

Beyond Sustainability: The Beauty Effect

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Abstract

“It goes without saying that sustainability is at the forefront of the public debate” (van Passel, 2010). This certainly seems to be true, insofar as the academic journal literature can be considered “public debate;” for, since the 1990s, there has been an absolute profusion of articles devoted to this seemingly urgent yet steadfastly ambiguous theme. What is sustainability? And what implications may sustainability pose to the ongoing human project? In this paper, I intend to answer these questions and to propose that sustainability, in itself, is not such a worthwhile goal. Implicit in this proposal is that there exists a realm *beyond* sustainability, and that certain deliberations within the current debate do indeed point to or preconfigure this new realm. Finally, in Part 2, I wish to introduce the proposal that the pursuit of beauty is a ubiquitous strategy for moving beyond sustainability. Beauty will be situated in context as that affective response that inspires people toward “higher orders” of fulfillment.

Part 1: Beyond Sustainability

Roots

Ricketts (2010) argues convincingly that “sustainability” has its roots in the “turbulence of the 1960s and early 1970s.” By citing such profoundly stirring testimonies as Rachel Carson’s *Silent Spring* (1962), Barry Commoner’s *The Closing Circle* (1971), and Paul Ehrlich’s *The Population Bomb* (1968) – “a new genre of writing that conjured fear of impending calamity” (p. 21) – Ricketts suggests that a new quality of consciousness entered the public debate. At its outset, it should be emphasized, this new consciousness was inherently, emphatically *ecological* – a dawning realization that human activities had real consequence for natural systems. Eugene Odum (1959) had recently introduced into the public realm his *Fundamentals of Ecology*, in which he defined ecology as “the study of the relation of organisms or groups of organisms to their environment, or the science of interrelations between living organisms and their environment” (p. 4). This emphasis on *relationship* was expanded by writers such as Carson, Commoner, and Ehrlich as having implications beyond the natural world: there also were serious social consequences in their reporting, and with them ethical considerations.

This new (what I’ve chosen to term) ‘consciousness’ that was emerging in the 1960s and early 1970s, based as it was on the relationship-oriented science of ecology, produced a plethora of seminal works beyond the sensationalistic genre mentioned above. For a partial sampling of this solid contribution, we could consider Bateson’s *Steps to an Ecology of Mind* (1972), one of the first attempts at broad interdisciplinary synthesis to exemplify the new way of thinking; Barker’s *Ecological Psychology* (1968), the beginning of the descriptive science relating environmental conditions to human potential; Dubos’ *So Human an Animal* (1968), explorations into a distinctly *human* ecology; Alexander’s *Notes on the Synthesis of Form* (1964), the

prototype of a design ‘pattern language;’ Schumacher’s *Small is Beautiful* (1973), the first scholarly treatise in support of community-centered economics; or even Perls’ *Gestalt Psychology* (1969), an introduction to the semantics of holism. To this list we could add developments in the parallel field of ‘systems theory,’ based as it is on a relationship-oriented manner of perceiving the world: Von Bertalanffy’s *General Systems Theory* (1968) and Laszlo’s *Systems View of the World* (1972) both introduced enunciation of this manner of thinking.

My purpose in citing all these influential seminal works is to support Ricketts (2010) in his assertion that what we’ve come to call “sustainability” has its roots in the 1960s and early 1970s; yet, whereas Ricketts in his article emphasizes the more turbulent aspects of the period, my purpose is to demonstrate that there was a silent revolution underway as well, and to propose that the most apposite name for this development is *a revolution in consciousness*. For, in the sense that “conscious capacity is ultimately the foundation of self-awareness” (Donald, 2001, p. 7), we could say that, in sum, there was an emerging self-awareness during this period that the human being-in-a-world – the entire drama of human existence – is taking place within *larger living systems*. The tools of ecological and systems thinking provided means to accentuate this growing self-awareness as one of co-participation or co-evolution: the primary existential fact of human being was to *be* in relationship – or, in the words of Heidegger (1962), to be “thrown” into a pre-existing world where “to care” becomes the standard of authentic existence. The emerging consciousness of this period certainly posed a challenge to the prevailing notion of human being-in-a-world, a notion held since the Enlightenment – that of an independent, individualized actor negotiating the world according to a supposedly detached, objective reasoning (Tarnas, 1991). In fact, the challenge was so critical that Shepard (1969) was moved to characterize ecology as “the subversive science.”

One other point should be made in justifying the developments of the 1960s and early 1970s as “a revolution in consciousness;” and that is the fact that beside the deliberative intellectual debate highlighted by the references above, there also were movements introduced during these years that explicitly sought to ‘expand’ consciousness. I’m thinking here, for example, of the transcendental meditation promoted by Maharishi Mahesh Yogi (1963), as well as other yogic systems, the awakening of a popularized form of Native American spirituality, perhaps exemplified by Castaneda’s *Don Juan* (1968) – and then there was the widespread diffusion of hallucinogenic experimentation. Can you hear the drone of the sitar as George Harrison chants “Jai Guru Deva Om” over the public airways?

Does all this seem to stray from essentializing sustainability? Not if the purpose is to reveal the roots of sustainability as growing from a field of expanded consciousness rather than framing these roots in unsettling acts of discontent, turbulence and discord. Of course, Ricketts (2010) is writing as a critic, so he feels justified in exclaiming: “The environmentalist movement was emerging as a modern American purity cult” (p. 22). And then:

Today’s sustainability movement incorporates virtually all of the major conceptual apparatus of the environmentalist movement from Carson to Commoner: the sense of impending doom from largely invisible sources, the call for immediate action, the finger

of blame pointed at corporate capitalism, the desire to “reeducate” the public and change tastes and patterns of consumption, the metaphysical postulate that “everything is connected to everything else,” the gripping fear of overpopulation and limited resources, and the success in giving the whole *gestalt* a celebrity glow. But if all this was part of environmentalism as far back as the 1960s, what makes today’s movement different (p. 32, emphasis in original)?

I think it’s important to step back from time to time and carefully assess a critique like that leveled by Ricketts, for apparently he feels quite strongly about what he’s professing. As evidence, by the end of his article he claims of sustainability, “The movement espouses a peculiarly potent distillate of political and religious enthusiasm” (p. 51) and “sustainability has emerged as the newest missionary ideology within higher educational institutions in the United States” (p. 53). I have to admit, I have been accused by my own family of being over-zealous when conversing about these matters, so a measure of temperance is recommended, especially when engaging with people who have not been exposed to comparable educational opportunities. And yet, the “movement” to which Ricketts refers is not being organized by any central authority; nor is there any concerted strategic plan of action; it seems to be more like an urgent impulse arising from the collective unconscious (Jung, 1933). Indeed, to answer the question posed above – “what makes today’s movement different?” – we could say that whereas the 1960s was characterized by a diverse array of “movements” – civil rights, animal rights, labor rights, environmentalism, social democracy and the New Left, etc., each fairly independent of the others – by the 21st century all these interests (and more!) had united under one banner: *sustainability*. One merely has to recall the amazing coalition of interest groups that assembled in opposition to the WTO in Seattle (1999) to get a feel for how strong is this unification; for this was a voluntary coalition of shared interests, a common interest in a better future. To label the motivations involved as “religious” or “missionary” is to discredit the heartfelt concern and genuine sense of community exhibited by the actors.

Now that we’ve uncovered the roots of sustainability, let’s continue with the historiography.

The Limits to Growth

Arguably, the most powerful testimony to emerge from the fervent conceptual period described above was the Report for the Club of Rome *The Limits to Growth* (Meadows, *et al.* 1972).¹ The Club of Rome was an “informal international association” of concerned “scientists, educators, economists, humanists, industrialists, and national and international civil servants” convened for the purpose of discussing “a subject of staggering scope – the present and future predicament of man” (p. 9). What made the Report so powerful was the broad *transnational* and

¹ Meadows, *et al.*, also produced two follow-up reports: *Beyond the Limits* (1992) and *Limits to Growth: The 30-Year Update* (2004). All of these are excellent expositions, representing in total the introduction, evolution and refinement of the critical issues they address.

transdisciplinary representation of the membership providing input coupled with the ambitious scope of the project itself: to provide projections at a global scale of the consequences of continuing ‘business as usual.’ Professor Jay Forrester of the Massachusetts Institute of Technology (MIT) had developed dynamic computer simulation models that could accommodate the kind of synthesis required for the research. Using this innovative software, “The team examined the five basic factors that determine, and therefore, ultimately limit, growth on this planet – population, agricultural production, natural resources, industrial production, and pollution” (pp. 11-2). Thus, this was the most intensive and far-reaching application of ‘whole systems thinking’ to date.

By inviting the MIT team to undertake this investigation, we had two immediate objectives in mind. One was to gain insights into the limits of our world system and the constraints it puts on human numbers and activity. Nowadays, more than ever before, man tends toward continual, often accelerated, growth – of population, land occupancy, production, consumption, waste, etc. – blindly assuming that his environment will permit such expansion, that other groups will yield, or that science and technology will remove the obstacles. We wanted to explore the degree to which this attitude toward growth is compatible with the dimensions of our finite planet and with the fundamental needs of our emerging world society – from the reduction of social and political tensions to improvement in the quality of life for all (p. 185).

From what I can gather, this statement in the Commentary section of the Report represents the world’s first attempt at defining the comprehensive and mutually-indicative parameters of a concept that we now call “sustainability.”

Significantly, however, the word “sustainable” was used only once by the authors of the Report, and only in passing: On page 24 we read: “It is possible to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future.” The preferred terminology used in the Report to present the image the authors wanted to convey was “equilibrium:” “*The most basic definition of the state of global equilibrium is that population and capital are essentially stable, with the forces tending to increase or decrease them in a carefully controlled balance*” (p. 171, emphasis in original).² Equilibrium theory, then, in its first appearance as a vanguard of sustainability, isolated two aggravating factors: population growth and capital accumulation, both of which would need to be kept in check by a “carefully controlled balance.” The legendary conclusion reached by *The Limits to Growth*, after running and analyzing numerous computer simulations, was that if these and associated

² Another usage of the terminology “equilibrium” later in the Report (p. 182) reveals even further its scope: “The equilibrium society will have to weigh the trade-offs engendered by a finite earth not only with consideration of present human values but also with consideration of future generations.” Here, the context of action has been expanded to include “society” and the time-line under consideration has been extended to include “future generations.” This kind of language clearly foreshadows later usage in such acclaimed reports as the World Commission on Environment and Development (WCED, 1987).

phenomena were to continue expanding without limit, then the global system invariably would go into “overshoot” followed by “collapse.”³

Needless to say, this startling conclusion spurred heated debate for many years afterward. Says Brander (2007, p. 7), “One striking effect of [the report] was the extent to which it unified economists in critiquing the analysis.” Political economists, especially, had grown accustomed to assuming perpetual growth as a given desirable condition, and so their various models were based upon this assumption (see for example Solow, 1956, 1970, 1974).⁴ The very purpose of Macroeconomics is “to explain how and why the economy grows and fluctuates over time” (Hall & Taylor, 1997, p. 4), where “economic growth” is defined as “a long-run *sustained* increase in the per capita real output of a society” (Peterson, 1989, p. 297, emphasis added). Daly (1977, p. 8) suggests there is ideology associated with attachment to this growth paradigm:

Although many question whether further population growth is desirable, very few people question the desirability or possibility of further economic growth. Indeed, economic growth is the most universally accepted goal in the world. Capitalists, communists, fascists, and socialists all want economic growth and strive to maximize it. The system that grows fastest is considered best. The appeals of growth are that it is the basis of national power and that it is an alternative to sharing as a means of combating poverty. It offers the prospect of more for all with sacrifice by none...

While it may have been “the most universally accepted goal in the world,” the debate that ensued upon the publication of *The Limits to Growth* included many thoughtful historical interpretations that situated economic growth *temporally*, as a phenomenon occurring within a bounded historical time-frame. As an example of this type of reasoning, consider this analysis, also from the year 1977:

For the last 300 years industrial societies have been experiencing a cornucopian revolution of plenty. This revolution has been based on new technologies and the more effective utilization of fossil fuels in doing work previously done by human beings and draft animals. Discovery of these fossil fuel benefits and new technologies caused a “great transformation” in the norms, values, morals, and growth expectations within newly industrializing societies. Pre-industrial societies characterized by stability and

³ This vivid languaging introduced by *The Limits to Growth* was utilized by subsequent authors to dramatize their findings: Catton (1982) *Overshoot: The Ecological Basis of Revolutionary Change*, emphasized the exceeding of “ecological carrying capacity” as presaging dissolution, and Tainter (1988) *The Collapse of Complex Societies*, an oft-referenced historical study, demonstrated how civilizations routinely complexify to the point where continued investment in infrastructure yields “diminishing rates of return.” More recently, Diamond (2005) *Collapse: How Societies Choose to Fail or Succeed* emphasized how the current society has enough information to make a choice. It seems pertinent to add here also an important study accomplished prior to the sustainability debate: Carter and Dale (1955) *Topsoil and Civilization*, which focused on the denuding of the precious resource topsoil as the essential factor contributing to an historical pattern of the collapse of civilizations.

⁴ Interestingly, Solow, in his 8 December 1987 Nobel Lecture “Growth Theory and After,” introduced the phrase “equilibrium growth path” (in Solow 1970/2000, pp. ix-xxvi). Was this seemingly paradoxical phrasing recognition of the influence of *The Limits to Growth*?

resistance to change were rapidly transformed into dynamic and rapidly growing industrial economies by these discoveries [...] The rapid economic growth characteristic of the industrial revolution has at least partially been built upon a generous fossil fuel subsidy [...] The history of industrial growth is written around fossil fuel innovations [...] It is impossible to estimate accurately the total impact of the fossil fuel subsidy on economic growth” (Pirages, pp. 1-3).

I think it is remarkable that such trenchant insight into the essential relationship between economic growth and energy subsidy was available at this stage, more than two decades before “peak oil” would enter the popular lexicon. Pirages already had access to data that would lead him to observations like: “Fossil fuels are no longer easily discovered and there are serious questions about the size of current reserves” (p. 2) and “The absolute depletion factor is not necessarily most important when analyzing prospects for sustainable growth. Over the last decade the actual amount of the fossil fuel subsidy has been steadily diminishing” (p. 4). Already available to scholars like Pirages *thirty-five years ago* were sophisticated analyses depicting the “diminishing rate of return” associated with the need to drill new wells ever deeper or in inhospitable locations.

While I believe these energetic analyses are at the very heart of the sustainability debate, this paper is not the place to pursue them further. There is currently available an entire genre of literature offering detailed documentation in support of this position.⁵ By citing the exemplary work of Pirages, I am attempting to demonstrate that this conversation has been underway for a long time now, and to suggest that the substance of this conversation was initiated with the 1972 publication of *The Limits to Growth – The Limits to Growth* is the source and the precedent. In that light, the title of Pirages’ edited volume is profoundly revealing: *The Sustainable Society: Implications for Limited Growth*; for here were collected writers who were taking the initial projections, conceptions, and methods and working with them: thus we get new ideas like “limited growth,” “sustainable growth,” and “steady-state” to accompany the “equilibrium economy” foundation. Most interestingly, Pirages’ own contribution to his volume introduced the idea of “social design” as a solution: “Social design refers to a creative social change process by which preferred and viable social futures can be envisioned, collectively debated, and eventually implemented through mutually agreed upon transition strategies” (p. 5). This must have been another revolutionary concept at the time, that desirable futures – sustainable or whatever – could be *designed*. I think the full import of this concept still has not been integrated into the collective psyche.

⁵ My personal favorite is the series produced by Richard Heinberg from the New College of California: *The Party’s Over: Oil, War and the Fate of Industrial Societies* (2003), *Powerdown: Options and Actions for a Post-Carbon World* (2004), and *Peak Everything: Waking Up to the Century of Declines* (2007). Additionally, writers such as Vaclav Smil have produced irreproachable scholarly treatises analyzing the ubiquitous and in fact deterministic role of energy in society. See especially: *Energy at the Crossroads: Global Perspectives and Uncertainties* (2003) and *Energy in Nature and Society: General Energetics of Complex Systems* (2008). There are also numerous websites monitoring current conditions. A couple of the most learned are: www.energybulletin.net and www.oilcrisis.com.

While certainly influential in its own way, Pirages' volume was not the first instance of using the phrase "sustainable society;" for it turns out that in the previous year, 1976, there appeared a little-known book by Robert L. Stivers bearing the title *The Sustainable Society: Ethics and Economic Growth*. Stivers was a theologian, thus his focus on ethics rather than scientific data to justify his position. While referencing *The Limits to Growth*, Stivers took the discussion to a moral level by asking the pressing question: "Is growth desirable?" Through the course of the book, he then explores three important ethical issues: "Distribution," "Who Should Pay?," and "Liberty and Coercion" – and finally arrives at the stern conclusion that a "reordering" is necessary:

Whatever we call the reordering, it will necessarily have economic, political, and ethical components. Perhaps the term "sustainable society" best conveys the overall reordering, while "equilibrium economy" is best used to refer only to the economic component. Thus we have the whole, the sustainable society, requiring an equilibrium economy; a globally oriented, yet decentralized, political system; and a new world view (pp. 186-7).

I can't say whether Stivers was known among his colleagues as a 'futurist;' yet in this sententious statement he certainly pegged the *gestalt* that would later appear under the banner "sustainability." From what I can gather, Stivers was the first person to introduce this pregnant phrase "sustainable society."⁶ Could "a new world view" be paraphrased as the emergence of "a new consciousness?"

At this point, it might be useful to step back a bit and take a more scrutable look at this word 'sustainable;' for if we are going to design a whole new society around the concept, it would be judicious to have deeper understanding of the implications involved. My trusty *American Heritage* defines "sustain" as: "To keep in existence; maintain; prolong" or alternatively "To endure or withstand." My first impression is that these are not such worthwhile goals. For example, would you be enthralled to have a "sustainable" marriage?⁷ Or what if a doctor was to emerge from a room in which your friend recently had been assigned only to announce that the friend's condition was "sustainable?" Would you be prepared to celebrate this news? Then where are we heading with the vision of a "sustainable" society?

Mirovitskaya and Ascher (2001) do a wonderful job of placing "sustainability" in perspective. In their book on environmental policy (p. 74), they provide the following synopsis:

Sustainability: the potential for a system to maintain or improve its functioning and the benefits derived from it. To be meaningful, the types of benefits (e.g., preservation of nature, economic growth, economic equity) have to be specified for particular applications. The meteoric rise of the notion of sustainability in the past several decades

⁶ Lester R. Brown of the Earth Policy Institute is often given credit for this inauguration with the appearance of his 1981 work *Building the Sustainable Society*. No loss for Lester as he has provided the world an impressive collection of publications devoted to various issues of sustainability, including the annual *Worldwatch Report*.

⁷ I am indebted to a mentor, Frederick Steier from the Fielding Graduate University, for originating this simile.

reflects a new perspective on how to assess human impacts on the natural environment and resources. The term originally came from the realm of natural-resource management, where it refers to a regimen for renewable resource use that would maintain specific levels of harvesting over time. This initial meaning was first broadened by ecologists who applied it to the task of preservation of the status and function of the ecosystems. Later, representatives of other disciplines made this term a part of their lexicon, which eventually resulted in the extreme ambiguity of its current use and a wide range of options to achieve it.

As I submitted earlier, the emerging consciousness of the 1960s and early 1970s was essentially *ecological* in character: ecological thinking is emphatically concerned with relationship and requires a specific context in which to become meaningful. Here, Mirovitskaya and Ascher confirm the suspicion that sustainability too is essentially ecological in character, insofar as the original meaning was applied to such practices as the “sustainable yield” of a managed forest system. In this sense, sustainability cohered with the dictionary definitions of “to maintain” or “to keep in existence.” Yet, in the process of transferring the goals of a managed woodlot to the vision of the possibilities for society at large, much potential opportunity gets lost – or so I would assert. There is an inherent ontological neglect in the idea of a “sustainable society.” We don’t want to just keep the whole thing alive – “in existence” – do we? Is it enough to be satisfied with simply perpetuating – “sustaining” – the human project? What about all the visions over the years of enhanced human potential, of reaching beyond the bounds of current human realization? What about all the dreams any individual might have of a better, more fulfilling life for their-self? I want to propose here that these are not fatuous utopian meanderings but are the very purpose of life itself; the most precious of gifts that come with self-consciousness is this ability to imagine more satisfying conditions than we enjoy at present. For all these reasons, “sustainability” is not enough: if we are going to design a new society for ourselves, than let’s set our sights as high as we can and begin talking about *beyond* sustainability, beyond mere steady-state material maintenance.

Yet here I precede myself; for there is still much catching up to do. Nevertheless, it was important to take this brief foray if only to prepare for understanding how the general term “sustainability” morphed into the more specific phrase “sustainable development” – for these two are often used interchangeably. To witness this transition, let’s move on to the next stage of the historiography; but first, an assessment by Robert Vos (2007, p. 335) from the Center for Sustainable Cities at the University of Southern California will be a smart way to close this present section:

Limits to Growth set the stage for sustainability by creating a need to answer such questions [as the viability of perpetual economic growth and its relationship to population growth] with a coherent set of policies that responded to the dominant models of growth. The choice is not between growth and non-growth, but between policies that create a soft-landing, through deceleration of growth, and a collapse of ill-defined proportions.

WCED

It's almost impossible today to read a journal article focusing on some aspect of sustainability without coming across a reference to the 1987 report from the World Commission on Environment and Development (WCED) *Our Common Future*, commonly known as the Brundtland Report. Indeed, it has become common practice to mention WCED in one of the opening paragraphs of an article as if that provides a measure of credibility for what is about to be presented (for a random sampling of this phenomenon, see Baumgartner & Ebner, 2010; Farzin, 2010; Heidiger, 2006; Pitt & Lubben, 2009; Pittman & Wilhelm, 2007; Porter, 2008; Randall, 2008; Wikstrom, 2010). The implications are that the sustainability debate was initiated with the Brundtland Report; but this is not so, as we have seen from a partial review of the aftermath of *The Limits to Growth*. Why, then, does *Our Common Future* maintain such an authoritative presence? Ratner (2004, pp. 51-2) provides a reasonable answer:

The Brundtland Report [...] defined sustainable development as the ability to “meet the needs of the present generation without compromising the needs of future generations” (World Commission on Environment and Development, 1987). It sought to build international consensus for action, emphasizing the necessity of integrating the imperatives of environmental protection, economic development and social equity. In characterizing these goals as mutually reinforcing, the report sought to define a basis for cooperation among frequently opposed parties, including governments of the North and South, industry, and a broad spectrum of environmental and local development activists.

Three conclusions could be gleaned from this assessment: 1) by seeking “international consensus for action,” the Report attempted to open dialogue between the disparate interests that had come to have a stake in the increasing awareness of a need for sustainability; 2) by “emphasizing the necessity of integrating” environmental, economic, and social parameters, the Report introduced the now standard concept of the “three pillars” of sustainability; and 3) by strategically framing the language within the new phrase “sustainable development” – this was, after all, a World Commission on Environment and *Development* – the Report suggested that sustainability could be accommodated within the prevailing growth paradigm. Thus, in one fell diplomatic sweep, the focus of the debate was transformed from “limiting growth” to “sustaining development.”⁸

Despite the widespread acceptance after WCED that sustainability could be defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” – a statement which is, to say the least, inherently ambiguous (and thus diplomatic!) – the Brundtland Report has not passed without some criticism. A particularly penetrating analysis came from Delyse Springett (2005, p. 151), who designed a course “Business and Sustainability” at Massey University, Aotearoa, New Zealand:

⁸ The old aphorism “you can have your cake and eat it too” comes to mind here.

Since the Brundtland Report (WCED, 1987) and the introduction of the concept of ‘sustainable development’ into the broader debate, these [international] fora have also provided an arena for corporate business to enter the debate in a more formal way (Rich, 1994; Mayhew, 1997). The compromise the Brundtland Commission made between ecological sustainability and economic growth gave business a place to stand, but, for some, rendered ‘sustainable development’ a deeply flawed concept, dismissed as an ‘oxymoron’ (*The Ecologist*, 1972); a ‘dangerous liaison’ (Sachs, 1991) and an ‘attempt to reconcile the irreconcilable’ (Benton, 1999).

Springett then goes on to describe how a key goal of her course is “to seek clarification of the discourses of sustainable development and sustainability that are frequently conflated and used as though they were interchangeable, particularly since business joined the debate.” Springett contends that the compromise made in the Brundtland Report arose “precisely from the modernist paradigm and the capitalist means of production that have largely created *unsustainability* [...] From this perspective, it is the *progeny* of that paradigm, a way of ‘greening’ growth without fundamentally affecting the dominant paradigm, and has resulted in the discourses of ‘the triple bottom line’ and the ‘business case’ for sustainable development” (ibid, emphases in original).

I do empathize with Springett’s position, especially after having reviewed a fairly large swath of the sustainability literature in preparation for this paper. Economics, Business, and Development related journals, especially, overwhelmingly feature articles in which the imperative of economic growth is simply not questioned. Instead, “sustainable development” is rationalized as advancement over ‘business as usual’ by the strategic pursuit of ‘the triple bottom line,’ where ‘sustained’ increase in value is theoretically expected to be obtained from natural capital, social capital, *as well as* financial capital. Indeed, Hawken, *et al.* (1999) introduced a groundbreaking book in which they demonstrated that pursuit of the triple bottom line is good business. This is a vital issue that I want to return to a little later; at the moment, I want to add some more commentary to WECD. I can, however, leave this bit of impression: as long as sustainability – or the related concept sustainable development – is framed within a business/economics discourse, we’ll never get to the underlying “dialogue of values” that writers such as Ratner (2004) deem so crucial.

I think it’s important to address Springett’s claim that sustainability and sustainable development “are frequently conflated and used as though they were interchangeable, particularly since business joined the debate” – for it is here, within this conflation, that a “dialogue of values” gets discounted, even confused. In a recent article in the *Review of Development Economics*, Farzin (2010, p. 262) begins like so many others:

“Sustainability” has come into vogue, but remains a vague concept, making it hard to test sustainability in practice. Many economists define sustainability as in the report of the World Commission on Environment and Development (1987), the Brundtland Report.

After mentioning specifically “sustainability” three times in his opening couple of sentences, he then makes the crucial epistemic shift in the third sentence, perhaps without realizing it:

It defines *sustainable economic development* as “development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.” Implicit in this definition are the two basic concepts of intergenerational fairness and economic optimality (p. 262, emphasis added).

To be sure, Farzin’s article is a valuable contribution to the literature. In it, he introduces the important distinction between *intergenerational* – spanning the generations – and *intragenerational* – within the generations – inequality, and states, “while the maximin criterion of sustainability may be appealing to the rich advanced industrial countries, for the poor developing countries it implies equalization of poverty across generations, and as such is too costly a moral obligation to be acceptable” (from Abstract). The argument here, then, is intrinsically moral (i.e. values based), and starkly brings to light “the role asymmetric power relations play in determining which constructions become legitimated” (Springett, 2005, p. 149). As Farzin develops his argument, he decries the “maximin” theory developed by Rawls (1972) as “puritanical.” I’m not familiar with this theory, but who knows, maybe it could be characterized as “imperious” as well, an instrument of neo-colonization? My point is that by limiting the discussion to language and concepts that are appropriate to the realm of economic development – even *sustainable* economic development – the full force of the moral issues never find expression. Indeed, given the context, Farzin is compelled to present his case for an “economic optimality” using established and approved mathematical formulas and graphs – abstract languaging that is easily co-opted by the system of asymmetric power relations. Thus, this is an example where “sustainability” and “sustainable development” are two entirely different discourses.

And there are even economists who question the efficacy of WECD. Brander (2007, p. 9), for example, in an excellent article entitled “Sustainability: Malthus Revisited” – one of the rare cases that reviews both *The Limits to Growth* **and** *Our Common Future* – begins perfunctorily by citing the Brundtland Report and its definition; and then comments:

Many economists find this definition unsatisfactory, in part because they are less comfortable with the concept of ‘needs’ than with preferences or utility. Presumably such things as music, literature, enjoyable meals, attractive clothing, comfortable accommodation, and most other things we enjoy on a day-to-day basis are not true ‘needs,’ not to mention items like cars, consumer electronics, and the like. Surely, we want both present and future generations to do more than just meet basic needs. Furthermore, any implementation of the definition would seem to require knowing what the needs of future generations will be. This definition also has very little direct connection to the ecological concerns that underlie the modern focus on sustainability and has also been criticized simply for being too vague and imprecise.

It should be noted at the outset that some of the things Brander takes for granted in his everyday lifeworld – things such as “enjoyable meals, attractive clothing, comfortable accommodation” – are not necessarily accessible to a vast portion of the world’s population; and so in that sense he reveals his privilege as a North American Professor of Economics. This alone is enough to re-insist on a dialogue of values.

Nevertheless, Brander opens a vital dimension that the Brundtland Report tends to neglect. By focusing on ‘needs’ – and we can assume here a basic human ecology perspective that includes the basic needs of clean air, fresh water, wholesome food, adequate shelter, right livelihood, etc. – we are accessing only the very base of the Maslovian hierarchy of values (Maslow, 1964). To achieve this basic level of subsistence is only the *first stage* of a re-design for society, not a final goal or vision toward which to aspire. In that sense, having everybody repeat the mantra “to meet the needs of the present without compromising the ability of future generations to meet their own needs” is, in effect, *dumbing us down*, profoundly limiting the discussion to a least common denominator, excluding the potential to imagine alternative futures that could frame the whole affair, for instance, as an opportunity for evolutionary succession. The international development industry – which includes the IMF, the World Bank, and more recently the WTO – has been operating in full force since the 1944 meeting at Bretton Woods (Mikesell, 1994). After almost 70 years of policy privilege, I would venture to say that there is not a single person in the world – whether in under-developed *or* over-developed countries – who can be assured the basic needs of clean air, fresh water, wholesome food, adequate shelter, right livelihood, etc. Clearly, there is something dysfunctional about the current world system; there is no shortage of critics of globalization (e.g. O’meara, et al., 2000; Giddens, 2003, Newell & Levy, 2005, Jha & Murthy, 2006). Perhaps that is what the meta-narrative “sustainability” is really pointing to: post-globalization? In the meantime, I would not put so much faith in the proclamations of international development agencies.⁹

I like the way Brander (2007) keeps a focus on the essential, for example when he says, “The word *sustainable* focuses attention on ‘conservation’ or ‘maintenance’ rather than on an actual improvement in the human condition” (p. 9, emphasis in original). This is exactly what I mean by insisting that the dialogue needs to move *beyond* sustainability, beyond mere steady-state material maintenance. There is something larger involved in the condition of being human, something potentially *beautiful* that will never get attention in a discussion limited within the

⁹ This reminds me of the time I was able to attend as an NGO the United Nations World Urban Forum (WUF3) in Vancouver in 2005. They were celebrating their 30th anniversary, for the first World Urban Forum was held in Vancouver in 1975. I remember one of the speakers at a workshop describing how exciting it was to be at that first Forum, the hope and commitment that was in the air. And then his tone turned a little disappointing: according to this speaker, in the intervening 30 years nothing got accomplished! All the plans and targets and proclamations, all turned out to be way over-optimistic, un-implementable. He finally confided that the UN is great for producing reports and convening meetings, but nothing ever happens “on the ground.” This is another reason to treat WCED with a little detachment.

framework of “sustainable development.” What if we were to focus instead on *human* development or *community* development within the context of a regenerating biosphere?

Herman Daly has argued for years for a more nuanced appreciation of this word ‘development.’ Here is a concise encapsulation of his reasoning:

Economists will complain that growth in GNP is a mixture of quantitative and qualitative increase and therefore not strictly subject to physical laws. They have a point. Precisely because quantitative and qualitative change are very different it is best to keep them separate and call them by the different names already provided in the dictionary. To grow means “to increase naturally in size by the addition of material through assimilation or accretion.” To develop means “to expand or realise the potentialities of; to bring gradually to a fuller, greater, or better state.” When something grows it gets bigger. When something develops it gets different. The earth ecosystem develops (evolves), but does not grow. Its subsystem, the economy, must eventually stop growing, but can continue to develop. The term “sustainable development” therefore makes sense for the economy, but only if it is understood as “development without growth” – i.e., qualitative improvement of a physical economic base that is maintained in a steady state by a throughput of matter-energy that is within the regenerative and assimilative capacities of the ecosystem. Currently the term “sustainable development” is used as a synonym for the oxymoronic “sustainable growth.” It must be saved from this perdition (1993, p. 267).

One can imagine all sorts of ways to develop humanly that don’t require capital accumulation: health and fitness, spirituality and religion, arts and crafts, human and other-than-human relations, education and training, beautification of the lifeworld, etc.¹⁰ This appreciation of development as a never-ending *increase in qualitative improvement* points the way beyond sustainability.

In an earlier book, *For the Common Good* (1989), Daly describes how this appreciation of development as qualitative improvement can be applied to the context of “community development.”

Community development as applied to village development in general involves taking the village rather than the individual or the nation as the unit of development. One then asks how the village can better meet its needs. The villagers themselves make the decision and thus determine their own fate. The result usually involves increasing their productive capacities. They may increase their water supply by introducing a pump, or their food production by replacing wooden ploughs with metal ones. Whatever the decision, the community is usually made more productive in doing what it wants to do as a

¹⁰ I use the term “lifeworld” intentionally, following the meaning first introduced by Husserl (1970): “The life-world is a realm of original self-evidences. That which is self-evidently given is, in perception, experienced as “the thing itself,” in immediate presence...” (p. 128). This introduced a *phenomenological* interpretation of the world, a world of “lived experience.” Husserl made the distinction so as to initiate a dialogue outside the realm of empirical ‘science,’ which posited an objective world of mathematical entities superseding the world of everyday lived experience. In this context, I believe a return to the lifeworld is an essential prerequisite for the manifestation of sustainability.

community. Its community character and its productive capabilities are strengthened together” (p. 165).

I know that most people think of sustainability rather dryly: it means that they will need to give up stuff, do without, lower their standard of living, work harder, stop watching so much TV, etc. Yet, as we have seen here, with a wee shift in perspective, beyond sustainability can become the gateway to an exciting new world of successive improvement and fulfillment. No matter where we live, we can all become villagers once again.¹¹

Current Discourse

Now that we’ve gained some understanding into *how* the sustainability debate entered the public discourse, let’s take a look at how the subject is being treated currently. It should be mentioned at the outset that in the past couple of decades there has been a profusion of thinking and writing exploring this topic from numerous angles, and there appears to be no sign that the interest is abating. Indeed, sustainability could be considered ‘*the topic of the century.*’ With that in mind, there is no pretense that what follows here will be a thorough survey of the literature. Conceivably, such thoroughness could be the content of an entire Master’s degree! And new material gets added every day. What follows, then, is a sampling, a cross-section of the available literature. In that spirit of modesty, let’s see if we can identify some prevailing themes in the current discourse.

One theme that becomes immediately apparent is the essentially multidisciplinary character of sustainability. This is first obvious by noting the diverse journal titles that feature articles about sustainability. From the *Journal of Chinese Philosophy* to the *Journal of Chemical Technology and Biotechnology* – and all areas of concern in between – issues of sustainability seem to have relevance to any discipline. There are also a number of journals focusing specifically on sustainability, with titles such as *Sustainable Development*, *Journal of Education for Sustainable Development*, *International Journal of Sustainability in Higher Education*, *Environmental Policy and Governance*, and *Business Strategy and the Environment* to name a few. Journals devoted to Education, Organizational Theory, and Economics (in all its forms) seem especially well-suited for hosting sustainability discourse, often with special editions focusing exclusively on some aspect of sustainability.

With this diversity in mind, Seager (2008) describes sustainability as a “meta-discipline” and avers, “No single body of knowledge, investigative method or discipline can legitimately claim to capture all the essential information or perspectives. Therefore, there are many sciences of sustainability, although integration of these into a single ‘meta-discipline’ is problematic in

¹¹ This last statement is more than anecdotal: in 2002 I set up a non-profit Village Design Institute to promote sustainability at *village*-scale. My reasoning was (and is) that sustainability needs an appropriate context in which to flourish. Historically, the ‘village’ was the perennial unit of human socio-economic organization. Re-design for sustainability will entail re-organizing (re-ordering) into village-scale socio-economic units in an aggregate settlement pattern, or so the theory goes.

traditional administrative structures” (p. 451). Seager asserts that the typical reductionism that characterizes useful knowledge in science, industry, and the academy as actually a hindrance when approaching sustainability. “While it may be that any (or *every*) body of knowledge may ultimately be relevant to sustainability, there have emerged several integrative disciplines during the last decade (or so) that are motivated in particular by sustainability and recognized as necessary to achieving or implementing sustainability” (p. 447, emphasis in original). These “integrative disciplines” are named as ‘ecological economics,’ ‘industrial ecology,’ ‘ecosystem health,’ and ‘sustainable decision making, policy and design.’ I suspect that this move towards integration, reversing the separating legacy of reductionism, will continue, especially in fields such as decision making, policy, and design.

An example of this kind of integration in action was creatively demonstrated in the collaboration of an ecological economist and a professor of accounting. Soderbaum and Brown (2010) call their integration “democratizing economics.” After recognizing that sustainable development is a “contested concept,” they go on to affirm: “At issue is not only how one characterizes a sustainable society, but also how to move toward its realization. A democratic ethos suggests acceptance of the idea of contested notions of the kind of society that meets the demands of sustainability and the possibility of different paths to such a society” (p. 179). The authors offer a scathing critique of “neoclassical economics,” marginalizing it as “a specific worldview” (p. 185), and then identify without hesitation the source of the sustainability problem: “Present unsustainable trends are related to a dominant theory of science (positivism), a dominant economics paradigm (neoclassical), and a dominant ideology (neo-liberalism)” (p. 193). In concluding, the authors assert, “Moving from neoclassical monopoly in economics to *pluralism* is an extremely important first step as part of the sustainability and development dialogue” (p. 193, emphasis added). One gets the impression after reading Soderbaum and Brown that radicalizing democracy lies at the heart of sustainability.¹²

The pluralism theme also was the focus of an article in the *Journal of Architectural Education*. Guy and Moore (2007) describe “pluralism” as a matter of “competing interpretations of our environmental futures” through which “we can begin to ask new questions and perhaps introduce some fresh thinking about sustainable design” (p. 16). “As pluralism indicates that no one perspective may lay claim to epistemic, moral or rational authority, the task of theory is to examine what each perspective provides, how to adjudicate among them, and how to reconcile conflicting perspectives in democratic practice” (p. 21). The authors offer wise counsel when they say, “We want to develop the thesis that the challenge of sustainability is more a matter of situationally specific interpretation than of the setting of objective or universal goals” (p. 15).

¹² With this revived emphasis on pluralism, I took special notice recently upon uncovering this passage from Tarnas (1991): “There was but one God and one Providence, one true religion, one plan of salvation for the entire world. All mankind deserved to know and have this one saving faith. And so it was that the *pluralism* of classical culture, with its multiplicity of philosophies, its diversity of polytheistic mythologies, and its plethora of mystery religions, gave way to an emphatically monolithic system – one God, one Church, one Truth” (p. 119, emphasis added). Naturally, one is left wondering the relationship between monotheism and un-sustainability. This very question was explored in a famous article by Lynn White, Jr. in 1967: “The Historical Roots of Our Ecological Crisis.”

“Learning “how to see” from the limitations of a particular place is, then, the only way to appreciate human complicity in and responsibility for constructing and reconstructing the world” (p. 18). It’s been noted by other sources (notably Krier 1998, 2008, 2009) that architecture and town planning have been brutalized by the universalizing Modernist paradigm, resulting in a technologizing and mechanizing of the built environment and the minds of designers – so the call by Guy and Moore for a return to situatedness may be a welcome prelude to a more sustainable built form. Situatedness, it might be added, is inherently ecological: each project is taking place within a specific context of features, characteristics, and relationships.

Situatedness also was an important consideration in a recent fascinating evaluation of the climate change debate. Jasanoff (2010) claims that the whole debate is being conducted within an abstract realm that lacks meaning for the lived experience of the people involved. To be sure, this is a broader critique of the legitimacy-claim of scientific knowledge: “Abstraction [...] is the method by which modern science achieves its universality and heft. Science wrenches phenomena out of their specific contexts, makes parts meaningful independently of wholes, and recombines segments in ways that transgress boundaries fixed by law, custom, tradition or institutional practice. Science creates entities [...] that reflect no one’s unmediated observations of the world and yet are recognized and accepted as real” (p. 234). For Jasanoff, as an interpretive social scientist, it doesn’t matter so much if climate change is “real” or not; what’s more important is to notice how the legitimating claims made by abstract scientific knowledge disrupt, substitute, or supersede the place-based knowledge of communities in everyday relationship with particular local ecologies. “Climate change, on this account, is problematic because it tends to separate the epistemic from the normative, divorcing is from ought. Crudely put, it detaches global fact from local value, projecting a new, totalizing image of the world as it is, without regard for the layered investments that societies have made in worlds as they wish them to be. It therefore destabilizes knowledge at the same time as it seeks to stabilize it” (p. 236). I see this as a recurring theme in the sustainability literature, this call for a re-appreciation of the meaning that emerges from “embedded experience” over “detached observation.” Jasanoff makes another valuable contribution by observing that the “rubric” that we call “environment” is a socially constructed reality – “a domain of ideas and entities accessible only with the aid of science and technology” (p. 235). What does this observation connote for the so-called “environmental movement?”

The *Journal of Environmental Psychology* is a good place to explore concerns like that raised by Jasanoff. Moser (2009), for example, qualifies embeddedness as “person-environment congruity,” and offers yet another definition of sustainability: “Sustainability means that people are provided with satisfactory living conditions so that they can identify positively with their own environment” (p. 351). With “quality of life” as the emphasis of this paper, Moser goes on to explain: “The linkage between environmental sustainability and quality of life is based on the assumption that without the achievement of an objectively and subjectively sufficient environmental quality, a sustainable development of society cannot be attained” (352). This may be true; yet, given the positivist orientation of psychology and the social construction of

environment, I kept hoping that Moser would move beyond the safe enclosure of descriptive indicators to actually advancing some eidetic design considerations for the quality of life proposed.

Another angle from environmental psychology can be gleaned from Corral-Verdugo, *et al.* (2009). This team designed a study to measure what they refer to as “affinity towards diversity (ATD),” which can be defined as “a tendency to prefer diversity and variations in bio-physical and socio-cultural living scenarios. ATD can in fact be conceptualized as an individual predisposition to appreciate the dynamic variety of human-nature interactions” (p. 36, emphasis in original). Recalling that biodiversity in ecological systems is a primary indicator of resilience, the authors surmise: “Diversity should therefore be considered as “the foremost adaptive and evolutionary strategy to face unpredictable change – and to ensure options for the future – in all biological, cultural and economic systems”” (p. 35, quoting di Castri & Balayi, 2002, p. 15). In their study, the researchers wanted to see if they could link ATD with pro-sustainability behavior. While admitting that the results were mixed, they concluded: “If ATD is a relevant component of a more general pro-sustainability orientation, then making ATD salient among the general public might enhance the impact of environmental campaigns and interventions for the promotion of more sustainable behaviors in everyday life contexts” (p. 42). Perhaps these researchers have touched upon the most effective leverage point for transitioning to a sustainable culture, inculcating “sustainable behaviors in everyday life contexts?”

On a more specific note, it was Robert Vos (2007) who contributed the sustainability article to the *Journal of Chemical Technology and Biotechnology* mentioned above. The mere fact that the editors of such a technical journal would detect an interest in their readership for exploring this topic demonstrates quite well, I believe, how far the sustainability discourse has penetrated. While admitting to the “fuzziness” of the concept, where “specific definitions must number in the hundreds” (p. 335), Vos suggests that “this very quality is part of what makes sustainability so valuable” (p. 334). The purpose of the article is to provide a “conceptual orientation” presenting several “archetypes of sustainability.” The representative archetypes chosen are: ‘ontology of nature,’ ‘substitutability of resources,’ ‘economic growth,’ ‘population growth,’ ‘role of technology,’ and ‘social equity.’ Each of these is given its separate treatment in terms of “‘what’ is being sustained for future generations;” overall the goal seems to be “to preserve [sustain] a particular civilization” (p. 339). While admittedly a general overview, we can assume that is what the readership wanted, to be introduced to sustainability. Vos closes his account with some practical advice for these precision-oriented technologists: “It is from practicing sustainability that definitions can best be tested and refined” (p. 339).

Also administering to technologists was an article written by Hansson (2010) in *Technology in Society*. Hansson refers to the very important concept of “weak vs. strong” sustainability: “Definitions of sustainable development can be divided into two major classes, representing what are known as the weak and strong concepts of sustainability. The weak concept is the more common one” (p. 275). Hansson notes: “An (economic) development is weakly sustainable if it can go on at a non-diminishing level from generation to generation” –

and then seems to contradict himself by saying: “Hence, according to weak sustainability we can pass on less environmental resources to coming generations as long as we pass on more human-made capital instead. If we hand over to coming generations new technologies that reduce their needs of natural resources, then according to this view we can deplete more resources and yet comply with the precepts of sustainability” (p. 275). Maybe the contradiction is in the concept itself? For, using the language of WCED, how can a future generation of increased population meet its “needs” with depleted topsoils, aquifers, fisheries, forests, etc.? Are we to expect the people to eat technology? Hansson demonstrates that the only way weak sustainability looks good ‘on paper’ is with the economic trick of “discounting,” “a method modeled after the interest rate calculations we perform for monetary assets;” however, “When discounting is applied to events far off into the future, it tends to lead to results that we consider absurd” (p. 276). Accordingly, Hansson reasons that weak sustainability cannot apply to “aesthetic natural assets” or “ecological assets” but only to what he calls “natural-technological resources” – which is still a sleight-of-hand since he is conflating ‘technologies’ with the ‘natural resources’ from which they are derived. Strong sustainability, by the way, “sees human-made and natural capital as different categories, each of which must be preserved separately” (p. 275).¹³

What about the ‘organizational theory’ dimensions of sustainability? What can be discerned about how sustainability is perceived in this culture? Wikstrom (2010) conducted a study in which a questionnaire was administered to companies in Australia and Sweden. The aim of the questionnaire was to discover how these companies approached environmental and business related issues in a “systematic manner.” Based on the results, Wikstrom concluded: “Sustainability from an organizational perspective is approached in two general ways, organization for sustainability and sustainable business/organization” (p. 104). The first approach is “normative:” “Sustainability is an end reaching beyond the scope of the organization” (pp. 104-5). This is what we’d expect with a values-based concept like sustainability, right? Unfortunately, this is not always the case. “[The second] approach is mainly concerned with traditional business management. Since sustainability is primarily dealt with as the business or organizational goal the concept is used to denote an ambition to find means that will make the organization or business last” (p. 105). Here we see the word “sustain” being utilized in its traditional sense of “to keep in existence” or “to endure” – no normative values implied. “In the survey, organizations were asked how they approached sustainability and the answers were predominantly related to business issues. Even though some organizations mentioned environmental (and a few social) reasons, these were most often accompanied by a profit

¹³ Strong sustainability is often associated with a philosophy of nature called Deep Ecology. Naess (1989) coined the term Deep Ecology to contrast with what he believed was a “shallow” use of ecology. The principle tenet of Deep Ecology is that all life has “intrinsic value” superseding any “instrumental value” that may be derived from human economic use. As such, strong sustainability would assert that natural resources must be conserved for their own sake, as parts of intact and functioning ecosystems, and cannot be assigned monetary value in any marketplace. Deep Ecology is often criticized for affirming that “natural resources” such as beetles and algae have intrinsic value. Can this be true?

purpose” (p. 103). Given their *raison d’etre*, is it practical to expect business organizations to provide leadership in the transition to sustainability?

Baumgartner (2009) answers this question in the affirmative: “Corporations can and have to play an important role in the development of sustainable societies” (p. 102). To support this assertion, Baumgartner provides a fairly sophisticated presentation of “the concept of organizational culture” in which three levels are identified in a pyramidal scheme (p. 106). At the base are “basic assumptions,” then come “values,” and at the apex are “artifacts.” “Visionary strategies are embedded in all [three] cultural levels; they show different sustainability related artifacts which are based in strategies, goals and philosophies at the level of values, which have to be based on basic assumptions. At the level of basic assumptions views and cogitations related to the idea of sustainable development have to be positive; in the case of systemic visionary strategies additionally emotions within basic assumptions are important” (p. 108). Baumgartner makes a convincing theoretical case for instilling sustainable-oriented behavior in corporations by influencing values, which after some time congeal into basic assumptions; however, the case study which is cited makes this theoretical approach appear a bit idealistic. The case study, made within a mining company, revealed two “basic assumptions” held by decision makers: 1) the company has to make money for its shareholders; and 2) measurement and controlling [are] central aspect[s] of doing business (p. 111). While the company had outwardly adopted a pro-sustainability stance in order to win more contracts, inwardly there were conflicting values revealed in statements like: “there is much more pressure to make profit than on Sustainable Development” and “the more time we spend (with unproductive issues like SD) the more money we lose” (p. 110). Thus, it appears that even with good stated intentions, for business it still comes down to making (sustainable) money.

Many of the business- and organization-oriented articles relating to sustainability focus on indicators and measurement criteria (e.g. McAlpine & Birnie, 2006; Pittman & Wilhelm, 2007; Spangenberg, 2004; Tanzil & Beloff, 2006; Thompson & Creighton, 2007). This, of course, reflects the positivist tendency to value and rely upon quantitative data when making decisions; yet, “It is commonly noted that what is measured determines what is managed” (Pittman & Wilhem, 2007, p. 55). As a result, you can find a measurement or an indicator to satisfy almost any agenda or purported purpose. In my opinion, this effort to quantify sustainability trivializes the depth of the matter and is simply an inadequate approach to take into account the sheer multidimensional complexity that we’ve been reviewing.

As a discrete example of this ‘shallowness,’ consider the study conducted by Figge and Hahn (2005). In their Summary, the authors claim: “We develop and apply a valuation methodology to calculate the cost of sustainability capital, and, eventually, sustainable value creation of companies. Sustainable development posits that decisions must take into account all forms of capital rather than just economic capital. We develop a methodology that allows calculation of the costs that are associated with the use of different forms of capital” (p. 47). The “different forms of capital” mentioned here, of course, refer to the “triple bottom line” that Springett (2005) alerted us to earlier. The authors base their findings on figures calculated from

British Petroleum (BP) “performance data” collected for the year 2001. “We use environmental and social impacts as proxies for the use of environmental and social capital” (p. 52). What the authors did, in effect (see study p. 53-4), was tally noxious emissions such as CO₂, CH₄, and SO₂ released by BP as indicators of the cost-effective use of environmental capital (in relation to the British economy as a whole) and to cite the single factor “work accidents” as an indicator of the cost-effective use of social capital. Their justification for tallying noxious emissions as a form of environmental capital is a classic neglect of “externalities:” “Companies need to be able to emit pollutants to be able to produce. It is for this reason that they can be considered to be inputs from an economic point of view” (Note 11, p. 57). I thought it was important to mention this study if only to demonstrate that the pursuit of sustainability in the literature – especially in the business related literature – may be merely ‘business as usual’ in a new dress.

As was stated earlier, education seems to be a particularly fertile field in which to sow seeds of sustainability thinking. Petersen-Boring (2010), for example, contributes a wonderful account about how she transformed her class “Western Civilization to 1600” into the more prescient “Western Civilization and Sustainability to 1600.” Petersen-Boring teaches at a small liberal arts college in Oregon, where she observed, “Standard Western civilization curricula, while ably incorporating postcolonial, feminist, and ethnic studies scholarship, reflect virtually nothing of the larger cultural consciousness regarding sustainability” (p. 289). According to this educator, “Sustainability in all its various guises [...] is a discourse of the “ought”” (p. 290): “Sustainability can function on multiple levels: as a concept to be critically assessed, a conceptual rubric with which to approach the past, and a catalyst to lead those not otherwise disposed into the discipline of environmental history [her major]. In addition, using sustainability to frame historical inquiry opens a conceptually rich space that re-energizes classical issues in the humanities and re-orient historical questions, narratives, and periodization” (p. 291). The article goes on to cite specific texts that have been chosen for the new class and various pedagogies that have been experimented with to engage the material. “[O]ne of the ideas the students discovered was that, although “sustainability” seems like a contemporary debate, in fact the underlying issues are transhistorical, different yet pervasive across numerous historical moments” (p. 296). Perhaps what is most heartening about Petersen-Boring’s account is how enthusiastically and determinedly students grapple with the issues: “To me [says the author], this suggests that this in-between time – when the academic disciplines are running to catch their breath in the face of the tide of sustainability – holds potential for great creativity” (p. 302).

Another article full of palpable hope was written by Michael K. Stone (2010) from the Center for Ecoliteracy in Berkeley. The Center for Ecoliteracy, of course, was co-founded in 1995 by Fritjof Capra as a public foundation whose purpose is “education for sustainable living.” “This article reflects lessons learned from work with thousands of educators from all types of K-12 schools. While recognizing that there is no schooling-for-sustainability blueprint that fits all schools, the Center has articulated a set of precepts that it calls “Smart by Nature”” (p. 34). The Smart by Nature approach is characterized by:

- An operational definition of sustainability
- An expanded understanding of “curriculum”
- A suite of guiding principles
- Shifts of perception resulting from systems thinking
- Desired outcomes described by core competencies

Each of these points is expounded in the article in a manner reflecting the ecologically-intelligent thinking elaborated by Capra in *The Web of Life* (1996) and *The Hidden Connections* (2002). Perhaps the most important lesson to be learned from this article (and thus from the Center) is: “The capacity to create sustainable societies [...] depends on ecological literacy – the ability to understand the basic principles of ecology, coupled with the values, skills, and conviction to act on that understanding. This means that ecoliteracy must become a critical capacity for politicians, business leaders, and professionals in all spheres; and hence an important component of education from primary and secondary schools to colleges, universities, and the continuing education and training of professionals” (p. 35). I don’t want to appear flippant, yet isn’t that what those first trailblazers in the 1960s were attempting to convey?

Another interesting perspective comes from faculty at Antioch University Los Angeles. Kahn (2010), in a special issue of *Teacher Education Quarterly* devoted to sustainability, rephrases “ecoliteracy” as “ecopedagogy,” and contemplates: “those of us interested in working for an ecopedagogy for sustainability must attempt to imagine orders of planetary community. Yet, such community has not fully arrived in the concrete, and so we must look critically to alternative ideas and practices as possibly anticipatory of a qualitatively different form of society” (p. 56). Kahn advocates the transition to sustainability as “a distinctly *educational* vocation,” and quotes Guevara (1965) to support this position: “Society as a whole must be converted into a gigantic school” (p. 56). The revolutionary innuendo is made more explicit later by including perspectives from Freire (1998) and the Frankfurt School of critical theory: “Just as critical theorists previously explored the manner in which the reification of the human enlightenment project resulted in the cold heart of authoritarianism and the false pleasures of industrial capitalism [...] so too is ecopedagogy concerned to illuminate ways in which the global ecological figure of the “human” stands as arguably the great sociopolitical (and hence educational) challenge of the 21st century...” (p. 57). Despite these political overtones, toward the end of his piece Kahn reveals his true inner motivation for insisting on a global ecopedagogy: As a youth in New Hampshire, he used to explore a “sacred wooded grove” populated by thousands of tiny frogs called “spring peepers.” The frogs are now all gone. “So, I cannot share with my son the joy and the wonder of earth communion that was so precious to me as a child. Instead, all I have is the sweet pain of the memory, which I can pass on” (p. 66). I can empathize with Kahn: I seem to remember a lot more butterflies and songbirds around when I was younger.

While surveying literature regarding education for sustainability, it would be an oversight not to mention the United Nation’s Decade of Education for Sustainable Development (DESD) – 2005-2014. Mochizuki and Fadeeva (2010) contribute a paper whose purpose is “to draw

attention of the education for sustainable development (ESD) community to recent discussions on competence approaches and to examine the adequacy of a competence-based model as the means of achieving educational and societal transformation towards sustainability” (p. 391). Since the authors are writing from the Education for Sustainable Development Programme at United Nations University in Japan, their report is situated explicitly within the context of the DESD. For example, they devote a whole section to “Essential characteristics of ESD as defined by UNESCO” (pp. 393-94). In another section, “Towards a new ESD framework,” the authors explain more precisely their programme: “In one way or another, competences for SD are conceptualized as alternative to competences for “modernization.” If ESD or education for sustainability (EfS) is about deconstructing the consumerist society that puts mass production, mass consumption and mass disposal at the center of economic and social activity for people in developed countries [...] ESD/EfS in so-called “developing” countries and non-Western countries tends to pay attention to traditional and indigenous knowledge and values as important resources for achieving SD (Bredlid, 2009) and sustainable livelihood approaches” (p. 394). The authors suggest the purpose of their programme is to set a precedent for “mainstreaming sustainability in the formal education curriculum” (p. 392); and, in a rare instance of transparency, explicate their underlying values: “Any serious call for a truly transformative approach to ESD/EfS, however, require[s] challenging of structural conventions and questioning of the taken-for-granted modernist dualisms (e.g. traditional/modern, individuals/collectivity, academic/vocational) underpinning the modern education system. We would need to foster alternative institutions, as much as we need an ethical, spiritual, cognitive and perceptual awakening to the interconnectedness, interdependence, diversity and wholeness of everything” (p. 395).

I have to admit, I was refreshingly delighted to hear such language emanating from what appear to be spokespersons for the United Nations. Not everybody, however, appears to share my appreciation. Selby and Kagawa (2010), for example, write a polemic in which they assert: “Characterised by definitional haziness, a tendency to blur rather than lay bare inconsistencies and incompatibilities, and a cozy but ill-considered association with the globalisation agenda, the [ESD] field has allowed the neoliberal marketplace worldview into the circle so that mainstream education for sustainable development tacitly embraces economic growth and an instrumentalist and managerial view of nature that goes hand in glove with an emphasis on the technical and the tangible rather than the axiological [pertaining to the nature of values and value judgments] and intangible” (p. 37). Referencing Jickling and Wals (2008, p. 5), the authors claim: “education for sustainable development is a policy-driven phenomenon, both a subset of and propelled forward by the globalisation imperative” (p. 39). The source of the authors’ complaint stems from their evaluation that climate change education (CCE) is not receiving adequate attention in the present discourse. I have not conducted enough research to know for sure. I can say, however, that Selby and Kagawa (2010) and Mochizuki and Fadeeva (2010) both present knowledgeable and well-informed positions. At the moment, in the context of the present paper, it seems prudent to

suspend judgment and to regard this disagreement as another instance of the “pluralism” that is inherent to sustainability discourse.

Consistent with a pluralist milieu, there are authors who would agree with Selby and Kagawa (2010). In an article used by Petersen-Boring in her “Western Civilization and Sustainability to 1600” class, Fischer, *et al.* (2007) warn us to “mind the sustainability gap:” “Despite increasing efforts at all levels of society to create a sustainable future, global-scale indicators show that humanity is moving away from sustainability rather than towards it. Several high-profile reports have recently emphasized the potential risk of existing trends to the long-term viability of ecological, social and economic systems” (p. 621).¹⁴¹⁵ “The growing ‘sustainability gap’ between what needs to be done and what is actually being done calls into question current approaches to sustainability research, policy and management” (p. 621). The authors are quite sincere in their concern about the dangers posed by current systemic ineffectuality: “most sustainability initiatives are firmly situated within the jurisdictional and political context [comfort zone?] of the present, where pragmatism reduces the set of potential actions to a relatively narrow range [...] Often, the resulting short-term responses are only minor perturbations (positive or negative) to the dominant trajectory of increasing un-sustainability” (p. 623). As a solution, the authors propose a “hierarchical model of sustainability:” “This hierarchical approach to sustainability is in contrast to the widely held notion of the ‘triple bottom line,’ which treats biophysical, social and economic considerations as parallel rather than nested concepts” (p. 622). Most interestingly, this paper singles out “the humanities” as a critical perspective that needs to be integrated: “Fundamentally enhanced collaboration among natural and social scientists and scholars of human contexts, symbols and meanings would signal the beginning of a new paradigm for addressing the sustainability gap [...] To achieve this, we need new forms of transdisciplinary scholarship that cut across traditional science-humanities barriers” (p. 623).

With that profoundly insightful and far-reaching sentiment, I will exit this survey of current sustainability discourse. What we’ve seen is that there are many ways to approach sustainability: the meta-discipline, the pluralism of radical democracy, situatedness in sustainable design, the embedded experience of knowledge, person-environment congruity, affinity towards diversity, archetypes of sustainability, weak vs. strong conceptions, organization for sustainability vs. sustainable organization, visionary organizational culture, indicators and measurements of sustainability, sustainability in the Western civilization curriculum, sustainability as ecoliteracy,

¹⁴ The reports referenced are: Solomon, et al. (2007) *Intergovernmental Panel on Climate Change*; Millennium Ecosystem Assessment (2005) *Ecosystems and Human Well-Being*; Steffen, et al. (2004) *Global Change and the Earth System*; Stern (2007) *The Economics of Climate Change*.

¹⁵ Jha & Murthy (2006, pp. 200-1) concur: “[O]ur approach is to illuminate how globalisation has set-in motion a process by which patterns of development as well as consumption are converging and are likely to set-in a process of environmental degradation for the indefinite future [...] As a consequence the environment has been heavily drawn upon to meet a multiplicity of human needs. In many areas, the state of the environment is much more fragile and degraded than it was in the 1970s.”

sustainability as ecopedagogy, ESD as the means of achieving educational and societal transformation, climate change education, the hierarchical model of sustainability, etc. Of course, there are many more.

What I've hoped to accomplish by this discursive exercise is twofold: 1) to demonstrate by example multi-various ways of defining and approaching this urgent yet elusive concept 'sustainability:' no single discipline or perspective is privileged in this overarching "meta-narrative" of our times; and 2) to begin to explore whether there might be an intertwining thread, a cross-relational coherency that can unify all the disparate approaches into not so much a meta-narrative but rather what might be called a singular grasping vision of what is possible. It is this aspect of sustainability that I investigate next.

The Heart (and Soul) of the Matter

It was fairly easy to situate the origins of the quest for sustainability within the consciousness revolution of the 1960s and early 1970s. It was suggested that the various disparate "movements" that arose in that fecund conceptual period had, by the 21st century, finally discovered a common cause around which to rally: that of sustainability. It was further suggested that the impulse that originated the consciousness revolution was based on a new ecological understanding of the world, an understanding that could demonstrate quite clearly – even scientifically – that the conditions that enabled life to exist on the planet were grounded in principles of inter-relationship and inter-dependence: humanity was just one constituent in the "web of life;" the entire human project was taking place within larger living systems – and without the continued health of these larger living systems, the entire human project was in jeopardy, unviable. The emergence and diffusion of this new essential awareness could be called 'ecological consciousness,' or 'eco-consciousness' for short.

Now, consciousness is one of those slippery terms that has about as many definitions and usages as sustainability; and, like sustainability, consciousness may need to be practiced before it is fully comprehended. With that in mind, it will be useful to survey how the term 'consciousness' is being employed in the present discourse in order to get a feel for what is emerging.

We've already seen Petersen-Boring (2010, p. 289) mention "the larger cultural consciousness regarding sustainability." And Stone (2010, pp. 42-3), in describing the effect ecoliteracy education has had at the Marin Academy in San Rafael, quotes an administrator as saying that they've already experienced "a top-to-bottom "change in consciousness" around sustainability." Selby and Kagawa (2010), cited above, boldly state: "Purportedly a new paradigm, how akin to a Copernican-type revolution is the idea of 'sustainable development' and its educational offshoot 'education for sustainable development'? There was a very clear shift in consciousness when humans came to understand that the place they inhabited was not the centre of the universe" (p. 38). Are we to imagine, then, that the transition to sustainability will require a "shift in consciousness" of the magnitude of a "Copernican-type revolution?"

Middlebrooks, *et al.* (2009, p. 35), in their article “Developing a Sustainability Ethic in Leaders,” also highlight this notion of a “shift,” as in “a paradigm shift toward sustainable thinking.” After mentioning the diverse array of sustainability considerations, “principles of equity, cultural diversity, human health, technological innovation, democracy, human rights, and environmental protection,” they go on to quote Cortese (2003): “To coalesce these commonalities into sustainable responsibility requires a “fundamental transformative shift in thinking, values, and action by all of society’s leaders and professionals, as well as the general population”” (p. 16). This is no small order; but what does a “shift” actually feel like?

Kira and van Eijnatten (2008), in a paper explicating systems thinking in the design of work organizations, remind us that “sustainability is – in this sense – a *dynamic* state” (p. 744, emphasis in original). They then introduce the “Consciousness Principle of Sustainability: Interiors and Exteriors of Holons.” “Sustainability does not only depend on actions taken, but also on mental models and value bases [...] Therefore, the aim should be to increase complexity both in interior and exterior domains. *This is the consciousness principle of sustainability*” (p. 750, emphasis added). Further insight can be gained by noting that the authors quote Riedy (2003, p. 2) in support of their position: “The values and worldviews that cause people and organizations to make particular decisions on a daily basis are [...] of crucial importance to sustainable development.” Consciousness, worldviews, values, paradigm shifts – there does appear to be an intertwining thread to this meta-narrative.

And Bowers (2010) *does* prefer the term ‘consciousness;’ he uses it in a variety of ways. For example, after recounting early environmental writers, he concludes: “Reading them contributes to a change of consciousness” (p. 10) and later “exposure [to them] does raise consciousness” (p. 18). After critiquing UNESCO and the ESD, Bowers reflects: “Missing from the recommendations is any mention, even at the most general level, of the fundamental changes that must be introduced into teacher education that will lead to the changes in consciousness and lifestyle that must be made” (p. 11). Bowers refers to this change in consciousness as elevation to “Level III thinking” (p. 13), a signification for *ecological intelligence*: “Exercising ecological intelligence needs to become part of the students’ culturally mediated embodied experiences – which will engage all the physical senses along with memory, and a heightened aesthetic awareness and moral responsibility” (p. 16).

Perhaps the most eloquent exposition I’ve seen to date equating sustainability with a desired level of consciousness came from Podger, Mustakova-Possardt, and Reid (2010). Readers are referred to their paper to get the full depth of discussion. Here I wish merely to cite a few passages to introduce the language and concepts they employ, for they have successfully encapsulated the thoughts of so many others. After opening with: “This paper suggests that higher order dispositions may be central to education for sustainability (EfS) as a means of understanding the development of sustainable “habits of mind”” (p. 340),¹⁶ they enclose this potent paragraph:

¹⁶ “The notion of “habit of mind” is attributed to John Dewey from his seminal work “How We Think” (1931).

Sustainability itself can be understood as a disposition towards human rights, peace, active citizenship, participatory democracy, conservation, and ecological, social, and economic justice (Sterling, 2001). From an adult developmental perspective, such a disposition pertains to more advanced stages of consciousness (Mustakova-Possardt, 2003; Wade, 1996). For example, Sterling (2007) argues for a “connective cultural consciousness” informed by a relational worldview, as both a necessary goal and as a condition for educational and cultural change. He identifies key personal qualities or virtues associated with such a consciousness, essential to a “widening and deepening of the boundaries of concern” necessary for change towards sustainability – flexibility, resilience, creativity, participative skills, competence, material restraint, sense of responsibility, and transpersonal ethics (Sterling, 2001, p. 52). The individual and collective change he describes involves self-awareness and self-critique as an agent of “cultural evolution” (Gardner, 2001, cited in Sterling, 2007, pp. 63-78). These capabilities and dispositions have been shown by psychological developmental research to pertain to mature critical moral consciousness (Mustakova-Possardt, 1998, 2004, and 2003)” (p. 340).

Some of the results of this research into “critical moral consciousness” are documented in the paper. Of particular vitality to the present survey, based as it is on preparing for the introduction of “The Beauty Effect,” is the following passage: “The development of this consciousness is a function of the synergistic interaction of two variables – the cognitive developmental capability for systemic thinking and critical discernment, and the formation of primarily moral motivation. Moral motivation is understood as a fundamental attraction to and disposition toward truth, beauty, and goodness, even as constructions of what constitutes beauty, truth, and goodness evolve with cognitive development” (p. 342). Also made explicit in the paper is the connection between “higher order dispositions” and “spirituality,” “spiritual potential,” and “spiritual orientation” as these relate to sustainability.

David Orr is another writer who has become comfortable advocating spirituality on the path toward sustainability. In an oft-quoted article contributed to the journal *Conservation Biology*, he declares: “Genuine sustainability [...] will come not from superficial changes but from a deeper process akin to humankind growing to a fuller stature” (2002, p. 1457). The growth referred to must be *spiritual* in nature:

By whatever name, something akin to spiritual renewal is the sine qua non of the transition to sustainability. Scientists in a secular culture are often uneasy about matters of spirit, but science on its own can give no reason for sustaining humankind. It can, with equal rigor, create the knowledge that will cause our demise or that will allow us to live at peace with one another and nature. But the spiritual acumen necessary to solve divergent problems posed by the transition to sustainability cannot be achieved with a return to some simplistic religious faith of an earlier time. It must be founded on a higher order of awareness that honors mystery, science, life, and death [...] The spiritual renewal necessary for the transition must provide convincing grounds on which humankind can justify the project of sustainability (p. 1459).

Some of the personally-integrated qualities that will facilitate this anticipated spiritual renaissance are mentioned in the preceding citation as constituents of “critical moral consciousness.” Already in 1992, Orr was proffering: “Sustainability, I think, will require a considerable increase in virtue throughout society” (p. 182) – and what is virtue if not “general moral excellence” (Webster’s)?¹⁷ Back to his 2002 article (pp. 1458-9), Orr describes a few of the social adjustments necessary toward realizing sustainability: 1) more accurate models, metaphors, and measures to describe the human enterprise relative to the biosphere; 2) a marked improvement and creativity in the arts of citizenship and governance; and 3) greatly improved education. While all these are recurring themes, of particular interest to our concern is a commentary to the article written by McDaniel (2002), in which he proclaimed of Orr: “His attention to questions of design, and the role of beauty in design, speak to those with sacramental sensibilities who have always aligned spirituality with beauty” (p. 1461). I think here the meta-narrative grows more luminous.

And yet, this call for “higher order” sensibilities can be framed as either spiritual *or* religious, depending on which group is doing the framing – or so asserts Johnston (2010, p. 177):

Arguments for sustainable behaviors often utilize normative language and spiritual values while religious groups or individuals often argue that adopting more sustainable lifestyles is a religious duty [...] For this reason, I think it is less important to define sustainability than it is to note what specific people or groups mean when they use the term, and to see how these particular usages expose their core values and deep beliefs. While uses of the term sustainability multiply, there has been a dearth of attention to the ways in which the religious dimensions of sustainability, those that refer to these core values and deep beliefs, may either reinforce or challenge the dominant sociopolitical structures.¹⁸

Johnston writes a scholarly treatise in which he traces the origins of the notion sustainability, and then its development through WCED to the Earth Summits in both Rio de Janeiro (1992) and Johannesburg (2002). After taking special note of the “subcultures of resistance” that gathered at the outskirts of these international fora – and then explicitly referencing the ‘Earth Charter,’ “[p]romoted on the international stage largely by religion scholars” (p. 179) – Johnston arrives at a remarkable, yet by now expectable, conclusion: “This helps to illustrate that whether religious in the traditional sense or not, the narratives constructed by sustainability advocates are doing religious work by intentionally facilitating new forms of exchange, providing interpersonal and community cohesion, and focusing the desire of communities of people” (p. 180) – indeed, “a new, global *sustainability ethic* is implied by the meta-narrative of sustainability” (p. 179, emphasis in original). To set the stage for his Conclusion, Johnston (p. 183) quotes the ever-alert social commentator Paul Hawken, from his book *Blessed Unrest* (2007):

¹⁷ Beauty, truth, goodness, virtue – these were the substance of Socrates’ deliberations in Plato’s *Dialogues*. It will be important to look at these qualities and this association more closely in Part 2 of this essay.

¹⁸ In my opinion, there also has been a dearth of attention given to how sustainability may apply in the context of community. The ‘sustainable community’ is the four-dimensional milieu in which all the various dimensions of sustainability may converge and synergize as a process of everyday lived experience.

It has been said that we cannot save our planet unless human kind undergoes a widespread spiritual and religious awakening. In other words, fixes won't fix unless we fix our souls as well. So let's ask ourselves this question: Would we recognize a worldwide spiritual awakening if we saw one? Or let me put the question another way: What if there is already in place a large-scale spiritual awakening and we are simply not recognizing it?

I wish to propose here that Hawken's wonder *is* the unifying thread that weaves together all the various sub-narratives into the meta-narrative we call sustainability; for, whichever angle or approach is taken, the realizations all converge on one essential underlying conclusion: the transition to sustainability infers fundamental change at a level so deep and so far-reaching that it may be characterized as 'spiritual' – and spiritual apodictically implies an evolution of consciousness. Now, of course, many people will object to this conclusion: some will deny it; others may be outright offended by the notion. So let me see if I might be able to make the proposition a little more acceptable with a cursory expose – realizing that a full treatment would take a whole book.

There are numerous thinkers who assert that the core of *unsustainability* is the intrinsic anthropocentrism that has been guiding, informing, and directing the human project (e.g. Berry, 1998; Bosselmann, 2001; Bowers, 2010; Capra, 1996; Gadotti, 2010; Hoffman & Sandelands, 2005; Jacobs, et al. 2010). Anthropocentrism (literally human-centered) is the worldview that holds humanity as the very center and focus of the universe; all issues ultimately pertain to the context of promoting and benefitting humanity. Berry (1998, pp. 209-10) observes that anthropocentrism has been defining our cultural traditions for millennia: "These anthropocentric traditions have determined our language, our intellectual insights, our educational programs, our spiritual ideals, our imaginative power, our emotional sensitivities. All these can now be seen not only as inadequate, but also distorted and as the origin of the deteriorating influence that we have on the life systems of the earth." According to the deep ecologists (Devall & Sessions, 1985, Devall, 1988; Naess, 1989; Sessions, 1995), anthropocentrism leads to an "instrumental value" view of the natural world and its natural resources. Such a view legitimizes the exploitation of nature for the benefit of human use. Nature has no "intrinsic value" of its own; it is merely there to provide resources for human consumption. Of course, it's easy to see that the implementation of such a worldview would inevitably lead to ecological deterioration and thus a call for 'sustainability.'

Ecocentrism, in contrast, as it is commonly used, is the worldview that places the Earth at the center.¹⁹ Ecocentrism thus could be regarded as the worldview that arises upon integration of ecological thinking or ecological awareness – *eco-consciousness*. Capra (1996, p. 7), after

¹⁹ Although technically, since 'eco' is derived from the root *oikos*, meaning 'home,' ecocentric would mean 'home-centered;' thus it would seem reasonable to make a compromise by describing ecocentric as 'earth-home' centered. 'Geo' is the prefix denoting 'earth,' as in 'geology;' yet geocentric, although sometimes used, lacks the associative impact that ecocentric has with ecology.

contrasting “deep” ecology with “shallow” anthropocentric ecology, provides quite a moving testimony in support of the proposition under consideration:

Ultimately, deep ecological awareness is spiritual or religious awareness. When the concept of the human spirit is understood as the mode of consciousness in which the individual feels a sense of belonging, of connectedness, to the cosmos as a whole, it becomes clear that ecological awareness is spiritual in its deepest essence.

In order to emphasize Capra’s lucid account of the relationship between deep ecological awareness and spirituality, I would like to cite his earlier transcription of these ideas as they appeared in Sessions’ compilation (1995, pp. 20-1):

Ultimately, the recognition of value inherent in all living nature stems from the deep ecological awareness that nature and the self are one. This, however, is also the very core of spiritual awareness. Indeed, when the concept of the human spirit is understood as the mode of consciousness in which the individual feels connected to the cosmos as a whole, it becomes clear that ecological awareness is spiritual in its deepest essence and that the new ecological ethics is grounded in spirituality.

If all this can be accepted as having some merit, then it follows that Hawken’s wondering about whether there might be already a spiritual awakening underway must be answered in the affirmative. Insofar as an ecopedagogy of ecoliteracy is impressing upon participants their essential inter-connection and inter-dependence as co-constituents in the web of life, and insofar as this realization is integrated and made manifest in changed behavior in everyday life, then we could insist that a spiritual evolution has in fact occurred. Based on this perspective, the movement toward ‘sustainability’ could be construed as the essentially ‘spiritual’ awakening that precedes and instigates the transition from an anthropocentric to an ecocentric worldview.

This all seems pretty straightforward, within the language and terminology that we’ve been using; yet there is more, for there are other forms of ‘centricity.’ Think about the *egocentric* nature of the child (and underdeveloped adult) who believes its self to be the center of the universe. The transition from an egocentric to an anthropocentric worldview, then, is already an evolution of perspective. And there are various shades of anthropocentrism, such as ethnocentrism (the belief that one’s ethnic group is the central referent of reality) or nation-centrism (commonly known as jingoism) or androcentrism (unduly emphasizing the masculine half of human being). Within this “developmental psychology,” arriving at ecocentrism is, as stated by Sterling (2007) above, a “widening and deepening of the boundaries of concern,” a sort of expanding concentric circle that includes more and more of the world into one’s sphere of empathy. Could this expanding sense of identification not be the very definition of spiritual evolution?

Ecocentrism, too, must come in varying circumferences of identification. For example, we could begin by identifying with the healthy functioning of our local ecosystem, and from

there we could expand our concern to include the vitality of the encompassing bioregion,²⁰ till finally we arrive at full-blown care for the fullness of life-on-earth in its totality. Yet, consider this: even at this advanced (more-inclusive) stage of ecological-spiritual awareness, ecocentrism is still implying that Earth is the center of the universe – and cosmologically speaking we know this is not true. Could there be, then, more inclusive concerns beyond the ecologically mature awareness that constitutes ecocentrism?

This must be a good place to adjourn Part 1 of this paper, an inquiry into sustainability. Framing the transition to sustainability as the evolution from an anthropocentric to an ecocentric worldview is enough, I believe, to provide substantial insight to the greater debate. Yet, the question still remains: what lies beyond ecocentrism? The deep ecologists sometimes use the term ‘biocentric’ (life-centered), as in “biocentric egalitarianism” (Fox in Sessions, 1995, p. 270); yet *bio* for the Greeks referred to life in its more corporeal, organismic form. The Greeks had another term for life – *zoe* – which referred to more animated dimensions of life. Shall we make a case for zoecentrism? Hoffman and Sandelands (2005) propose “theocentric” as a means to transcend the anthropo-eco divide. In their use, *theo* explicitly refers to God as understood by Catholic Christianity, and so becomes limited by its own culture-specific construct. The root *theo*, however, is also found in ‘polytheism,’ and here we find an intimation of the pluralism that’s been held in such high regard. Arrows, *et al.* (2010), coming from a Native American perspective, propose a “creation” based orientation, with “the idea that every land formation and creature is an imprint of our ancestral consciousness” (p. 17), and this certainly provides a richer experience of ecocentrism. Whatever the case, it’s too early to make a commitment. For now it’s enough to propose that whatever lies beyond ecocentrism, by definition, enters a realm beyond sustainability. In Part 2, I explore the idea that the realm beyond sustainability can be accessed by application of “the beauty effect.”

Having initiated this inquiry into sustainability by recalling the consciousness revolution of the 1960s and early 1970s, it is now apt to close with a visionary commentary from that period:

Yet, if there is to be an alternative to the technocracy, there *must* be an appeal from this reductive rationality which objective consciousness dictates. This, so I have argued, is the primary project of our counter culture: to proclaim a new heaven and a new earth so vast, so marvelous that the inordinate claims of technical expertise must of necessity withdraw in the presence of such splendor to a subordinate and marginal status in the lives of men. To create and broadcast such a consciousness of life entails nothing less than the willingness to open ourselves to the visionary imagination on its own demanding terms. We must be prepared to entertain the astonishing claims men like Blake lay before us: that here are eyes which see the world not as commonplace sight or scientific scrutiny sees it, but see it transformed, made lustrous beyond measure, and in seeing the world so, see it as it really is. Instead of rushing to downgrade the rhapsodic reports of our enchanted seers, to interpret them at the lowest and most conventional level, we must be

²⁰ For an introduction to bioregional thinking, see Sale (1985) *Dwellers in the Land*, and Andrus, et al. (1990) *Home! A Bioregional Reader*.

prepared to consider the scandalous possibility that wherever the visionary imagination grows bright, magic, that old antagonist of science, renews itself, transmuting our workaday reality into something bigger, perhaps more frightening, certainly more adventurous than the lesser rationality of objective consciousness can ever countenance (Roszak, 1969, p. 240).

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Part 2: The Beauty Effect

Part 1 can be summarized thusly: The call for sustainability can be understood, at its deepest, most fundamental and meaningful levels, as a global summons to evolve from an anthropocentric to an ecocentric worldview. This evolution can be felicitously characterized as ‘spiritual’ because it involves increasing identification with and care for ever greater extensions of the self. A plausible deduction from this hypothesis would be that those individuals who are still operating within an anthropocentric – or even more developmentally naïve, *egocentric* – worldview simply will not have the cognitive or affective wherewithal to understand the full import signified by the transition to sustainability – and so we get so many piecemeal or incomplete ameliorations to ‘business as usual’ with what amounts to no more than a ‘greener’ dress.

It was further suggested that sustainability, in itself, is not such a worthwhile goal: sustainability indicates the capability to maintain or keep in existence current conditions. Yet, we may rightly wonder, if current conditions are the climax or final outcome of millennia of institutionalizing an *anthropocentric* worldview, perhaps these conditions are axiomatically flawed – or at least suboptimal in the current context; that is, perhaps what sustainability seeks to sustain loses credibility in the transition from an anthropocentric to an ecocentric worldview? Beyond steady-state material maintenance there have been visions throughout the millennia of more exalted, even more satisfying, conditions of humanity’s being-in-a-world. For all these reasons, it was posited that there exists a realm *beyond* sustainability. For the purpose of initiating a dialogue, I wish to propose here that beyond sustainability entails imagining conditions that may optimize the development of human potential. Optimizing human potential

in the anthropocentric worldview meant gaining some sort of advantage over Nature; optimizing human potential in the ecocentric sense means achieving a mutually-sustaining partnership with Nature; optimizing human potential beyond sustainability would mean regenerating both Humanity and Nature toward higher orders of realization and fulfillment.

This is where the beauty effect enters: for, as will be demonstrated, it is in the pursuit of beauty that human beings find their ultimate fulfillment. Beauty can be approached from many different angles. In the discussion that follows, beauty will come to be uniquely situated in the realm beyond sustainability.

Aesthetics

Similar to the way in which it is almost impossible to read an extract about sustainability without coming across mention of WCED, a survey of the beauty literature will repeatedly reference Immanuel Kant. Why is this? Perhaps it will be best to go right to the source and see what Kant had to say about beauty. In the opening lines of the First Moment of the First Book (Analytic of the Beautiful) of the First Division of his *Critique of Judgment*, first published in 1790, we find:

In order to distinguish whether anything is beautiful or not, we refer to the representation, not by the understanding to the object for cognition, but by the imagination (perhaps in conjunction with the understanding) to the subject and its feeling of pleasure or pain. The judgment of taste is therefore not a judgment of cognition, and is consequently not logical but aesthetical, by which we understand that whose determining ground can be *no other than subjective* (Kant, 1951, p. 37, emphasis in original).

The first thing I notice is that this acclaimed philosopher begins his inquiry by conflating two essential terms: “beautiful” and “taste.” The inference here is that an inquiry into the beautiful is necessarily, simultaneously, a judgment of taste. Perhaps something is lost in the translation from German, but I tend to think of ‘taste’ as referring to a refined cultural appreciation to which ‘beautiful’ is not inexorably associated. There is much potential beauty that lies outside any consideration of taste, for example the myriad ways in which a person may be deemed beautiful. Whewell (1995, p. 250), in a synopsis of Kant’s work, makes the same conflation without seeming to notice (or perhaps ignoring) the conceptual admixture:

Kant distinguishes two main types of aesthetic judgement: judgements about the beautiful, or pure judgements of taste; and judgements about the sublime.

I think it’s important to reveal this oversight simply because Kant’s theory of aesthetics remains so influential down to the present day; indeed, there are philosophical journals in which debates over the finer points of what Kant actually meant in his *Critique of Judgment* are still alive (e.g. Janaway, 1997; Makkai, 2009; Mallaband, 2002; Wenzel, 2009; Zangwill, 1999), some 220 years later! As an example, Wenzel (2009, Abstract) submitted an article entitled “Kant’s Aesthetics: Overview and Recent Literature,” in which he explains:

Besides contributing to general and systematic aspects within his transcendental philosophy, Kant's aesthetics also offers new insights into old problems. It deals with feelings versus experience, subjectivity versus objectivity, disinterested pleasure, aesthetic universality, free and adherent beauty, the *sensus communis*, genius, aesthetic ideas, beauty as the symbol of morality, beauty of nature versus beauty of art, the sublime, and the supersensible. In this article I will limit myself to this critical aesthetics of Kant.

What is so significant about all this is that it amounts to a continuation of the philosophical discussion of the European Enlightenment, of which Kant was a "champion" (Whewell, 1995, p. 250). Thus, an inquiry into beauty (and its Enlightenment synonyms taste and aesthetics) is framed explicitly within the context of, or concern about, *judgment* – where judgment must refer to reflective appraisal by the rational reasoning mind. Even though Kant expanded and humanized the notion of beauty beyond what the empirical science of the time would admit – that is, by claiming beauty to be a function of the imagination of *subjective* experience – he still was committed by the larger project to remain within the bounds of a rational intellectual investigation.

Tarnas (1991) perspicuously situates Kant within our larger discussion of sustainability by pronouncing that he developed "the central philosophical position of the modern era" (p. 340):

It could be said that in one sense Kant reversed the Copernican revolution, since he placed man again at the center of his universe by virtue of the human mind's central role in establishing the world order. But man's claim to be the center of his cognitive universe was only the obverse of his recognition that he could no longer assume any direct contact between the human mind and the universe's intrinsic order [...] Despite the attempt to ground knowledge in a new absolute – the human mind – and despite, from one point of view, the ennobling status of the mind's being the new epistemological center, it was also evident that human knowledge was subjectively constructed and therefore – relative to the intellectual certainties of other eras, and relative to the world in itself – fundamentally dislocated. Man was again at the center of his universe, but this was now only *his* universe, not *the* universe (pp. 348-9, emphasis in original).²¹

²¹ I realize that it is not politically correct to use the term "man" when referring to human beings as a whole; however, I accept Tarnas's reasoning on this case: "For most of its existence, the Western intellectual tradition was an unequivocally patrilineal tradition. With a uniform consistency that we today can scarcely appreciate, that tradition was formed and canonized almost exclusively by men writing for other men, with the result that an androcentric perspective was implicitly assumed to be the "natural" one [...] [There is] evident a fundamental masculine linguistic bias that has been embedded in and intrinsic to virtually the entire progression of world views discussed in this book. That bias cannot be excised without distorting the essential meaning and structure of those cultural perspectives. The bias does not represent merely an isolated linguistic peculiarity; rather, it is the linguistic manifestation of a deep-seated and systemic, if generally unconscious, masculine predisposition in the character of the Western mind (1991, pp. 468-9). As such, throughout *The Passion of the Western Mind*, Tarnas employs the gender-specific word "man" wherever it seems appropriate.

This “central philosophical position of the modern era” was profoundly – even disturbingly – anthropocentric. Thus the rational reasoning of the Enlightenment mind served to separate “man” from the intrinsic order of the universe. An inquiry into beauty under such conditions would invariably situate “man” as an outside observer trying to look in, distant and detached from the source of order – perhaps from the source of beauty itself. Any descriptions or inferences drawn from such a position must be, from an ecocentric 21st century perspective, highly suspect.²²

Kant did not originate the philosophical discussion of aesthetics; he merely positioned it within the larger project of articulating a transcendental philosophy that could “reconcile the claims of science to certain and genuine knowledge of the world with the claim of philosophy that experience could never give rise to such knowledge (Tarnas, 1991, p. 341). Wenzel (2009, pp. 380-1), while positioning Kant within the historical milieu, reports: “Some philosophers of aesthetics had tried to find rational standards and norms for what should count as beautiful. Leibniz (1646-1716), Wolff (1679-1754), and Baumgarten (1714-62) were influential in this direction. Others followed empirical considerations, but also argued for objective standards. Shaftesbury (1671-1713), Hutcheson (1694-1746), Hume (1711-76), and Burke (1729-97) should be mentioned here.” I think it’s important to mention that these were all Enlightenment-era thinkers (from northern European countries), so naturally they were searching for “rational” and “objective” standards by which to qualify beauty.

The preceding, passionate, emotionally bounteous Renaissance, by contrast – and the classical cultures upon which it was founded – had a very different appreciation of beauty. Durant (1953, p. 726), for example, when characterizing Renaissance painting says: “Its stress was on sensuous beauty, on lordly raiment and rosy flesh; even its religious pictures were a voluptuous sentimentality, more intent upon corporeal forms than upon spiritual significance.” Carrier (1995, p. 14), quoting the Renaissance historian Vasari (1968 [1550], vol. I, p. 18), reiterates this corporeal theme: “The ‘arts resemble nature as shown in our human bodies.’”

²² Although not directly relevant to the purpose of the present study, it might be a good idea to demonstrate this ‘separating distant detachment’ that arises from perpetuating the Kantian philosophical position. Here is the opening paragraph of a paper by Mallaband (2002, pp. 66-7): “It is my purpose in this paper to challenge two received interpretations of Kant’s distinction in [section] 16 of the *Critique of Judgement* between free beauty and dependent beauty. The picture painted by Malcolm Budd is one which the distinction is taken to be between kinds of judgement. A judgement of free beauty is a singular (pure) judgement of taste, and a judgement of dependent beauty is a complex judgement made up from a pure judgement of taste and a judgement of goodness of kind. Christopher Janaway conceives of the distinction as holding between a judgement whose ground is the subject’s *aesthetic* pleasure and a judgement whose complex ground is an *aesthetic* pleasure and an *intellectual* pleasure. I consider these analyses together, because the same dilemma arises for each: either dependent beauty is a concept superfluous for an aesthetic theory, or else it is a subspecies of free beauty. The dilemma is a direct consequence of the inability of these accounts to deal with the possibility that an object may be judged dependently beautiful but not judged freely beautiful. Given that an interesting distinction ought not to render dependent beauty redundant, and that there is a lack of evidence in the *Critique of Judgement* for the treatment of dependent beauty as a subspecies of free beauty, I offer an interpretation which allows that an object may be judged to be dependently beautiful but not freely beautiful, and which does not analyse dependent beauty judgements as complex judgements, or as based on complex grounds.” I acknowledge that I am not a trained philosopher, yet I think it is still fair to ask the question, “What does any of this have to do with *beauty*?”

Holmes (1969, p. 202), referring to influential early Renaissance artists, explains that they “portrayed human beings and the natural space in which they lived more nearly as they appeared to the common-sense observer, with more regard for their human emotions and less for their symbolic significance.” While this is not a paper about art history, and while the beauty that will be explored later will extend beyond art, it’s important to note that “each culture must have its own independent artistic ideals” (Carrier, 1995, p. 15).

With the above in mind, we should always remember that the “artistic ideals” that gave birth to what we call today “aesthetics” had their origin in the philosophical rationalism of the northern European Enlightenment. Cooper (1995, p. vii), in the Blackwell *Companion to Aesthetics*, makes this philosophical grounding explicit:

Aesthetics is one of the most popular student choices from the philosophy curriculum, and each year sees a flood of new publications in the area. Just a few of the factors responsible for this transformation are worth mentioning. First of all, there have been developments in other areas of philosophy helping to bring new, or newly formulated, questions about art into prominence. Work by philosophers of language on reference and meaning has challenged older views on the relations – notably representation – between an artwork and its object. Some epistemologists have challenged the status of propositions as the privileged conveyors of truth, opening up the possibility that artworks may, in their way, be vehicles of knowledge. Debates over cultural and moral relativism have inspired new interest in the criteria, if any, of good taste and beauty.

Cooper (p. viii) concedes that in the *Companion*, “‘aesthetics’ is used in the broader sense of philosophy of art, with ‘art’ itself taken broadly so as to include, for instance, literature.” He then feels it important to add: “the focus is on art and no longer on *natural* beauty” (p. viii, emphasis in original). So we see that aesthetics, according to this educator, is not only explicitly philosophical, it is also explicitly a philosophy of art.

The Oxford Handbook of Aesthetics (2003) is a little more inclusive, perhaps because it was published eight years later. “Part IV Further Directions in Aesthetics” includes titles such as “Feminist Aesthetics,” “Aesthetics and Cognitive Science,” “Aesthetics of the Everyday,” and “Aesthetics and Cultural Studies.”²³ While granting this greater latitude, the *Handbook* is still predominantly a survey of the philosophy of art, with all the contributors holding positions in Departments of Philosophy at anglophone universities. My initial impression is that this exclusivity, both conceptual and cultural, unduly narrows “aesthetics” as a relevant field of

²³ I picked up a book with the title *Aesthetics of the Natural Environment* (Brady, 2003) thinking I could find some material to help me explain a beauty-inspired ecocentricity. What I discovered instead was the same old bland Kantian philosophical categories. I turned to a section “Imagination and Natural Environments” believing that a discussion on imagination, at least, would reveal some creativity. Here was the language used: “Kant’s view of imagination in the aesthetic response, although somewhat vague, provides a starting point for understanding how imagination is active. Although also present in cognitive judgements, ‘productive imagination’ is exercised to its fullest in the judgements of taste that characterise the aesthetic response” (p. 151). Truly, I do not understand the role of “taste” in, say, spontaneously absorbing the exquisite beauty of a dainty flower.

inquiry – especially in the current project of wanting to situate ‘beauty’ as the attractor to move beyond sustainability.

Despite popular conception, it also turns out that ‘beauty’ is just *one* aesthetic property among limitless others. Levinson (2003, p. 6) opens the floodgates, as it were, by expressing: “there is substantial convergence in intuitions as to what perceivable properties of things *are* aesthetic, as this open-ended list suggests – beauty, ugliness, sublimity, grace, elegance, delicacy, harmony, balance, unity, power, drive, élan, ebullience, wittiness, vehemence, garishness, gaudiness, acerbity, anguish, sadness, tranquility, cheerfulness, crudity, serenity, wiriness, comicality, flamboyance, languor, melancholy, sentimentality – bearing in mind, of course, that many of the properties on this list are aesthetic properties only when the terms designating them are understood figuratively.” Given that the word ‘aesthetics’ is derived from the Greek *aesthetikos* – “pertaining to sense perception” (American Heritage) – it is difficult not to imagine *any* adjectival quality that might be construed as an aesthetic property, especially as it may be applied to capture the attributes of a work of art – and especially since modernist art has been a revolt *against* beauty.²⁴

Overall, I find the philosophical discipline of aesthetics – from Kant onward down to the so-called environmental aesthetics of today – to be inadequate for apprehending the nature of beauty. I have always experienced beauty as accompanied by an emotional tinge; something gets lost by attempting to over-intellectualize it or to position it primarily as a manifestation of judgment. Since philosophy is concerned with the study of the processes of reasoning ‘mind,’ it has only tangential relevance to the full wonder of beauty. For all these reasons, we must expand our search to discover the mystery of the beauty effect.

Emotionality

Armstrong and Detweiler-Bedell (2008) offer an insightful study that presents a psychological interpretation of beauty. They do not negate cognitive appraisal; rather they position mental activity associated with an experience of beauty in the context of the nervous system’s ongoing effort to gain meaningful knowledge of the world: “the cognitive processes characteristic of beauty are not those that identify a stimulus per se, but those that identify a stimulus’ potential to be incorporated into our knowledge” (p. 311). Beauty, as we learn, comes as information of a very special kind:

²⁴ “Of all the features of the aesthetic, the one which makes demarcating it a particularly challenging task is the impressive variety and heterogeneity that characterizes it. For although *there is one rather outdated sense in which the notion of the aesthetic refers primarily to beauty* (and possibly ugliness), the understanding prevalent today is a considerably more comprehensive one whereby the category also includes qualities such as being somber, exciting, dumpy, sharp, kitsch, tightly knit, or serene. Providing a satisfactory answer to the question of what “aesthetic value” refers to thus soon turns into what may seem a preliminary concern: what makes all these qualities aesthetic” (Schellekens, 2009, pp. 165-6, emphasis added)? Good question. The author locates the period in which ‘aesthetic as beauty’ became “outdated:” “much art created since the beginning of the twentieth century has openly set out to demote the importance of aesthetic value in art, [...] most other works definitive of this period actively sought to develop a form of non- or anti-aesthetic art” (p. 163). This was the Modernist period.

Our view, in short, is that beauty as an emotion bears directly on the mind's prospect and, indeed, goal of understanding particularly challenging stimuli when the potential to realize such understanding (i.e., actually achieving conceptual understanding) is tangible but distant. Beauty, unlike most emotions, entails no concrete behavioral goals. It reflects the mind's more abstract, overarching epistemic goals. Beauty is the exhilarating feeling that something complex, perhaps to the point of being profound, might yield to understanding. For the human mind, equipped as it is to take reality into itself through its symbolic representation of the world and itself, the feeling of beauty serves as Keat's (1860/1996, p. 1261) harbinger of a "reality to come" (p. 312).

Within this meaning-making and knowledge-generating process, it's important to know: "*Beauty presages understanding* before one's cognitive faculties can be certain that an object or experience will yield to any coherent conceptual representation. Beauty is not discerned. Rather, it is the felt prospect of cognitively representing and achieving processing mastery over a challenging object or experience. As a result, beauty is best thought of as *an exhilarating emotional experience*" (ibid, p. 305-6, emphases added).²⁵ "Beauty is felt, not discerned. Still, the pleasure of beauty depends on a subtle relationship between emotion and cognition" (ibid, p. 312). According to this psychological interpretation, while acknowledging that cognition plays an inherent role in the appreciation of beauty, it would appear that judgment can only occur well after the fact of an initial emoting stimulus.

The recognition of the "relationship between emotion and cognition" is representative of the pioneering work of Antonio Damasio (1994, 1999, 2003). As a neurologist, Damasio has conducted research which has led him to conclude that "emoting" and "thinking" are not two distinct processes but are, rather, complementary: a functional interrelationship between two evolutionarily distinct regions of the brain:

The apparatus of rationality, traditionally presumed to be *neocortical*, does not seem to work without that of biological regulation, traditionally presumed to be *subcortical*. Nature appears to have built the apparatus of rationality not just on top of the apparatus of biological regulation, but also *from* it and *with* it. The mechanisms for behavior beyond drives and instincts use, I believe, both the upstairs and the downstairs: the neocortex becomes engaged *along with* the older brain core, and rationality results from their concerted activity (1993, p. 128, emphases in original).

The subcortical, older region of the brain is designated as the 'limbic system,' and "it should be noted that the limbic system participates [along with biological regulation] in the enactment of drives and instincts and has an especially important role in emotions and feelings"

²⁵ In order to understand the authors' use of terms like "complex" and "processing mastery" it's useful to know that in the course of their discussion they make a distinction between "pretty" and "beautiful:" "On one hand, it appears that a mild aesthetic pleasure reliably accompanies the experience of simple stimuli." These simple stimuli the authors' refer to as "pretty." "On the other hand, a more exhilarated form of aesthetic pleasure may accompany the experience of more complex or novel stimuli." For these more complex stimuli, requiring "processing mastery," the authors' reserve the term "beautiful." This discussion is introduced on pages 308-9.

(ibid, p. 118). An inference may be drawn here that an experience of beauty – the initial sensory-induced feeling-impulse – is first registered in more primordial structures of the brain, whereupon it produces a pleasurable emotion which can subsequently be evaluated by the reasoning capacity of the neocortex. Since beauty is an especially potent sort of emotion – what Armstrong and Detweiler-Bedell chose to distinguish as “exhilarating,” or what Hagman (2002, p. 661) characterizes as “sublime” or “exalted” – it might be assumed that an experience of beauty would produce a more stimulating neurophysiological response than, say, an experience of ‘pleasantness’ or of ‘prettiness.’ By neurophysiological response, I am suggesting the release of neurotransmitters (serotonin, dopamine, norepinephrine, acetylcholine) in association with a profound experience of beauty. Damasio (2003, p. 120) would seem to support this hypothesis:

As a result of opioid binding to the mu-receptors of certain cortical neurons, neurons in the ventral tegmental area of the brain stem become active and lead to the release of dopamine in structures such as the nucleus accumbens of the basal forebrain. In turn, a number of rewarding behaviors occur, and a pleasurable feeling will be felt.

Damasio’s neurophysiological explanation is derived from the analysis of observable states achieved by the ingestion of mood-altering chemicals that *lead* to pleasurable feelings; yet, if the pleasurable feelings were induced by an experience of beauty in the first place, wouldn’t neurotransmitters such as dopamine still be implicated? Damasio is also careful not to be perceived as advocating a reductionist, cause and effect, connection between chemical inputs and feelings. The crux of his whole program (and extensive writing) could be considered as based on the presupposition: “Feelings probably became possible because there were brain maps available to represent body states (ibid, pp. 110-1). “Brain maps” refer to neural configurations that correspond to ongoing body regulation in response to changing environmental conditions; thus his work is intrinsically contextual and somatosensory:

As body changes take place, you get to know about their existence and you can monitor their continuous evolution. You perceive changes in your body state and follow their unfolding over seconds and minutes. That process of continuous monitoring, that experience of what your body is doing *while* thoughts about specific contents roll by, is the essence of what I call a feeling. If an emotion is a collection of changes in body state connected to particular mental images that have activated a specific brain system, *the essence of feeling an emotion is the experience of such changes in juxtaposition to the mental images that initiated the cycle*. In other words, a feeling depends on the juxtaposition of an image of the body proper to an image of something else, such as the visual image of a face or the auditory image of a melody. The substrate of a feeling is completed by the changes in cognitive processes that are simultaneously induced by neurochemical substances (for instance, by neurotransmitters at a variety of neural sites, resulting from the activation in neurotransmitter nuclei which was part of the initial emotional response (Damasio, 1994, p. 145-6, emphasis in original).

This is a remarkable discovery which, I believe, serves to confirm the hypothesis; for, if “the mental images that initiated the cycle” were *beautiful* – that is, by definition a particularly potent form of stimuli (exhilarating, exalting, sublime) – then the resulting “changes in cognitive processes” would be that much more pronounced, with a commensurate activation of neurotransmitters. I think it also could be gathered that if the “visual image of a face or the auditory image of a melody” were considered beautiful, then there would be a corresponding change in body state – in other words, an experience of beauty is not only happening ‘in the head’ but must be trans-somatic. Indeed, the face or the melody would not even need to be *considered* beautiful, for the whole cycle of changes would be initiated prior to any cognitive evaluation.

This understanding gained by noting the neurophysiological associates of beauty could be the basis for proposing that an experience of beauty offers the opportunity for increased awareness – which may be paraphrased as ‘expanded consciousness.’ At the moment, however, it remains only an opportunity, for one must be capable of *feeling* the emotions stirred by beauty before any benefits might accrue:

In short, feeling your emotional states, which is to say being conscious of emotions, offers you *flexibility of response based on the particular history of your interactions with the environment* (Damasio, 1994, p. 133, emphasis in original).

And what if that environment was intentionally designed to be beautiful? Wouldn’t there be more opportunities for becoming conscious of emotions?

The Humanist Geographers explore questions like this. Keeping in mind that Damasio regards emotion as “a collection of changes in body state,” consider this appraisal by Casey (2001):

Neither body nor place is a wholly determinate entity; each continually evolves and precisely in relation to the other. The place-world is energized and transformed by the bodies that inhabit it, while these bodies are in turn guided and influenced by this world’s inherent structures [...] But the body not only goes out to reach places; it also bears the traces of the places it has known. These traces are continually laid down in the body, being sedimented there, and thus becoming formative of its specific somatography. A body is shaped by the places it has come to know and that have come to it [...] To be (a) subject to/of place is to *be what we are as an expression of the way a place is*. The body is the primary vehicle of such expression (pp. 414-5, emphasis in original).

If the relationship between body and place is so intimate, so symbiotic, then maybe we ought to pay a little more attention to the quality of the places we create. While an environment designed for beauty may not *necessarily* co-evolve beautiful bodies, it would be well to remember: “The organism constituted by the brain-body partnership interacts with the environment as an ensemble, the interaction being of neither the body nor the brain alone” (Damasio, 1994, p. 88). Thus, based on all of the above, it would seem plausible to propose that neural patterning is explicitly implicated by environmental design, and this would seem to be

confirmed in later passages: “Thus, as we develop from infancy to childhood, the design of brain circuitries [neural patterning] that represent our evolving body and its interaction with the world seem to depend on the activities in which the organism engages [...] Neither our brains nor our minds are tabulae rasae when we are born [...] [T]he design of brain circuits continues to change. The circuits are not only receptive to the results of first experience, but repeatedly pliable and modifiable by continued experiences” (ibid, pp. 111-2) – and experiences can only transpire within the context of place. “In effect, there is *no place without self; and no self without place*” (Casey, 2001, p. 406, emphasis in original).

Hagman (2002) does a wonderful job of situating all this within our central concern: the beauty effect. The following definition is forwarded: “beauty is an aspect of the experience of idealisation in which an object(s), sounds(s) or concept(s) is believed to possess qualities of formal perfection” (p. 662). For Hagman, “there is always a quality of the ideal with beauty” (ibid). “The effect of beauty psychologically is to produce an optimum emotional condition in which the person enjoys an ideal subjective state” (ibid, p. 663). The appreciation of beauty in an object, scene, or person, then, stirs within the perceiver “the same allegiance to ideal intentions as he is seeking to renew in himself” (ibid, p. 665, quoting Lee, 1948, p. 520). This is a profound realization: that an experience of beauty, as a manifestation of ideal form or quality – what we might call *immanent perfection* – may inspire in the perceiver a psychological desire to reach for an envisioned self-ideal.

At this point, I wish to recount a personal experience that would seem to substantiate Hagman’s thinking. In the Summer of 2009, I had a chance to visit Florence, Italy. I had developed a keen interest in the Renaissance and its florescence in Florence (Firenze) in particular. As such, I had read numerous accounts – so much so that I had a pretty good feel for the place upon my arrival; in other words, I had internalized a mental map with prominent features. On my first morning, I decided to head for the Duomo via the Ponte Vecchio. It was indeed exhilarating to walk through this museum of a city where attention to beauty was evident everywhere. I paused momentarily in the Piazza della Signoria to take in the majesty of the Palazzo Vecchio with its fabulous statues poised out front – but I thought I would return to this scene since my principal concern was the Duomo. I headed toward the Via dei Calzaiuoli knowing that this thoroughfare would bring me to the anterior of the Duomo. It was still morning so the shadows of the buildings casted long shadows along the street. Summer in Firenze is teeming with tourists, so there were many crowds to negotiate on my walk.

I finally reached a point where the top of Giotto’s campanile came into view above the line of buildings: this mere glimpse was at once splendid, almost surreal. I was encouraged to explore further. As I reached the end of the line of buildings that demarcate the perimeter of the plaza of the Duomo, I slowed down – and time seemed to slow down too. I finally emerged into full view of the Duomo, bathed in 45 degree sunlight. I had an instant bodily reaction. My knees felt weak so I had to support myself against the building behind me. As I absorbed the full supernal glow of this remarkable edification of the divine, tears spontaneously welled-up in my eyes and started to flow. For the next ten minutes or so, the tears kept flowing. My eyes were so

watery and bulging that I lowered my shades so the passing crowds would not see my blatant exhibition of emotion. I remained in this condition for what seemed an eternity, supported against the wall with tears overflowing. In between surges of emotion, I kept asking myself, “What kind of people would do this – build something so *beautiful*?” It was not so much the technicality of geometry or the detail of sculpture that had me so enthralled; it was the gestalt: knowing that *some 600 years earlier* a group of people had cared enough about their lives to memorialize their aspirations in an artifact of such exquisite, unselfconsciously loquacious, testament of beauty.²⁶

I’ve often reflected on the meaning of the incident; for, although I can be pretty emotional at times, I’ve never experienced such sustained, profoundly moving emotionality. Taking Hagman’s view into consideration, it is now possible to frame the incident as an encounter with the Ideal. Witnessing the sublime beauty of the Duomo must have awakened in me latent visions I have of living an ideal life for myself. The immanent perfection of the Duomo reflected in me an image of perfection I have for myself. The tears must have flowed because I was bearing witness to the fact that perfection is possible – I was suddenly standing naked, as it were, revealed: excuses or rationalizations for not realizing the ideal life I envision were instantly rendered vacuous. Hagman (2002, p. 668) exclaims: “In this sense, beauty results from this dialectic between an inner readiness for idealisation and the encounter with an object that is ‘worthy’ of the projection. By ‘worthy’ I mean that the object resonates with unconscious, archaic sources, fantasies (memories?) of paradise.”

Transcendence

My experience at the Duomo can be described as *transcendent*.²⁷ For the duration of the exalted emotional interlude, I was in a super-sensory state in which I seemed to have access to far deeper layers of awareness than are available to ordinary consciousness. A kaleidoscope of impressions was revealed to me that ranged along the full spectrum of human potential. Nor did the impact of this encounter with “immanent perfection” fully subside once the intensity of the experience had faded: for the rest of my stay in Firenze I seemed to possess an acutely sensitive feeling-tone. What a joy to be able to witness masterpieces by artists such as Donatello, Masaccio, or Brunelleschi with this heightened state of awareness. Perhaps this is what Damasio means by “brain maps available to represent body states?” Could my neural patterning have been transfigured in some way by the exquisite intensity of the beauty?

Beauty as transcendence is a recurring theme in the literature. Hagman, for example, as we might anticipate, says “beauty elevates human subjectivity and human values to a transcendent level. The sense of beauty in its reparative and preservative function asserts love over aggression, life over death, and harmony over disintegration. It may even be one of the

²⁶ Hamashita (2010, p. 14) makes a similar observation: “When I first saw Fra Angelico’s *Annunciation* in the San Marco museum, I was not so much in awe of the Italian Renaissance artist than of the evidence before me that a human being could reach such heights of spirituality. In my mind, Fra Angelico makes all humankind proud.”

²⁷ Transcendental: rising above or going beyond ordinary limits; surpassing (Webster’s).

ways that we reconcile our relationship with the world” (2009, p. 172). Thus, beauty has a “reparative and preservative function” that counters the inexorable pull of entropy consequent to material embodiment. The experience of beauty invokes and affirms higher order values such as love, life, and harmony. This is an upward pull towards aspirations of ideal realization and fulfillment.

Turner (1991), in a “phenomenological exploration of the feel of beauty,” feels compelled to differentiate the moment of transcendence:

Beauty is closely related to but not the same as other transcendent experiences: the glory or despairing triumph of heroic action; oceanic religious ecstasy or trance; the deep intellectual satisfaction of scientific or philosophical or mathematical insight; the rapture of love; the irresistible upwelling of laughter at absurdity or comedy. Though these are not the same as it, each need turn only a degree or so to become the beauty experience (p. 14).

What all these transcendent experiences have in common is their immediate sense of accessing a higher order reality – “higher order” here referring to that which is supersensible, superordinary, perhaps even archetypal: “Beauty has about it the quality of inexhaustibility, of depth. It connects to where we are, and indeed evokes our whole past, both of the nursery and of the race – that parkland our ancestors inhabited, where you could look out from the edge of a wood across a well-watered plain – but it also goes on from the ancient place to some new and transforming experience, something shaped though limitless” (ibid, p. 2).

O’Connor (2008) approaches transcendence from a devoutly theological perspective, as in the good news: “beauty is understood as in some way revelatory of the divine” (p. 399). “As a transcendental (or ontological) quality of being, beauty reveals the truth and goodness [godness?] of being, revealing in created forms the presence of the creator God, Who is the ultimate source of beauty, truth and goodness” (p. 401). God is certainly a “higher order reality.” Within this theological context, mention of the ‘soul’ becomes permissible: “If a thing exalts and delights the soul by the bare fact of its being given to the intuition of the soul, it is good to apprehend, it is beautiful” (p. 408, quoting Maritain, 1930, p. 23). This perspective opens the possibility that what happened to me at the Duomo was a *soul* experience: the beauty affected me so deeply that it touched the core of my being, my very soul. O’Connor is so good at articulating the transcendent religious experiencing of beauty that it is worth adding another quote:

The genetic moment of beauty is the dynamic vision of the seeds and promise of renewal and consummation in God of our fallen and fragmented world. There is a tension between what is and what should be, and between what is and will be, a tension that is reflected in our experience of beauty as revelatory and our understanding of that experience (p. 416).

An Irishman with a Ph.D. in philosophical theology, John O’Donohue (2004), expresses intimations of transcendent beauty in wonderfully warm poetic prose. Perhaps some of these

phrases will rouse recollection in your soul: “The Beautiful stirs passion and urgency in us and calls us forth from aloneness into the warmth and wonder of an eternal embrace” (p. 13). “There is a profound nobility in beauty that can elevate a life, bring it into harmony with the artistry of its eternal source and destination” (p. 15). “Beauty awakens the soul, yet it is never simply ethereal. Beauty offers a profound psychological and indeed mystical invitation. The dream of beauty is the self drawn forth to its furthest awakening, where the senses and the soul are utterly alive and yet in harmony, brimming with presence” (p. 41). “To behold beauty dignifies your life; it heals you and calls you out beyond the smallness of your own self-limitation to experience new horizons. To experience beauty is to have your life enlarged” (p. 20). “Beauty calls us beyond ourselves and it encourages us to engage the dream that dwells in the soul” (p. 51). However, “Beauty is not just a call to growth, it is a transforming presence wherein we unfold towards growth almost before we realize it. Our deepest self-knowledge unfolds as we are embraced by Beauty” (p. 8). “The glimpse, the touch of beauty is enough to quicken our hearts with the longing for the divine” (p. 21). To participate in beauty is to come into the presence of the Holy” (p. 226). “Yet ultimately beauty is a profound illumination of presence, a stirring of the invisible in visible form and in order to receive this, we need to cultivate a new style of approaching the world” (p. 23). “If we attempt to own beauty, we corrupt it [...] It is ultimately a sacred manifestation and should not be trespassed on by our lower hungers. In the presence of beauty, we are called to be gracious and worthy” (p. 49).

O’Donohue’s book is so full of bits of wisdom that it ought to be read leisurely, just a few pages at a time, so as to allow the opportunity for ruminative processing. For example, in the final chapter he offers this seemingly paradoxical observation:

Though we live in time, beauty seems to visit us from outside time, from eternity. Beauty turns vanishing time into something precious; it makes the moment luminous and indeed timeless. Yet one of the most agonizing aspects of beauty is that it does vanish. What we do not know or feel barely touches us, does not sadden us when it vanishes. However, beauty awakens, envelops, inspires and delights us; an experience of beauty turns a certain sequence of time into something unforgettable. Yet it still vanishes. The Japanese have the word *aware* to describe the ephemeral nature of beauty (p. 221).

At first, I wanted to deny this: not all beauty vanishes, right? There must be some beauty that persists forever, right? Yet, upon further reflection, O’Donohue would seem to have revealed something important. Take the Duomo. If I were to become a ticket agent working in front of the Duomo, day after day, week after week, I can imagine that eventually the beauty would fade; or at least I might stop noticing it – perhaps I would even grow critical of it? In that sense, the *novelty* of my first encounter was complicit in the depth of feeling that was aroused. And how many romantic partners are drawn together by their infatuation with each other’s beauty only to feel the ardor begin to fade with familiarity? In cases like these, O’Donohue’s point would seem to be directed at the insight that the experience of beauty cannot solely depend on the reflected appearance of an object, person, or scene – there must be a corresponding emotional response in the perceiver of an especially pleasing intensity to be characterized as ‘beauty.’ I think this is

what Hagan meant by “an inner readiness for idealisation and an encounter with an object that is ‘worthy.’” In this sense, the experience of beauty must be a psychological projection of some kind; for although my lovely partner and the Duomo may have characteristics that could be objectively qualified as ‘beautiful,’ not everyone will have the same reaction toward them.²⁸

Despite having attempted here to rationalize the “vanishing” of beauty, in certain situations, I wish to assert that there *is* a quality of beauty that lasts forever – and O’Donohue himself sometimes uses the word “eternal.” It is precisely the transcendental quality of beauty that waxes eternal, and this is the business of the soul:

For Plotinus beauty is never merely external. Beauty is ultimately an elegant, inner luminosity; it is bestowed by the soul: ‘For the soul...makes beautiful to the fullness of their capacity all things whatsoever that it grasps and moulds.’ Beauty is not simply surface appearance intended to indulge us or bestow temporary pleasure. Following Plato, Plotinus advocates the cultivation of a sense of beauty; this is a work of the soul, it is the cultivation of virtue and the clarification of the heart. The life-journey can be a journey of ascent to beauty. The longing at the heart of attraction is for union with the Beautiful. Not everything in us is beautiful. We need to undertake the meticulous work of clearance and clarification in order that our inner beauty may shine. The radiance of the Good makes beauty real...(O’Donohue, 2004, p. 30).

I find these to be such enchanting, inspiring images. Tarnas (1991, p. 84) relates that Plotinus was a third century A.D. philosopher who “by integrating a more explicitly mystical element into the Platonic scheme while incorporating certain aspects of Aristotelian thought, formulated a “Neoplatonic” philosophy of considerable intellectual power and universal scope. In Plotinus, Greek rational philosophy reached its end point and passed over into another more thoroughly religious spirit, a suprarational mysticism.” This, of course, would be the entrance of the medieval period. It’s important to note this point of entrance because, in stark contrast to the current era, “For the medieval mind beauty was a central presence at the heart of the real. Without beauty the search for truth, the desire for goodness and the love of order and unity would be sterile exploits” (O’Donohue, 2004, p. 45). Beauty, truth, goodness – these were the substance of virtue in the philosophy of Plato; and, in my opinion, nobody portrays transcendent beauty better than Plato. Maybe the world became unsustainable because people stopped honoring beauty, truth, and goodness?

²⁸ There is a branch of the research literature dealing with “Darwinian” or “evolutionary” aesthetics and its role in mate selection and the propagation of the species. Franklin & Adams (2010), for example, report: “Much of the research associated with attractiveness focuses on sexual aspects of face preference, such as mate selection. Facial attractiveness is associated with sexual behavior in both short and long-term relationships (Rhodes, Simmons & Peters, 2005). Indeed, the strongest neural association with attractiveness is imaging research that links attractiveness with brain regions linked to reward processing [...] Facial attractiveness causes activation in brain structures associated with processing many forms of reward, including sexual reward” (p. 301). There are limits, however: “The mere exposure effect is not sexual, as mere exposure reduces the arousal involved with sexual stimuli (Koukounas & Over, 2001; Mann, Berkowitz, Sidman, Starr & West, 1974) and actually increases reported negative affect to sexual stimuli” (Ibid). Perhaps it is this “mere exposure” that causes the beauty to “vanish?”

It was upon reading the *Symposium* that it first dawned on me that the path beyond sustainability was illuminated by the beauty effect. Nehamas (2007, p. 1) calls the *Symposium* a “phenomenology of love and beauty,” and avers, “Socrates’ speech in praise of *eros* in the *Symposium* (201d-212c) is perhaps one of the most influential passages Plato ever composed” (ibid). *Eros*, of course, is love, and love has a perennially powerful attraction to beauty; yet, within the context of Classical Greek culture, Socrates was able to identify various layers of beauty:

In the closing parts of his speech, Socrates (claiming to be repeating the words of Diotima, a holy woman with prophetic abilities) describes a complex hierarchy of different levels of love and lovers (207c ff.). At the lowest stage, he locates men who are attracted primarily to the beauty of the human body – these are, he says, lovers of women and their union with beauty results in the generation of children. The second stage includes men who are drawn more to the beauty of the human soul than they are to the human body and turn to pederasty. These lovers themselves are of two kinds. There are, first, those who are in pursuit of fame and who, in love with a particular boy, are inspired to create poetry or legislation which benefits both their lover and the city as a whole – theirs, Socrates says, is an intellectual rather than a biological progeny. But there are also those who are moved by a passion for wisdom and whose intercourse with beauty results in a life devoted to philosophy, which constitutes and produces the greatest benefits of which human beings are capable (Nehamas, 2007, p. 1).²⁹

According to Socrates, Diotima showed him that “however different their particular focus, all lovers are united by their desire to possess the beautiful (that is how *eros* has been defined; see, e.g., 204d3) or, more precisely, by their desire ‘to give birth in beauty’ (206b, 207e). Every human being, she said, is pregnant *both* in body and in soul and wanting to give birth is part of our nature” (ibid, p.5). However, since there are varying levels, “The love of beauty is really a signal to free ourselves from that sensory attachment, and to begin the ascent of the soul towards the world of ideas, there to participate in the divine version of reproduction, which is the understanding and the passing on of eternal truths” (Scruton, 2009, p. 41).

Here’s what the progression described above feels like in the actual text, in Socrates’ own words (which are, of course, Plato’s words):

Mortal nature is capable of immortality only in this way, the way of generation [...] For in this way every mortal thing is preserved; not by being absolutely the same forever, as the divine is, but by the fact that that which is departing and growing old leaves behind another young thing that is as it was [...] So do not be amazed if everything honors by nature its own offshoot; for it is for the sake of immortality that this zeal and *eros* attend everything [...] But there are others who are pregnant in terms of the soul – for these, in

²⁹ It’s important to realize that the Greeks understood ‘philosophy’ differently than the way it is used today. We may think of a philosopher as someone preoccupied with abstract mental deliberations in support of some position or another. For the Greeks, a philosopher was literally a ‘lover of wisdom,’ and the successful accomplishment of wisdom became apparent in living a life of virtue for the benefit of the *polis*.

fact [...] are those who in their souls even more than in their bodies conceive those things that it is appropriate for soul to conceive and bear [...] Then he must realize that the beauty that is in any body whatsoever is related to that in another body; and if he must pursue the beauty of looks, it is great folly not to believe that the beauty of all bodies is one and the same. And with this realization he must be the lover of all beautiful bodies and in contempt slacken this [erotic] intensity for only one body, in the belief that it is petty. After this he must believe that the beauty in souls is more honorable than that in the body [...] Whoever has been educated up to this point in erotics, beholding successively and correctly the beautiful things, in now going to the perfect end of erotics shall suddenly glimpse something wonderfully beautiful in its nature [...] For this is what it is to proceed correctly, or to be led by another, to erotics – beginning from these beautiful things here, always to proceed on up for the sake of that beauty, using these beautiful things here as steps: from one to two, and from two to all beautiful bodies; and from beautiful bodies to beautiful pursuits; and from pursuits to beautiful lessons; and from lessons to end at that lesson, which is the lesson of nothing else than the beautiful itself; and at last to know *what is beauty itself*' (Plato, 1986, pp. 270-4, emphasis added).

This is typical Platonic dialogue: emphasizing or making a case for the primacy of the transcendent Ideal Forms, those perfect archetypal representations that lie above or beyond the physical plane and from which dense material manifestations are mere vitiated copies. Thus, “beauty itself” is the unadulterated archetype ‘Beauty’ as it is revealed to the trained contemplative mind of the philosopher. Any earthly beauty will be in reference to this transcendent Beauty – beauty itself – which is pure essence and primal cause.

The Form of Beauty, then, may be more beautiful than everything else and the intensity of the true philosopher’s love may dwarf our everyday feelings, but since *eros* is essentially the desire for beauty, and *eros* is certainly felt by everyone, beauty is not the exclusive property of the Form. It is, as both everyday experience and the *Symposium* itself tell us, a feature of the world around us. The philosophic lover does not reject the beauty of what he leaves behind as he rises toward the Form. Although he discovers beauties that exceed anything he has already seen, the beauty of what he leaves behind does not disappear; only its brilliance diminishes, as the moon’s radiance wanes in the light of the sun (Nehamas, 2007, p. 3).

One gets the impression here of an increasing refinement for the appreciation of beauty toward those more inclusive or higher order manifestations that reflect, in their final consummation, that Beauty which is *eternal*. Eternal Beauty exudes an essential quality that becomes embodied in all its earthly manifestations – and maybe we can assume this essential quality has something to do with begetting and sustaining Life itself? “The philosopher’s movement up the ladder of love is an ascent toward the things that are always, as opposed to those that come into being and pass away. To see and perhaps to become one with what is always is the philosopher’s way of reaching immortality” (Bernardete, 2001, p. 150). In the *Symposium*, reaching immortality is a consequence of the philosopher integrating and generating the eternal quality of “true virtue:”

Or don't you realize [says Diotima] that only here, in seeing in the way the beautiful is seeable, will he get to engender not phantom images of virtue – because he does not lay hold of a phantom – but true, because he lays hold of the true; and that once he has given birth to and cherished true virtue, it lies within him to become dear to god and, if it is possible for any human being, to become immortal as well (Plato, 1986, p. 274).

This is the climax of Socrates' treatise on Eros in the *Symposium*. The pursuit of beauty ultimately arrives at the condition of immortality through the practice of virtue. “[The philosopher] finally grasps the cause of the beauty of the Forms – the Form of beauty itself – which is also the ultimate cause of the beauty of absolutely everything in the world; in a serious sense, as the philosopher gains a vision of the Form of beauty, he falls in love with the world itself. That is the beauty the contemplation of which is the only thing that makes human life worth living, if anything does (211d,1-2)” (Nehamas, 2007, p. 12-3).

Conclusion

The beauty effect, then, is the pathway beyond sustainability; for, its gradual and cumulative appreciation culminates in a glimpse of immortality, a desire to commune with that which is eternal. If ‘sustainability’ is merely the capability to maintain conditions as they are, to keep things in existence, as it were, then beauty inspires visions to reach *beyond* previous limitations, to strive for an ideal that may be only dimly sensed at first. Whereas sustainability is concerned with achieving steady-state material maintenance, comfortable conditions for the body, beauty has the ability to touch and stir aspirations of the soul: truth, goodness, virtue, and the optimization of human potential.

For all these reasons, sustainability could never be considered more than an interim goal. Using systems languaging, we could insist that the sustainability effort is the application of ‘negative feedback’ to bring the current ‘runaway’ system back in line with biospheric realities so as to prevent ‘overshoot.’ Sustainability is the global transition from an anthropocentric to an ecocentric worldview – and this will be an amazing achievement in itself; yet, beyond ecocentricity lies a realm of wonder where Humanity and Nature are regenerating, *cogenerating*, toward previously unexplored conditions of realization and fulfillment. The way to get to this realm beyond ecocentricity, beyond sustainability, is to begin creating beauty everywhere as a ubiquitous retrofit strategy in all spheres of human interest.

The application of these principles will be explored in a follow-up paper.

Ode to Egle

Of course there were a lot of new people there,
So how could I know that one would become very special?

I noticed you behind the film maker camera, attending your work.
I noticed you again, and had to look twice.
Once more for an extended furtive glance...
Wow, she's beautiful.

Divine Grace placed us next to each other.
I turned and you were beside me.
My body must have released some hormones, for
My heart beat faster and my face felt flushed.

I finally got your attention.
You swayed and looked into my eyes.
I had a reaction:
 I saw the ancestors emerging from the forest;
 I saw the rise and fall of the Roman Empire;
 I saw the waves pounding the hull of the explorer's ship.
 I observed a voice emanating from my body:
What's your name?

"Egle."
I had another reaction:
 I heard the wind roaring across the primordial plain;
 I heard the thunder wake an early dawn;
 I heard the seagulls diving for the waves.
 I listened as a voice came from way down deep:
How do you spell that?

"E-G-L-E – It's Lithuanian."

Space became compressed.
The other voices in the room faded.
A bubble of light formed around us.
As I gazed into your eyes I de-materialized.
For an instant I was a vibrating energy field.
All my chakras lit up in pulsating vibrancy.
Our energy bodies began to mingle...

And then the person next to you directed a question.
You turned in acknowledgement.
The bubble collapsed; the voices returned.
My body felt heavy and hungry.

Divine Grace placed us at the door of the hotel.
My body must have released some hormones, for
My heart beat faster and my face felt flushed.
Shall we go and see the Sagrada? – “OK”
As we reached the corner of the promenade,
A full marching band greeted us!

With the drums a-rat-tat-tatting
And the horns a-root-toot-tooting,
The centipede marching band turned down the promenade.
The children were running to and fro along the edges;
The grownups fell in behind and kept pace with the band.
The residents along the promenade stepped onto their second-story balconies
So they could witness the revelry below.
Everyone was smiling.
Wasn't there confetti and balloons?
Or do I just imagine that now?

You and I,
We joined the parade,
The parade that came to greet us and escort us to...
The encounter with Beauty.

At the end of the promenade stands the Sagrada Familia:
Gaudi's famous testament to organic embellishment.
What Divine Inspiration!
The tall coned steeples reaching for Heaven,
The flowery curlicues lining the base,
A statement of pure unselfconscious ebullience.

As we sat at the table, the Sun illuminated your face,
Revealing what seemed to be sparkles on your cheekbones!
Your eyes shone golden in this morning Sun.
I'm so happy the conversation turned Spiritual!
Talking about practices that can purify and beautify the Soul.
Like a giant sundial, the steeples of the Sagrada Familia marked our time.
As the shadow crossed our table, I knew soon it would be time for me to depart.

I wanted to soak up the extraordinary multifaceted exquisite beauty of the moment:
Sitting beneath the outline of the beautiful cathedral,
In the company of the most beautiful woman I've ever met,
Having arrived on the wings of a beautiful celebration,
Contemplating topics of eternal beauty...

There was fulfillment in that moment:
The moment has vanished yet the aspirations linger...

Note: Egle is pronounced 'og-la'

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