Dignity is a threshold concept, at first. All humans have it, and no animals—at least not with those characteristics analyzed here. But it is also a relative concept. Some behaviors are more dignified than others; some activities are beneath our dignity. Here the phenomenological sense of self-identity enters, in the sense of a goal or norm to which we hold ourselves accountable. We find it difficult to say that some animal's behavior was undignified. But human beings, enacting their embodied lives, have the capacity to treat their own behavior, cognition, and careers as objects of contemplation for what they are in themselves; there is a dialectic of reflection and action. This makes possible "style" in presenting self to others, as when one makes an effort to dress, speak, and behave with dignity.

Animals may fit into their social hierarchies; they can be keenly aware of their relations with conspecifics. They take up roles. Coyotes may have a hierarchy problem in the pack, but a coyote does not have an ego problem, wondering if its behavior is beneath its dignity, or if it has been treated without dignity by the alpha male. Humans evolved to have dignity when they evolved to be able to entertain the concept of dignity (and to acknowledge dignity by way of respect, recognition, courtesy), as chimpanzees cannot.

Such self-presentation can become overstudied and artificial, so that dignity can collapse. We dislike those who project images. Dignity operates often best at subliminal levels; but, on occasion, it can be brought to mind and refined. It is always near enough the surface to be readily affronted. Inherent dignity may be latent, an endowment; but expressed dignity always requires some considered self-control, an achievement. We are always keeping up a broken wholeness. Animals may exemplify the potential of their species with more or less success, but we do not know of any parallels of such considered and controlled dignity in animal behavior.

Ethical Uniqueness

Ethics is distinctively a product of the human genius, a phenomenon of our social behavior. To be ethical is to reflect on considered principles of right and wrong and to act accordingly, in the face of temptation. This is a possibility in all and only human life, so that we expect and demand that persons behave morally and hold them responsible for doing so. This is true even when, alas, they are tragically diminished in capacity and we cannot presume to hold them to what they ought to have been, or perhaps once were, at least aspirationally. Such an emergence of ethics is as remarkable as any other event we know; in some form or other ethics is pervasively present in every human culture, whether honored in the observance or in the breach. This fact looms large in human dignity.

In this, humans are unique; there is nowhere in animal behavior the capacity to be reflectively ethical. After a careful survey of behavior, Helmut Kummer concludes, "It seems at present that morality has no specific functional equivalents among our animal relatives."[43] Peter Singer's *Ethics* has a section called "Common Themes in Primate Ethics," including a section on "Chimpanzee Justice," and he wants to "abandon the assumption that ethics is uniquely human."[44] But many of the behaviors examined (helping behavior; dominance structures) are more pre-ethical than ethical; he has little or no sense of holding chimpanzees morally culpable or praiseworthy.

Frans de Waal finds precursors of morality, but concludes:

> Even if animals other than ourselves act in ways tantamount to moral behavior, their behavior does not necessarily rest on deliberations of the kind we engage in. It is hard to believe that animals weigh their own interests against the rights of others, that they develop a vision of the greater good of society, or that they feel lifelong guilt about something they should not have done. Members of some species may reach tacit consensus about what kind of behavior to tolerate or inhibit in their midst, but without language the principles behind such decisions cannot be conceptualized, let alone debated.[45]

As before with "culture" and with "teaching," finding "ethics" in nature is partly a matter of discovering previously unknown animal behavior, but mostly a matter of redefining and stretching what the word "ethics" means to cover behavioral adjustments in social groups.

Christopher Boehm finds that in some primate groups not only is there dominance hierarchy, but there are controls to keep such hierarchy working because this produces arrangements that the primates can live with, improving their overall success. Chimpanzees fight with each other over food and mates; but fighting is unpleasant, so the chimps will allow the dominant to break up such fights. If, however, the dominant becomes overly aggressive, the chimps will gang up on the dominant, who can control one but not several arrayed against him. The result is more "egalitarian behavior."[46] Perhaps such behaviors are the precursors out of which such maxims as "treat equals equally; treat unequals equitably" once emerged, but it must be equally clear that such chimps are orders of magnitude away from deliberate reflection on how to treat others fairly, respecting their rights, much less their dignity.

After her years of experience with chimpanzees, and though she found among them pair bonding, grooming, and the pleasure of the company of others, Jane Goodall wrote: "I cannot conceive of chimpanzees developing emotions, one for the other, comparable in any way to the tenderness, the protectiveness, tolerance, and spiritual exhilaration that are the hallmarks of human love in its truest and deepest sense. Chimpanzees usually show a lack of consideration for each others feelings which in some ways may represent the deepest part of the gulf between them and us."[47]

Higher animals realize that the behavior of other animals can be altered, and they do what they can to shape such behavior. So relationships evolve that set behavioral patterns in animal societies—dominance hierarchies, for example, or ostracism from a pack or troop. But it is not within the animal capacity to become a reflective agent interacting with a society of similar reflective agents, knowing that other actors, like oneself, are (if normal) able to choose between options and bear responsibility for their behavior. Nor is there among nonhuman animals any cultural or ideological heritage to defend.

Animals lack awareness that there are mental others whom one

might hold responsible. Or to whom one might be held responsible. This precludes any critical sense of justice, or in general of values that could and ought to be fairly shared because they are enjoyed by others who, like oneself, are the existential subjects of their own lives. Even more, this lack precludes respecting the dignity of others as part of moral responsibility. Such consideration is not a possibility in their private worlds, nor is a morally binding social contract such as that in inter-human ethics. Yet all this, undeniably, has emerged within the human genius.

Persons set up a reflective gap between the real and the ideal. The human must be moral, however brokenly the ideal mixes with the real, and in that consists the human dignity. So we find in persons an agent who must be oriented by a belief system, as animals are not, and that leaves us, in the end, with the question of how to authorize such a belief system. Ethics is essential to the human genius; we cannot realize our dignity without it. To put this provocatively, not only are the animals pre-ethical, but even humans when operating as scientists are pre-ethical. For centuries we have been welcoming scientific insights into our apparent uniqueness, into how our human nature evolved out of animal nature. But in the end we find that science not only struggles to understand how amoral nature evolved the moral animal, but finds itself incompetent to analyze how even now *Homo sapiens* has duties, how to set up and resolve that reflective tension between real and ideal.

Science and conscience have a complex, elusive relationship. Science needs conscience but cannot justify it. The *is-ought* divide continues, past, present, and future. Humans crossed it during their evolutionary history and now live in moral territory. That is dignity by heritage and endowment. But such endowment potential has to be made actual, generation after generation, in each new age, in each human life, lest we lose our dignity. After four hundred years of science and enlightenment, the value questions in the 21st century remain as sharp and as painful as ever. Not the least of such questions is how to recognize and to respect human dignity. Much in our future depends on the answer.

Notes

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[2] United Nations General Assembly, *Universal Declaration of Human Rights*, General Assembly Resolution 217 A (III), 10 December, 1948 (New York: United Nations General Assembly Official Records, 1948), available online at www.un.org/Overview/rights.html.

[3] Indeed, some complain that human dignity is a vague and ill-defined concept, so much so that people on all sides of disputes about it claim the term for their own view. See Ruth Macklin, "Dignity is a Useless Concept," *BMJ* 327 (2003): 1419-1420; Doron Shultziner, "Human dignity—functions and meanings," *Global Jurist Topics* 3 (2003), 1-21; Timothy Caulfield and Audrey Chapman, "Human Dignity as a Criterion for Science Policy," *PLoS Medicine (Public Library of Science) 2* (2005): 736-738, available online at dx.doi.org/10.371 /journal.pmed.0020244.

[4] Peter J. Richerson and Robert Boyd, *Not by Genes Alone: How Culture Transformed Human Evolution* (Chicago: University of Chicago Press, 2005), pp. 126, 195.

[5] *Chimpanzee Cultures*, ed. Richard W. Wrangham, William C. McGrew, Frans B. M. de Waal, and Paul G. Heltne (Cambridge, Massachusetts: Harvard University Press, 1994), p. 2.

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[12] Michael Tomasello, *The Cultural Origins of Human Cognition* (Cambridge, Massachusetts: Harvard University Press, 1999), p. 21.

[13] Daniel J. Povinelli, Jesse M. Bering, and Steve Giarnbrone, "Toward a Science of Other Minds: Escaping the Argument from Analogy," *Cognitive Science* 24 (2000): 509-541, p. 509; Daniel J. Povinelli and Jennifer Vonk, "Chimpanzee Minds: Suspiciously Human?" *Trends in Cognitive Sciences 7* (2003): 157-160.

[14] Marc D. Hauser, *The Evolution of Communication* (Cambridge, Massachusetts: MIT Press, 1996); Donald R. Griffin, *Animal Minds*, 2nd ed. (Chicago: University

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[16] Mark Twain, *Following the Equator and Anti-imperialist Essays* (New York: Oxford University Press, 1996[1897]), p. 256.
[17] Blaise Pascal, *Pensées,* trans. William F. Trotter (New York: Dutton, 1958[1670]), pensée no. 347, p. 97.
[18] Stephen R Anderson, *Doctor Dolittle's Delusion: Animals and the Uniqueness of Human Language* (New Haven, Connecticut: Yale University Press, 2004), pp. 2-8.
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[20] Ibid., p. 318.
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