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TRUSTING IN THE 'EFFICACY OF BEAUTY'

A KALOCENTRIC APPROACH TO MORAL PHILOSOPHY[1]

BRIAN G. HENNING

Although debates over carbon taxes and trading schemes, over carbon offsets and compact fluorescents are important, our efforts to address the environmental challenges that we face will fall short unless and until we also set about the difficult work of reconceiving who we are and how we are related to our processive cosmos. What is needed, I argue, are new ways of thinking and acting grounded in new ways of understanding ourselves and our relationship to the world, ways of understanding that recognize our fundamental interdependence and interconnection with everyone and everything in the cosmos, ways of understanding that recognize the intrinsic beauty and value of every form of existence. What is needed, I suggest, is a moral philosophy grounded in Alfred North Whitehead's philosophy of organism. It is the primary aim of this essay to defend the value of a moral philosophy inspired by Whitehead's organic, beauty-centered conception of reality.

In the opening decade of this new millennium, long-simmering conflicts have exploded into a rolling boil of fear, hostility, and violence. Whether we are talking about the rise of religious fundamentalism, the so-called "war on terror" or the much touted culture wars that define the

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contemporary American political landscape, there is a move away from tolerance and appreciation of diversity toward the ever more strident formulation of absolutist positions. Dogmatism in its various forms seems to be on the rise as the rhetoric and reality of compromise and consensus building is replaced with the vitriol of moral superiority and righteousness. As the psychologist and philosopher William James noted more than a century ago, the problem is that we are in a world where "every one of hundreds of ideals has its special champion already provided in the shape of some genius expressly born to feel it, and to fight to death in its behalf" (James 1956 [1891], 207–08). The force of this point was made brutally clear by the events of and following September 11, 2001. Given a world fraught with such conflict and tension, what is needed is not a moral philosophy that dogmatically advances absolute moral codes. More than ever, what is needed is an ethic that is dynamic, fallible, and situated, yet not grossly relativistic.

This project takes on added urgency when we consider the environmental and social crises that threaten not only human civilization, but all forms of life on this planet. Unhealthy air and water, species extinction, overpopulation, soaring food prices, fresh water shortages, stronger storms, prolonged droughts, the spread of deserts, deforestation, melting ice caps and glaciers, the submersion of low-lying lands—there are no shortage of challenges facing us in this young century. Complex and multifaceted, these issues are at once technological, scientific, economic, social, and political. Yet we will have no hope of successfully addressing the root cause of these crises until we also squarely confront fundamental issues concerning epistemology, axiology, aesthetics, and metaphysics. Although debates over carbon taxes and trading schemes, over carbon offsets and compact fluorescents are important, our efforts will ultimately fail unless and until we also set about the difficult work of reconceiving who we are and how we are related to our processive cosmos. What is needed, I believe, are new ways of thinking and acting grounded in new ways of understanding ourselves and our relationship to the world, ways of understanding that recognize our fundamental interdependence and interconnection with everyone and everything in the cosmos, ways of understanding that recognize the intrinsic beauty and value of every form of existence. What is needed, I suggest, is a moral philosophy grounded in Alfred North Whitehead's philosophy of organism. Recognizing this

need, it is the primary aim of this essay to present the key elements and defend the value of a moral philosophy inspired by, though not dogmatically committed to, Whitehead's organic, beauty-centered conception of reality.

I recognize that such a project is likely to be greeted with more than a kernel of skepticism by many readers. As a prominent scholar recently explained to me in declining an invitation to speak, though she continued to find Whitehead's work "interesting and thought provoking," studying process philosophy is "not encouraged" by her "mainstream analytic department."[2] This is revealing both in what it says about mainstream philosophy in the United States and in what it says about the state of Whitehead scholarship. I take it as a bad sign for the vitality of contemporary philosophical thought in America that philosophers increasingly feel the need to self-censor, avoiding interesting and thought-provoking material in order to have a successful career in mainstream philosophy. As deserving of attention as this problem may be, my concern here is more with the extent to which process scholars themselves share some of the blame for the neglect of Whitehead's work.

For some time, process scholars have suggested that Whitehead's organic metaphysics of process would be an ideal basis from which to develop a robust ethic, particularly one equipped to address environmental concerns.[3] Despite this general consensus, Whitehead's work suffers from chronic, if not fatal, neglect from mainstream ethicists and environmental philosophers.[4] Thus, it is a secondary, though not unimportant, intention of this essay to demonstrate that this neglect is in part the result of a misunderstanding of Whitehead's work and that Whitehead scholars are themselves at least partially responsible for this misunderstanding. Let us begin our discussion by considering the task and limits of moral inquiry.

1) MORALITY IN THE MAKING

What is the task of morality? What is its purpose and its aim? According to the dominant theories of morality, such as contract theory, utilitarianism, or deontology, the aim of morality is to construct abstract moral theories capable of determining what one ought to do in any moral conflict. In a sense, moral philosophy has become a sort of game in which an ethical theory is tested by posing to it various—often exaggerated—moral dilemmas involving burning buildings or the switching of tracks. If

an ethical theory is unable to neatly resolve a given dilemma, it is implied that it should be rejected whole cloth.

The first difficulty with this view of morality is that it fails to appreciate fully the fallibility of human inquiry. Although testing the adequacy of proposed theories is itself a laudatory goal, from the fallibilist's view point, it is problematic that the motivation behind this procedure often rests on the presupposition that moral inquiry leads to—or is in principle capable of—absolute certainty. Pragmatist and process philosophers, however, rightly reject this notion of inquiry, acknowledging that, because absolute certainty is an unrealizable ideal, moral fallibility is inescapable. Thus, in rather sharp contrast to most modern ethical theories, I contend that we should no longer understand the task of moral philosophy to be the construction of absolute and unchanging moral laws. The limitations of moral philosophy imposed by the fallibility of human inquiry must finally be recognized—no longer should one expect moral theories to be capable of abstractly prescribing what ought or ought not to be done prior to a particular concrete situation. Unlike elementary mathematics, for example, every moral problem does not have a single indisputable answer existing prior to its solution that we need only divine and then codify in a moral law. Morality, like life, is inherently "messy." Yet without qualification, the rejection of absolute moral codes is likely to be misunderstood as implying a gross relativism wherein each culture or individual decides what is right for them. However, upon closer examination, we find that what is needed is not the wholesale rejection of moral laws, but a dramatic revision in how we conceive of their status.

In a sense, we should conceive of moral laws as being analogous to physical laws. Initially, this comparison may seem to imply the opposite of my intention. Indeed, for many, science is often understood to epitomize the pursuit of absolutely certain truths. The problem with this interpretation is that it embodies an inaccurate understanding of the nature of scientific theories. Of course, there is little doubt that many scientific theories do possess a great many truths. What is being denied is not that one account may be truer – more explanatorily adequate – than another, but that any of these "truths" are of the sort that could be called "final." The comparison between the laws of morality and the laws of nature is meant to highlight the fact that moral inquiry is a form of inquiry in general and that all forms of inquiry are inherently fallible. Accordingly, the "laws"

of science are not infallible formulations immune to development or revision; they are exceedingly probable formulations of observed regularities. Thus, although scientists may still use the language of "laws," few continue to perceive them as absolute formulations as, for example, Newton did.[5] If the last century's scientific discoveries have taught us anything, it should be that the "truths" of science are limited.

Similarly, just as there is no final or absolute certainty in physics that would allow one to make perfect predictions about future physical events, there is no final truth in ethics that would allow one dogmatically to determine in advance the good in any particular situation. Like the scientist who must wait and revise her conclusions based on the discovery of new evidence, if we are to lead the moral life, we also must continually and resolutely revise our conclusions in light of the goods which we can presently see, and resist the temptation to codify these conclusions in absolute moral laws. Just as we have moved beyond the notion that nature's "laws" give us infallible access to natural processes, we must abandon dogmatic views of morality. And just as new experiments may force the revision and reinterpretation of physical laws, the emergence of new forms of social order will inevitably require the revision and refinement of our moral laws. Thus, as Whitehead once noted, the *true* foe of morality is not change, but "stagnation" (1933, 269).

In our effort to avoid moral dogmatism, we must be equally wary of embracing the opposite extreme and reject all moral codes for some form of pure relativism or subjectivism. Although morality is always in the making, we must recognize that novel and intense experiences can only be achieved within a sufficiently stable environment. Law and order, for instance, are critical to the functioning of complex human communities. The problem, however, is that all too often the conservative becomes obstructionist, particularly in debates over morality. Whitehead has a unique way of putting this point: "it is true that the defense of morals is the battle-cry which best rallies stupidity against change. Perhaps countless ages ago respectable amœbæ refused to migrate from ocean to dry land—refusing in defence of morals" (1933, 268). In attempting to defend absolute, unchanging moral laws, he goes on to argue, the "pure conservative is fighting against the essence of the universe" (274). To be adequate, therefore, *morality must at once be conservative and adventurous*. Morality requires that we intrepidly revise our moral laws in light of new forms

of social order while simultaneously preventing relapse to "lower levels." Regrettably, examples of an obstructionist conservatism abound.

For instance, for eight years the Bush administration stubbornly refused to take significant action to address climate change and other ecological challenges, claiming that our public policies must be driven by "good scientific facts," not conjecture. "More study is needed before we can take action," was often the refrain. The administration even went so far as to censor top scientists' reports on global climate change.[6] As Dale Jamieson correctly notes, we do not have the luxury of waiting until we have all the "facts." "There are many uncertainties concerning anthropogenic climate change, yet we cannot wait until all the facts are in before we respond. All the facts may never be in. New knowledge may resolve old certainties, but it may bring with it new uncertainties. And it is an important dimension of this problem that our insults to the biosphere outrun our ability to understand them. We may suffer the worst effects of the greenhouse before we can prove to everyone's satisfaction that they will occur" (1992, 141–2).

Jamieson's claims regarding certainty and action point to a more fundamental point. The public debate over climate change, like that over evolution, reveals a fundamentally flawed understanding of the nature of scientific investigation and the "facts" that it pursues. The Cartesian spirit of modernity is alive and well in the rhetoric of scientists and policymakers who speak as though science were capable of obtaining absolutely certain truths in any arena.[7] What is unfortunate about this is, in exaggerating the status of their findings, scientists unintentionally weaken their significance. In speaking as though their conclusions are infallible formulations and that "facts" are value-free verities, scientists often provide an opening to the very critics that they hope to silence. For if scientific theories are "facts" in this strong sense, then all critics need do is show that there is still some room for doubt, some ambiguity of data, and they can claim to have falsified a theory.[8] The point, of course, is that science is no more capable of *absolute truths* than any other field of investigation, if by absolute truths we mean something that is final and indubitable. The fact of the matter is that, as Hume showed long ago, scientific "truths" are not absolutely certain; they are more or less probable outcomes based on empirical observation.[9]

Following Whitehead and his American pragmatist cousins, then, sci-

entists and policy makers need to recognize the inherently provisional and fallible nature of their conclusions. Once we abandon the notion that absolute certainty is possible, we can begin to recognize the vacuousness of the current debates over the scientific evidence regarding climate change. Once we recognize that there are no scientific "facts" in the sense of absolutely certain or final truths, we will recognize that we have no choice but to act on tentative formulations and provisional conclusions. We have no choice, and have never had any choice, but to act on the best state of our understanding, with all of the doubt, risk, and messiness that this involves. This is not to say that every truth is as established as every other, nor is it an acceptance of gross relativism. Rather, what I am suggesting is that a Whiteheadian approach to our social and ecological challenges will begin by abandoning this epistemological chimera called absolute certainty and embrace fully our unavoidable fallibility. More study will always be needed, but that does not justify the abdication of our responsibility to act today on the best state of our understanding. There is a second, more fundamental reason for adopting a thoroughgoing epistemological fallibilism—our unavoidable fallibility stems not only from the finitude and imperfection of human knowers, but also from the nature of the known.

2) OUR PROCESSIVE COSMOS

Final truths (whether in religion, morality, or science) are unattainable not only due to the finitude and fallibility of human inquirers, but because we live in what the theologian John F. Haught calls an "unfinished universe" (2004). The notion that one could achieve anything like a final or absolute formulation in any field of study presupposes that one's object is static. Thankfully, we do not live in such a universe. Over the last century scientists have consistently discovered that the universe is not a plenum of lifeless, valueless facts mechanistically determined by absolute laws. Rather, we live in a processive cosmos that is a dynamic field of *events* organized in complex webs of interdependence, rather than a collection of objects interacting via physical laws.

The intuition that the universe is fundamentally a clockwork machine successfully guided science in the wake of Newton's inspirational formulation of the laws of mechanics, but this metaphor proved increasingly inadequate as Newton's work was supplanted in the early 20th century by both general relativity and quantum mechanics. Even at its peak, the

mechanical metaphor created difficulties for thinking about human beings, who were never effectively illuminated by the assumption that they were complex machines. At the level of elementary particles, quantum mechanics disclosed a world of wave-like particles spread out in space and inextricably entangled with other particles in the local environment. The notion of autonomous "individual" particles disappeared.

Although all metaphors are misleading to some degree, the metaphor of the world as an evolving organism has become more helpful than the old mechanical model of the world as a clock. This, in a sense, is the founding insight of Whitehead's "philosophy of organism," which took as its starting point the view that individuals—particles, plants, and people—are not discrete facts walled off from each other but parts of complex and intersecting wholes. Conceived of as an organic process, every individual is inextricably intertwined and interconnected with every other. The fundamental reality is no longer individual entities but rather the ongoing processes by which they interact and create novel structures.

Once we recognize that every individual—from a subatomic event to a majestic sequoia—brings together the diverse elements in its world in just this way, just here, and just now, we see that nothing is entirely devoid of value and beauty. This process whereby many diverse individuals are brought together into the unity of one new individual, which will eventually add its energy to future individuals, characterizes the most basic feature of reality and is what Whitehead calls the "category of creativity." On this view, reality is best characterized not as an unending march of vacuous facts, but as an incessant "creative advance" striving toward ever-richer forms of beauty and value.

Noting its emphasis on interdependence and interrelation, many scholars have rightly noted that Whitehead's metaphysics is uniquely suited to provide a basis for making sense of our relationship to the natural world.[10] Decades before modern ecologists taught us about ecosystems, Whitehead was describing individuals as interrelated societies of societies. No individual, Whitehead insisted, can be understood apart from its relationship to others.[11] Indeed, whereas ecologists only explain how it is that *macroscopic* individuals are related in interdependent systems, Whitehead's organic metaphysics of process provides a rich account of how individuals at *every* level of complexity—from subatomic events to ecosystems, and from oak trees to galaxies—arise and are perpetuated.[12]

What is more, Whitehead's philosophy of organism places a premium on an individual's dependence on and relationship to the larger wholes of which it is a part without making the mistake of subsuming the individual into that larger whole.[13] With the philosophy of organism we need not choose between either the one or the many, "the many become one and are increased by one" (Whitehead [1929] 1978, 21).

By providing a robust alternative to the various forms of reductive physicalism and destructive dualism that currently dominate many branches of science and philosophy, the philosophy of organism is an ideal position from which to address the complex social and ecological challenges confronting us. First, if who and what I am is intimately and inextricably linked to everyone and everything else in the universe, then I begin to recognize that my own flourishing and the flourishing of others are not independent. Not only do I intimately and unavoidably depend on others in order to sustain myself, with varying degrees of relevance, how I relate to my environment is constitutive of who and what I am. As we are quickly learning, we ignore our interdependence with our wider environment at our own peril.

Moreover, in helping us to recognizing our connection to and dependence on our larger environment, an organic model forces us to abandon the various dualisms that have for too long allowed us to maintain the illusion that we are set off from the rest of nature. Adopting an organic metaphysics of process forces us finally to step down from the self-constructed pedestal from which we have for millennia surveyed nature and finally to embrace the lesson so compellingly demonstrated by Darwin: humans are not a singular exception to, but rather a grand exemplification of, the processes at work in the universe.[14] In this way we ought finally to reject not only the materialisms of contemporary science, but also the dualisms that often undergird our religious, social, political, and moral understandings of ourselves and our relationship to the natural world. As John Dewey concisely put it, "man is within nature, not a little god outside" (1929, 351). Until we shed our self-deluding arrogance and recognize that who and what we are as a species is fundamentally bound up in and dependent on the wider scope of events unfolding in the universe, the ecological crisis will only deepen. Taken seriously, our understanding of reality as composed of vibrant, organically interconnected achievements of beauty and value, has a dramatic effect on how we con-

ceive of ourselves, of nature, and of our moral obligations—morality can no longer be limited merely to inter-human relations.

In rejecting modernity's notion of lifeless matter, we come to recognize that *every* form of actuality has value in and for itself, for others, and for the whole. In aiming at and achieving an end for itself, every individual—no matter how ephemeral or seemingly insignificant—has intrinsic value for itself and in achieving this self-value it thereby becomes a value for others and for the whole of reality. Every individual, from the most fleeting event in deep space to centuries old redwoods, has value for itself, for others, and for the whole of reality and it is from this character of reality that our moral obligations derive (Whitehead 1938, 111).

Given that every individual in our universe, no matter how small or seemingly insignificant, has some degree of value, the scope of our direct moral concern[15] can exclude nothing. Thus, in rather sharp contrast to the invidious forms of anthropocentrism that characterize much of western moral thought, our scope of direct moral concern cannot be limited to humans, to sentient beings, or even to all living beings. Morality is not anthropocentric, but neither is it sentientcentric or biocentric. In affirming the value of *every* individual, we must begin to recognize that *every* relation is potentially a moral relation. As Whitehead vividly puts it, "The destruction of a man, or of an insect, or of a tree, or of the Parthenon, may be moral or immoral.… Whether we destroy or whether we preserve, our action is moral if we have thereby safeguarded the importance [or value] of experience so far as it depends on that concrete instance in the world's history" (1938, 14–15). Morality is not merely about how we ought to act toward and among other human beings, other sentient beings, or even other living beings. Morality is fundamentally about how we comport ourselves in the world, how we relate to and interact with every form of existence.

To summarize our position thus far, in recognizing the fallibility of human knowers and the dynamic nature of the known, a Whiteheadian approach insists that moral philosophers steadfastly recognize the limits of moral inquiry, carefully navigating between the rocks of dogmatic absolutism and gross relativism. The recognition of nature's dynamism furthermore requires that philosophers abandon finally the artificial bifurcations (dualisms) and unjustified reductions (physicalism and materialism) that distort and destroy the interdependent relationships constituting reality.

The world revealed by the last century of scientific investigation can no longer support a mechanistic model that describes the natural world in terms of vacuous facts determined by absolute laws. In its place, I am defending the adoption of an organic model that conceives of reality as vibrant, open, and processive. On this model, individuals are conceived of as ongoing events situated in vast webs of interdependence, each achieving value for themselves, for others, and for the whole of reality.

3) REHABILITATING WHITEHEAD

Given the many promising elements of the philosophy of organism, why is Whitehead's work so routinely ignored by mainstream philosophy and by environmental philosophers in particular?[16] We could, of course, point to the difficulty of Whitehead's texts. I rather suspect that we Whiteheadians like to tell ourselves this story, but given the comparative popularity of figures such as Heidegger, Hegel, and Wittgenstein, this alone could not explain the trend.

Noting this, others might explain the neglect by suggesting that Whitehead's work had the misfortune of being born out of season—metaphysical speculation has long been out of fashion, after all. While there is probably more than a kernel of truth to this, I suggest that it is we Whitehead scholars who must accept some of the blame for the perennial neglect of his work. For too long, Whiteheadians have been more concerned with debating about what Whitehead did or did not think than with setting about the difficult work of building and improving on his thought. The era of Whiteheadian scholasticism must come to an end, if Whitehead's rich and provocative project is to be of any lasting importance. Indeed, if we are to be true to the spirit of Whitehead's work, this is the only appropriate course.[17] Thankfully, there are many signs that a new day is dawning in Whitehead scholarship.[18]

While this line of reasoning might account for the *general* neglect of Whitehead's work, there would seem to be a more subtle reason why the philosophy of organism is frequently passed over by potentially sympathetic environmental philosophers and ethicists. The hesitation on the part of many stems not from Whitehead's emphasis on interrelatedness or his characterization of individuals as nested societies of societies, nor does it stem from his affirmation of the intrinsic beauty and value of every individual. The problem is not that Whitehead affirms the equality of every

individual in *having* value, but rather his recognition that not every individual has value *equally*. More than any other, it is this claim—that there are grades or degrees of beauty and value among the individuals of the world—that gives many philosophers pause, and for good reason.

For too long, the so-called "great chain-of-being" has not only justified the mistreatment of nature and nonhuman animals, but also the brutal subjugation of women and indigenous peoples. The problem, I submit, is that this hierarchical conception of nature was taken not only to be ontologically descriptive, but also ethically normative—that is, an individual's *ontological status* was constitutive of its *moral significance*. A notable, but not unusual, example of this sort of logic can be found in Aristotle's *Politics* I.8, where he argues that "after the birth of animals, plants exist for their sake, and that the other animals exist for the sake of man.... Now if nature makes nothing incomplete, and nothing in vain, the inference must be that she has made all animals for the sake of man." It is important to note that this hierarchy not only held *between* species but also *within* a species. "And so," Aristotle continues, "from one point of view, the art of war is a natural art of acquisition...an art which we ought to practice...against men who, though intended by nature to be governed, will not submit; for war of such a kind is naturally just" (1256b15-25). Because of the truly devastating results of this thinking, many philosophers, particularly those with environmental concerns, view with great suspicion any philosophy that embraces a hierarchical conception of reality. And herein lies the roots of many misgivings over Whitehead's philosophy of organism.

For many potentially sympathetic philosophers, process philosophy's insistence on what appears to be a traditional hierarchy of value is too much like the old hierarchies that have for centuries justified the destruction of the environment. Indeed, pointing to this hierarchy of value, some have accused process philosophers of not having fully abandoned their anthropocentrism, noting that, even if everything has value, as the most complex form of life, humans are still likely to be at the top of that hierarchy. For instance, considering process thought, the deep ecologist John Rodman argues that "'Subhumans' may now be accorded rights but we should not be surprised if their interests are normally overridden by the weightier interests of humans, for the choice of the quality to define the extended base class of those entitled to moral consideration has weighted

the scales in that way" (125).[19] Thus, Rodman concludes, process philosophy's rejection of anthropocentrism is not taken far enough.

This is one area where my own approach, what I call the ethics of creativity, has the potential to make a significant contribution. What both critics and proponents of Whitehead's work frequently misunderstand is that, although a Whiteheadian ethic *does* recognize, rightly in my estimation, that the depth of value achievable by individuals varies, the depth of value achieved by an individual *does not*, as it does in traditional systems, *directly determine* that individual's moral significance. Although an individual's onto-aesthetic status plays a significant role in determining its moral significance, the former is not neatly constitutive of the latter. While the depth of value achieved by an individual will be an *important* factor in understanding its moral significance, *ultimately an action is only moral to the extent that its aim is consonant with the aim of every form of process*. Following Whitehead, I claim that the ultimate aim of the creative advance of the universe is at the production of beauty.[20] Process is inherently "kalogenic" (from the Greek *kalós* or beauty and *genesis* or creation).[21] "All order is therefore aesthetic order, and the moral order is merely certain aspects of aesthetic order" (Whitehead [1925] 1996, 105).

4) TRUSTING IN THE EFFICACY OF BEAUTY

Whitehead's most extensive discussion of beauty is found in *Adventures of Ideas*, where he defines beauty as "the mutual adaptation of the several factors in an occasion of experience" (1933, 252). He explains this adaptation in terms of a twofold aim. The first aim, what he calls the "minor form" of beauty, is at the "absence of mutual inhibition" so that the elements brought together "do not inhibit each other." Thus, the minor form of beauty involves a harmony of experience in that there is "the absence of painful clash." The *major* form of beauty then builds on this harmony and "adds to it…new contrasts of objective content" (252). Thus, in the major form of beauty, there is not only a lack of mutual inhibition or harmony, but the introduction of new contrasts that deepen the *intensity* of the experience achieved such that its elements are not only mutually compatible, they are mutually enhancing.[22] It is contrast which gives depth and richness to the "clutch at vivid immediacy" that is life (Whitehead [1929] 1978, 105). This is the very essence of the creative advance wherein, as Whitehead puts it, "the parts contribute to the massive

feeling of the whole, and the whole contributes to the intensity of feeling of the parts" (1933, 252).[23]

Working in a similar vein, Charles Hartshorne describes beauty as a "golden mean" between two pairs of extremes (Hartshorne 1968, 311).[24] In this way, it is helpful to conceive of beauty as analogous to a bi-polar version of Aristotle's concept of virtue. Whereas, for instance, courage is understood as the mean between a single pair of extremes—i.e., rashness and cowardliness—beauty is here defined as the mean between, on the one hand, unity and diversity, and, on the other hand, simplicity and complexity. When diversity is too great and unity is lost, experience becomes chaotic, yet when unity is too great and diversity is lost, experience becomes dull and monotonous. Similarly, an otherwise harmonious experience that is too simple is trivial, while one that is too complex may be so utterly profound that it cannot be grasped.[25] The universal aim at beauty, therefore, is the aim at the ideal balance between a *harmony* of the details and the *intensity* of the contrast between these elements.

It is important to note that, strictly speaking, there is no truly unbeautiful experience. The zero of beauty is in fact the zero of actuality.[26] In achieving *some* degree of harmony and intensity, every individual is, taken by itself, beautiful. However, taken in its larger environment, an individual may indeed be ugly. "Evil, triumphant in its enjoyment, is so far good in itself; but beyond itself it is evil in its character of a destructive agent among things greater than itself. In the summation of the more complete fact it has secured a descent towards nothingness, in contrast to the creativeness of what can without qualification be termed good. Evil is positive and destructive" (Whitehead [1925] 1996, 95).[27] Ugliness results from mutual inhibition or frustration, either through the destruction of achieved forms of beauty, what we will call "violence," or by the interposition of lower forms of beauty when higher forms are possible, what Whitehead calls "anesthesia" (Whitehead 1933, 264). Thus, a violent experience is ugly in that it destroys existing forms of beauty, while an anesthetic experience is ugly in achieving a less intense form of beauty where higher forms are possible.

Although both are tragic, the evil of violence, what Whitehead calls "aesthetic destruction" or "discord," is "preferable to a feeling of slow relapse into general anæsthesia, or into tameness which is its prelude" (1933, 264). Whereas discord at least has the potential to create more

intense experiences, the slow death of tameness is the death knell of the creative advance. Thus, Whitehead rightly argues, "Perfection at a low level ranks below Imperfection with higher aim. A mere qualitative Harmony within an experience comparatively barren of objects of high significance is a debased type of Harmony, tame, vague, deficient in outline and intention" (264).

The problem today, especially with regard to our current ecological crisis, is not that there are more "evil people" running around than in the past, but that there are too many of what Whitehead calls "good people of narrow sympathies" ([1925] 1996, 98). In a sense, our obsessively consumeristic culture has created an epidemic of "tameness"—as we slowly sink into a sweet, anesthetic stupor, many often fail to see the violence of their actions. For instance, this was grotesquely on display early in President George W. Bush's first term when his press secretary was asked "Does the President believe…given the amount of energy Americans consume per capita, how much it exceeds any other citizen in any other country in the world, does the President believe we need to correct our lifestyles to address the energy problem?" His press secretary matter-of-factly answered: "That's a big no. The President believes that it's an American way of life, and that it should be the goal of policy makers to protect the American way of life. The American way of life is a blessed one" (Fleischer 2001).

It is unlikely that the planet can sustain this "blessed" way of life, especially as it is exported to the rest of the world. A kalocentric or beauty-centered approach to our social and ecological challenges seeks to reorient our conception of ourselves and our place in the world so that we begin to understand that there are richer, more meaningful forms of beauty than the anemic simulacra we are being force-fed. Whitehead calls this expanded consciousness "peace." Peace, he writes in *Adventures of Ideas*, is the "Harmony of Harmonies which calms destructive turbulence and completes civilization" and makes it possible to move beyond "the soul's preoccupation with itself" (1933, 285). "Peace," he continues, "carries with it a surpassing of personality." To commit oneself to peace, to this surpassing of personality, is "primarily a trust in the efficacy of Beauty" (285).

This is not a sort of absent-minded trust, nor is it some sort of blind faith. Peace is not the mere absence of discord; it is a positive feeling which "crowns the 'life and motion' of the soul" (285). To trust in the ef-

ficacy of beauty is to choose in each action to affirm more beauty, to fight against the slow relapse into tameness and anesthesia, and to fight against the violence that destroys the forms of beauty that we have inherited. To put one's trust in the efficacy of beauty does not mean that we close our eyes to the ills of the world and hope for the best. Rather, to put one's trust in the efficacy of beauty is to strive always and everywhere to realize as much beauty as possible. To trust in the efficacy of beauty is to value deeply and thoroughly the intensely beautiful world around us. In the end, to place one's trust in the efficacy of beauty is to commit oneself to becoming an agent of beauty.

Yet in trusting the efficacy of beauty we must not forget the tragic nature of existence. In many respects, tragedy is both unavoidable and necessary in the achievement of higher forms of beauty. Indeed, life itself necessarily involves violence. In its bid to sustain itself, each living organism robs from others in order to create and sustain itself. "Life is robbery" (Whitehead [1929] 1978, 105). Like every living organism, human beings destroy other organisms in order to sustain themselves. The problem, as James vividly puts it, is that "The actually possible world is vastly narrower than all that is demanded; and there is always a *pinch* between the ideal and the actual which can only be got through by leaving part of the ideal behind" ([1891] 1956, 202). Yet this is not the end of the story. Although "Life is robbery." as Whitehead continues, "It is at this point that with life morals become acute. The robber requires justification" ([1929] 1978, 105). The question for morality, then, is whether and when this violence, this robbery is justified.

5) THE ROBBER'S JUSTIFICATION

Confronted with this claim, many traditional moral philosophies would appeal to some form of ontological hierarchy or invoke some bifurcation to justify why higher animals such as ourselves are justified in our robbery. For instance, deontologists and social contract theorists would in some way want to limit moral significance to those with the capacity or the potential for rational thought, while utilitarians will cast a wider net, including all sentient beings. Aristotelians and natural law theorists, on the other hand, will draw an even closer connection between an individual's ontological status and its moral significance, suggesting that the "lower forms" of life are for the "higher forms." Seeking to remedy the

violence done by these artificial bifurcations and the invidious use of hierarchies, many environmental philosophers rightly insist that we recognize the value of every individual.

Herein lies the source of one of the most basic divisions between traditional ethics, environmental ethics, and animal ethics. Many within traditional moral philosophy remain suspicious of environmental and animal ethicists who seek to expand the scope of direct moral concern, fearing that the recognition of non-humans will come at the expense of humans—that the ethical playing field will be leveled either by illicitly elevating non-humans to the level of humans or by inappropriately denigrating humans to the level of non-humans. On the other hand, environmental and animal ethicists continue to be confused why traditional moral philosophers retain an unjustified hierarchical or dualistic axiology that is unsupportable by modern evolutionary science and which has historically been used to justify exploitive relationships with nature and "inferior" peoples. Why, they rightly wonder, do so many philosophers continue to maintain in their philosophies what they do not practice in their daily lives?

The present project is uniquely situated to help resolve this artificial and damaging impasse. It is, I contend, the central role of beauty, the *kalocentric* focus of a process approach, that makes it possible to recognize that there are real differences in the complexity of individuals, yet not make the mistake of taking these differences as purely normative. That is, by adopting a truly kalocentric approach it is possible to appropriately recognize differences in degrees of beauty and value without succumbing to the seductive logic that an individual's onto-aesthetic status strictly determines its moral worth.

I am reminded in this context of a passage from the opening pages of Whitehead's (1938) *Modes of Thought* in which he compares the beauty and value achievable by human civilization with the beauty achievable by a nightingale and a hermit thrush. He notes first that although "the hermit thrush and the nightingale can produce sound of the utmost beauty…they are not civilized beings." Clearly, he writes, these "higher animals" are able to "entertain notions, hopes, and fears. And yet they lack civilization by reason of the deficient generality of their mental functionings. Their love, their devotion, their beauty of performance, rightly claim our love and our tenderness in return. Civilization is more than all these; and in moral worth it can be less than all these" (3–4).

There are several noteworthy points here. First, the hermit thrush and the nightingale are intrinsically beautiful beings who "rightly claim our love and our tenderness." They are, in this sense, individuals deserving of our direct moral concern. Yet, in that the thrush and the nightingale are unable to entertain notions of "adequate generality," we must also recognize that the beauty that they are capable of achieving is not as rich as that of a healthy adult human being. In achieving a relatively simple form of unity in diversity, the nightingale's song is a good example of the achievement of a "pretty" form of beauty. Although we rightly appreciate its elegant simplicity, the nightingale's song is trivial in comparison to the profound beauty of a concerto by Mozart. In our efforts to overcome the errors of the past, we must not fail to recognize that there are real differences in the richness of experiences achievable by different types of individuals. Indeed, the hasty rush to an axiological egalitarianism is potentially more destructive than the use of an invidious anthropocentric hierarchy.

This is where the final line of Whitehead's claim is important to note. Despite the greater complexity and beauty achievable by human civilization, in terms of *moral worth*, human civilization may "rank lower" than the hermit thrush and the nightingale. The nightingale's onto-aesthetic status, the depth of beauty and value achievable by it, does not neatly constitute its moral significance. If morality is not about the simple affirmation of the interests of "higher" individuals, what does determine an individual's moral significance?

As I have argued in more detail elsewhere, taking the kalocentric focus of process seriously we see that an individual's moral significance is ultimately determined not merely by its potential depth of beauty, but whether the satisfaction of its demands adds to or detracts from the achievement of the most beautiful whole possible in each particular situation. In this way, the fundamental duty within a kalocentric ethic is *always to act in such a way as to bring about the greatest possible universe of beauty and value that in each situation is possible*.[28]

On this view, morality is not about simply affirming the needs of "higher" individuals. When there are true instances of moral conflict and we are forced to choose between different sets of individuals, our obligation is *not* simply to sacrifice the interests of the "lower" for the sake of the "higher," as it was with traditional approaches. Rather, our action is

moral only if we affirm the most harmony and intensity (beauty) in the situation *taken as a whole*. That is, in each situation we must strive to be as inclusive of the interests of others without allowing experience to devolve into chaos (harmony) and in choosing between different courses and competing claims we ought always to aim at that whole which is richer and more complex (intensity). We ought always to avoid, therefore, the destruction or maiming of any individual, unless *not* doing so threatens the achievement of the greatest harmony and intensity that in each situation is possible.[29] Although there is not space to develop fully the moral decision-making process implied by these claims, it may be instructive to conclude by briefly applying this position to Whitehead's example of the nightingale.

Before we can determine the *moral* significance of the nightingale vis-à-vis humans, we must first seek to learn as much as we can about the beauty and value affected by and achievable through our actions.[30] In a sense, then, the first step in any moral decision-making process is education. We must work to achieve a width of understanding and experience to cut against our tendency toward those narrow sympathies that lead to violent destruction and anesthetic tameness. Let us begin, then, by trying to learn more about nightingales.

The nightingale (*luscinia megarhynchos*) is a migratory insectivorous bird that nests in forest and brush areas of Europe and southwest Asia and winters in southern Africa. Its distinctive song has inspired poets and authors for centuries. [31] Although it is not currently threatened with extinction, like other migratory bird populations, nightingale populations are on the decline.[32] While the reasons for the decline of each species is complex, migratory bird populations worldwide are generally on the decline because of (1) the fragmentation and loss of habitat and (2) global climate change.[33] Indeed, these two closely related trends are conspiring to bring about one of the greatest losses of biodiversity since the last mass extinction 65 million years ago that saw the demise of the dinosaurs.[34] Migratory birds such as the nightingale are particularly sensitive to these changes. As the Executive Secretary of the Convention on Migratory Species recently noted: "Migratory birds play a key role as biodiversity indicators. Any impact on ecosystems resulting from climate change, habitat degradation or availability of prey is reflected in the migration patterns and timing and breeding output of migratory birds" (United Nations

2008). It would seem, then, that the activities of human civilization are in conflict with the flourishing of the nightingale. What guidance would a kalocentric approach such as the ethics of creativity provide?

If our aim is to achieve the most beauty possible, our goal is to achieve the most harmonious and intense whole possible in this situation. Understood as maximal diversity in unity, the moral aim at harmony has a bias towards inclusivity. To aim at harmony requires that we be as inclusive as possible of the demands made upon us without allowing experience to degenerate into chaos. The burden of proof, therefore, is not on those who would seek to conserve achieved forms of beauty and value, but on those who would destroy them. Too often, this step in moral decision-making is cut short. The general balkanization of public discourse leads many prematurely to assume that the demands made upon us are mutually exclusive, that we are in a zero sum game. Although there are certainly very real instances of mutually exclusive demands—as I have already noted, for instance, the continuation of life necessarily requires robbery and violence—in many instances the conflict is only apparent. There is a general failure of moral imagination needed to envision ways of living and acting that avoid unnecessarily destroying achieved forms of beauty.

Yet beauty requires not only harmony or the absence of "painful clash," but also intensity. We ought not only to aim at that course of action that will avoid mutual inhibition, but also that course that will achieve the most intense form of beauty possible. Intensely beautiful experience is purchased through complex interrelations and patterns of experience that introduce new contrasts that deepen and magnify experience. We ought, therefore, to embrace those forms of living that are qualitatively richer, that foster more complex combinations and more intense contrasts. What would this mean in the context of the conflict between human civilization and the nightingale?

Although the depth of beauty and value achievable by both human beings and nightingales is relevant to our moral decision-making, our aim is not merely to preference the interests of the "higher" individual. Ultimately our moral obligation is to act in such a way as to bring about the greatest possible universe of beauty and value that in this situation is possible. The conflict in this situation is between the relatively trivial forms of beauty that many humans seek, which are contributing to the loss and fragmentation of habitat and to global climate change, and the

vital needs of migratory bird species such as nightingales. Though it will likely require a dramatic revision of our consumeristic lifestyle, even a relatively large human population could thrive alongside a species such as the nightingale. Therefore, while humans have the potential to achieve much more complex and intense forms of beauty than the nightingale, the world would be a less beautiful place if we were to preference human consumption habits over the nightingale's survival and flourishing. Although human civilization has a "higher" onto-aesthetic status, in moral significance many destructive aspects of human civilization rank lower than the nightingale. In the final analysis, then, our obligation to avoid the destruction or maiming of any individual, unless not doing so threatens the achievement of the greatest harmony and intensity possible, requires that we begin to change those practices that undermine the flourishing of these beautiful animals.

A unique, kalocentric approach has the potential to bridge many traditional divides within moral philosophy, though much work remains to be done. Once we recognize more fully the interconnected and interdependent nature of our reality and embrace an organic conception of the world that appreciates the beauty and value of every form of existence without slipping into the excesses of an egalitarianism, we can begin to move beyond the invidious walls that too often separate traditional moral philosophy, environmental ethics, and animal ethics. In a world that is filled with so much ugliness and fear, a kalocentric approach to ethics calls on each of us to fallibly, humbly, and with fear and trembling, attempt in each situation to affirm the greatest and most beautiful world possible, knowing always that we cannot in advance know which universe that will be. In the end, human action is like every other form of process in the universe—it is good when it is beautiful.

NOTES

1. Earlier drafts of portions of this essay benefited greatly from the comments of participants in the séminaires de recherche "Chromatiques Whiteheadiennes," at Paris 1 Panthéon Sorbonne, Paris, France in November of 2007 and from the insightful questioning of participants in the Metaphysical Society of America's March 2008 conference in Portland, Maine. A small portion of this essay appeared in the (now defunct) popular newsletter *Science and Theology News* 6.10 (June 2006): 31–33.

2. Out of respect for the author, names have been omitted from this email exchange.
3. See, for instance, Armstrong 1986, 1989, 1991; Cobb 1972, 1973, Cobb and Birch 1981, Cobb and Daly 1990; Dombrowski 1988; Ferré 2001; Grange 1997; Griffin 2007; Hartshorne 1974a, 1974b, 1979, 1981. As Griffin puts it, "environmentalism is a movement seeking a worldview.…My own judgment is that Whitehead himself went far toward providing the kind of worldview that the environmental movement needs. The kind of worldview that is needed, I believe, is one that is deeply ecological; one that is pragmatic, in the sense of providing a livable guide for action; one that can be commended, because of its coherence and relative adequacy, as at least not obviously false; and one that, as part of the evidence for its relative adequacy, can reconcile tensions between other positions, doing justice to the elements of truth in each. Whitehead's cosmological philosophy has, I believe, all of these virtues" (70).
4. Review of recent animal ethics and environmental ethics anthologies quickly confirms this. See, for instance, Sterba 2000, Pojman and Pojman 2007, Armstrong and Botzler 2004 and 2008. Susan Armstrong is particularly noteworthy in this context, since, according to Eugene Hargrove, she wrote the first philosophical dissertation on environmental ethics, "The Rights of Nonhuman Beings: A Whiteheadian Study" (1976). (For a copy of her dissertation and reference to Hargrove's statement, see Armstrong's Web site at Humboldt State University, http://www.humboldt.edu/~phil/armstrong/armstrong.html.) A process perspective in her otherwise very thorough anthologies on the environment (2004) and animals (2008) is noticeable in its absence.
5. For Newton and most early scientists, to discover a law, such as the law of gravity or the laws of motion, is to discover a necessary and unchanging description of the behavior of natural bodies. Subsequent investigation has revealed that, while Newton's laws are very useful approximations when dealing with large bodies, his accounts are inadequate in describing the behavior of things that are extremely small (e.g., subatomic particles) or very fast. For the former one needs quantum mechanics and for the latter one requires relativity theory. With Whitehead, I hold that "the laws of nature are merely all-pervading patterns of behaviour, of which the shift and discontinuance lie beyond our ken" (Whitehead 1938, 143). "These special forms of order exhibit no final necessity whatsoever. The laws of nature are forms of activity which happen to prevail within the vast epoch of activity which we dimly discern (87).
6. See, for instance, Mark Bowen, *Censoring Science: Inside the Political Attack on Dr. James Hansen and the Truth of Global Warming* (New York: Dutton, 2007). We will of course pass over the fact that the Bush administration was willing to wage an elective war in Iraq on less than certain intelligence, but

required airtight scientific facts before being willing to take action to respond to our rapidly changing climate.

7. Descartes' conviction that all inquiry aims at the achievement of indubitable truths came to epitomize the modern understanding of rational inquiry.
8. The growing industry around "intelligent design" is a notable case in point.
9. See David Hume [1748] 1993. See also, Whitehead 1938, 13, 87, 143 and Whitehead 1933, 41–42. For a very insightful analysis of the connection between Hume and Whitehead in the context of environmental issues see Scarfe 2006.
10. See note 3.
11. Cf. "It follows that every item of the universe, including all the other actual entities, is a constituent in the constitution of any one actual entity. This conclusion has already been employed under the title of the 'principle of relativity'" (Whitehead [1929] 1978, 148).
12. For a more sustained discussion of this point, especially as it compares to traditional substance metaphysics, see Henning 2004 and 2005a, chapter 3 (66–98).
13. It is noteworthy in this context that, in his 1979 article, "The Historical Foundations of American Environmental Attitudes," Eugene Hargrove suggests that Aldo Leopold may have been inspired by Whitehead's work. "Most interesting of all is the similarity of some of Whitehead's comments and those of environmentalist Aldo Leopold. There are long passages in the last chapter of *Science and the Modern World*, for instance, which could easily have served as the source of some of Leopold's ideas, and which suggest that Leopold's notion of community could be derived from Whitehead's theory of organism without much difficulty. In one place especially Whitehead speaks of 'associations of different species which mutually cooperate,' and he refers to the forest environment as 'the triumph of the organization of mutually dependent species.' A few lines further on he adds that 'every organism requires an environment of friends, partly to shield it from violent changes, and partly to supply it with its wants'" (239). It is a small step, Hargrove tells us, "from Whitehead's 'environment of friends' to Leopold's 'biotic community'" (239).
14. It has been a founding assumption of western thought that humans are utterly unique in their capacity for reason. Darwin's theory of evolution by natural selection reveals that our supposedly unique traits have evolved over time according to the same forces that have shaped every other species.
15. The scope of direct moral concern refers to those individuals (moral patients) whom moral agents ought to, for their own sake, consider in their moral deliberations and who are owed direct moral duties.
16. See note 3.
17. In Whitehead's words, "Philosophy is at once general and concrete, critical and appreciative of direct intuition. It is not—or, at least, should not be—a

ferocious debate between irritable professors. It is a survey of possibilities and their comparison with actualities. In philosophy, the fact, the theory, the alternatives, and the ideal, are weighed together. Its gifts are insight and foresight, and a sense of the world of life, in short, that sense of importance which nerves all civilized effort" (1933, 98). See Henning 2005a, 28 for more on this.

18. There is significant evidence of a revitalization of Whitehead scholarship. In the United States see the Society for the Study of Process Philosophies (http://www.processphilosophies.org), the Whitehead Research Project (http://www.whiteheadresearch.org), and the Center for Process Studies (http://www.ctr4process.org). The interest in Whitehead studies abroad is in many ways even more energetic. See, for instance, The China Project (http://www.ctr4process.org/projects/china/) and the International Process Network (http://www.processnetwork.org), which has affiliates in North America, Europe, Asia, and Australia. Also, major international conferences have recently been convened in China, Austria, Poland, and India.
19. For more on the relationship between deep ecology and process thought, see Armstrong 1991, Cobb 2001a, 2001b and Griffin 2007, 70–85. For a similar critique regarding latent anthropocentrism in process thought, but from the perspective of a theological animism, see Wallace 2007.
20. Cf. Whitehead's *Adventures of Ideas*: "The teleology of the Universe is directed to the production of Beauty" (1933, 265). For Whitehead, beauty is "the one aim which by its very nature is self-justifying" (266).
21. This elegant term was coined by Frederick Ferré. "Since intrinsically satisfying experience is what Whiteheadians mean by beauty, and since beauty is always present when self-consistent actuality blooms from conflicting possibility, the process of concrescence is the process of beauty-creation. Combing the Greek roots for beauty (*kalós*) and for creation (*genesis*), the acknowledgment of a valuer, achieving patterns of preferences that create moments of intrinsic satisfaction, leads to the acknowledgement of *kalogenesis* at the heart of ethics and of actuality" (2001, 109).
22. Cf. "The whole displays its component parts, each with its own value enhanced; and the parts lead up to a whole, which is beyond themselves, and yet not destructive of themselves" (Whitehead 1938, 62). For an eloquent and powerful discussion of the importance of intensity and contrast, see Jones 1998.
23. For a more systematic development of Whitehead's complex conception of beauty and also its relationship to Charles Hartshorne's aesthetics see 2005a, chapter four "Process as Kalogenic" (99–124). For a discussion of the possible objection that the current project is a version of aestheticism, see Henning 2002.
24. Cf. "On both dimensions, (1) chaos versus monotony, (2) the profound versus the superficial, beauty is the golden mean, balanced between excess of unity

and excess of variety, between excess of depth and excess of superficiality" (Hartshorne 1968, 311).

25. A helpful way of conceiving of this is in terms of Hartshorne's aesthetic circle, a defense of which can be found in chapter four of Henning 2005a and 2006.
26. This is what Hartshorne terms the "zero fallacy." "A logical requirement of any value system is that it should clarify the idea of no value, or the value zero. I hold that, as value diminishes, its limit of zero is not in a form of existence without value, but in total nonexistence. The zero of feeling, or of intrinsic value, and of actuality are one and the same" (Hartshorne 1997a, 54).
27. See also, "It must be noted that the state of degradation to which evil leads, when accomplished, is not in itself evil, except by comparison with what might have been. A hog is not an evil beast, but when a man is degraded to the level of a hog, with the accompanying atrophy of finer elements, he is no more evil than a hog. The evil of the final degradation lies in the comparison of what is with what might have been. During the process of degradation the comparison is an evil for the man himself, and at its final stage it remains an evil for others" (Whitehead [1925] 1996, 96-97).
28. This is the "obligation of beauty" in Henning 2005a. For a presentation and defense of the five obligations of beauty, see chapter five, esp. 146ff.
29. This is the "obligation of peace" in Henning 2005a, 146, 148–49, 153, 158, 160–61.
30. Keeping in mind the claims made in the first section, this analysis is necessarily limited because it is not in the context of a concrete moral situation with a specific history, actors, and possibilities.
31. For a recording of the nightingale's song visit The Free Sound Project: http://freesound.iua.upf.edu/samplesViewSingle.php?id=17185.
32. According to the UN Environment Programme (UNEP), "41% of the 522 migratory waterbird populations on the African-Eurasian Flyways are declining and there are reports that numbers of migratory songbirds using the same flyways are also decreasing" (United Nations 2008).
33. As UNEP notes, "The loss and fragmentation of essential habitats is being further compounded by the effects of climate change: rising global temperatures lead to expanding deserts and more frequent storms which impact bird migration and subsequent sea-level rise threaten tidal and wetland areas which are important for many migratory birds…" (United Nations 2008).
34. Researchers from the World Wildlife Fund and the Zoological Society of London have recently concluded that since 1970, land species have declined by 30% and that we are currently experiencing a rate of extinction 10,000 times greater than the background rate suggested by the fossil record (Zoological 2008).

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