

Green versus Sustainability

From Semantics to Enlightenment

By Ernest J. Yanarella, ¹ Richard S. Levine, ² and Robert W. Lancaster³

"In the green revolution we're having, everyone's a winner, nobody has to give up anything ... That's not a revolution. That's a party."

Thomas Friedman



Abstract

The sustainability movement from the grassroots to the global level has been both enriched and hobbled by the many different versions of sustainability articulated in scholarly and popular writings, town hall forums, and international conferences. The latest expression of this cacophony is evidenced in the emergence of "green-talk" and the growing substitution of varieties of "greenness" for sustainability and sustainable development in everyday and media parlance. This critical essay seeks to accomplish two things: draw out the differences between the green label and sustainability, and situate this debate within a hierarchical sustainability rubric that allows us to meaningfully offer gradations on the sustainability continuum. In so doing, we seek to illuminate the stakes involved in this conceptual debate and provide clarity about what these putative variations on sustainability imply for both theory and practice. In an age of mounting finite resource scarcities, rapid climate change, and continuing global population growth, combined with the growing clamor for Western-style economic development, the sustainability movement is not going to go away. Sadly, the meaning of sustainability and sustainable development remains highly contested and subject to ongoing and fierce dispute. This state of affairs is evidenced by the growing shift away from the language of sustainability and its variants to the increasingly popular, and easier to swallow, term green.

Keywords: sustainability, green, green washing, environmentalism, smart growth

Green vs. Sustainability: How They Differ and Why It Matters

In his latest book, Hot, Flat, and Crowded: Why We Need a Green Revolution—and How It Can Renew America, New York Times columnist Thomas Friedman both criticizes the confusion over green

¹Department of Political Science, ²School of Architecture, University of Kentucky, Lexington, Kentucky.

³Department of Political Science, Kentucky State University, Frankfort, Kentucky.

and sustainability and abets it; in the book's subtitle and text, he dubs the needed sustainability transformation as a "green revolution." His critique in most respects is right on the money. Pointing to the proliferation of books and popular magazine articles espousing the many ways of going green, Friedman scolds: "In the green revolution we're having, everyone's a winner, nobody has to give up anything ... That's not a revolution. That's a party. We're having a green party." What really separates a "green party" from a genuine sustainability revolution? And what light do these two terms shed on the other gradations on the environmentalism to sustainability continuum that have entered the global sustainability debate?

First things first: how can we overcome the confusion between the terms green and sustainability? Although they are often used interchangeably, these two concepts mean different things (Table 1). Green is typically associated with individual products and processes that seek to "pick the low-hanging fruit"2 that is available in seemingly abundant supply in a country like ours where waste remains a scandal in many realms of commerce and industry and where profligacy continues to be a proud and thoughtless feature of consumer lifestyle. Landfills throughout America continue to swell even though the mantra of reduce, reuse, and recycle is intoned in television commercials and on elementary school blackboards. Green practices are ideologically safe practices that do not fundamentally disturb the driving forces of economic growth and corporate profit-making.

By contrast, sustainability is tied to whole systems, of which individual consumer products and other commercial materials are a part. Its imperative breaks through the ideological veil of mass production and consumerist consumption without end, calling for a cultural change in the definition of human need and the renovation of our competitive individualist orientation to other individuals and toward possessions.³

Going green distinguishes itself from sustainability in that conceptually it balances precariously on one leg (environmental health or economic vitality) of



Table 1. Green vs. Sustainability: A Typology of Differences		
Dimensions	Green	Sustainable
Relation to sustainability tripod	Only one leg (environmental improvement)	All three legs (environment health, economy vitality, social justice)
Focus	Individual components	Interplay of individual components and whole system
Tactics/strategy	Tactical application of activities that involve "picking low-hanging fruit"; promoting individual changes and reforms to make world less unsustainable	Strategic discovery of the proper scale that will make successive policy steps and actions easier and less costly by designing and implementing a sustainable, self-balancing system
Political orientation	Conventional, "pragmatic realist," reformist	Innovative, visionary, revolutionary ("going to the roots")
Scale	Individual devices, products, indicators, practices, buildings as most tractable level for greening	City region as the level at which human and social disequilibriums and ecological insults can be dynamically rebalanced
Risks or excesses	Greenwashing	Utopian fantasizing or top-down authoritarian policy action
Definition of success	Infinite progress of incremental improvements	Reduction of ecological footprint to a city region's fair Earth-share

the sustainability tripod4 (economic vitality, environmental health, and social equity), while sustainability rests securely on all three legs of that tripod (or the "triple bottom line," another sustainability metaphor). The vocabulary of greenness allows the environmental activist to focus on a narrower agenda for change while leaving in abeyance the more politically sensitive and upsetting social equity leg. Even putative sustainability city programs promoted in U.S. and Canadian cities (e.g., Sustainable Chattanooga⁵ and Canada's Hamilton-Wentworth Vision 2020 program⁶) pay only lip service to policies addressing equity and fairness. Sustainability, at the very least, is built upon a core meaning that makes the pursuit of all three legs necessary and compelling.

Green is popular and easy to do, as Friedman shows, because it connotes quick and inexpensive steps to make the world *less unsustainable* by deployment of tactics that reduce the environmental impact of human activity, agricultural and industrial production, and our built environment. But the enemy—unsustainability as a set of social, cultural, and economic systems and practices—is never directly confronted. Instead, 100 simple palliatives, 12 easy practices, six quick and inexpensive ideas are sent into the battlefield without hope or consideration that they will really vanquish the adversary. ⁷⁻⁹

Sustainability, on the other hand, is radical (in the proverbial sense of "going to the roots") and implies undertaking the necessary changes in our economic,

social, and urban processes to achieve a dynamic, virtuous, and balanced relationship with nature. As we have argued elsewhere, 10 these sustainable, balance-seeking processes never fully attain a static end-state precisely because human life and social activities are always throwing up new destabilizing challenges, which in turn must be tackled and brought into balance with the larger system. Thus green evokes small incremental improvements in social practices, modern technology, and human habitats, while sustainability implies a revolution in organizing our personal and collective lives and inhabiting the planet.

Like sustainability, green can take on ideological expression. When green-talk and green practice are promoted by fundamentally unsustainable companies or other uncaring institutions, they easily congeal into a deceptive ideology known as "greenwashing." 11 Whether it be "revolutionary research to save the planet" advertised by powerful oil companies12 or "clean coal" trumpeted by the coal industry,13 the underlying ideological conceit of the jingles is intentional; their purpose is to perpetuate the trends and practices that are leading the United States and the world to an ecological precipice. Naturally, sustainability, too, risks falling into ideological excess. When sustainability is separated from campaigns of public understanding and active political involvement or detached from people, communities, and their politics, it can become a blueprint for authoritarian, top-down policy action.



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Table 2. A Sustainability Rubric		
Level	Characteristic/Presupposition	
0. Environmentalism	Bifurcates wilderness and built environment and identifies wilderness as "environment" Understands the relationship between economic growth and environment as matters of balance or repair	
	Perceives economic-environmental rebalancing or mitigation through government regulation and bureaucratically mandated standards or market mechanisms; involves purchase of pollution credits	
1. Smart growth	Rejects no-growth and controlled growth urban planning while seeking smart alternatives to urban sprawl Recognizes the need to curb economic growth and commercial/residential growth	
	Advances palliatives to alleviate adverse consequences of uncontrolled growth intended to elevate overall quality of life	
	Pursues adoption of smart planning through neo-traditional neighborhood design; high-density downtown commercial and residential construction; mixed-use, high-density corridors congenial to mass transit and walking; PDR and TDR agreements	
	Focuses on only one of three legs of sustainability tripod	
Green products, techniques, practices, policies	Focuses on individual devices, products, indicators, practices, buildings	
	Engages in "pick the low-hanging fruit" practice—i.e., individual changes and reforms that make world less unsustainable	
	Orients itself within the political realm as conventional, "pragmatic realist," and reformist policies and actions	
	Defines success in terms of indefinite progress through incremental improvements	
3. Weak sustainability	Embraces rhetoric of Brundtland Commission definition of sustainable development	
	Identifies sustainability as a never-ending pathway pursued through sustainability indicators marking progress toward an ambiguous, unarticulated goal	
	Insofar as the goal of sustainability is operationalized, it is treated in terms of the three-legged table metaphor: economic well-being, environmental health, and social equity	
	Retains the practice in policy making of separating economic "development" (growth) and environmental protection through practices intended to mitigate the negative consequences of the former upon the latter	
4. Transitional sustainability	Through adoption of LEED certification standards, promotes a whole-building approach to sustainability by recognizing performance in five areas: sustainable site development, water savings, energy efficiency, materials selection, indoor environmental quality	
	Pursues economic growth (deemed necessary) through urban growth and planning mechanisms that seek to combine good urban design underwritten by eco-sustainability subsidies negotiated with land developers to incorporate into buildings, neighborhood projects, sustainability-oriented design, and other practices	
	Negotiates revenue sharing and other policy practices within a regional framework that mitigates sprawl tendencies from towns and cities adjacent to the urban growth boundary; teaches surrounding communities the benefits of moderate sustainability	
5. Strong sustainability	Understands that growth (quantitative increase) is not equivalent to development (qualitative improvement)	
	Works from the five operating principles of sustainability	
	Recognizes the basic unit and minimum scale of sustainability as the city region	
	Conceives of sustainability as a local, informed, balance-seeking process, operating within its sustainable area budget, and by so doing, exports no negative imbalances beyond its budgeted territory or into the future, thus opening spaces of possibility and opportunity	
	Seeks to generate local/regional sustainability policy making metaphorically around the model of a sustainability game involving multiple scenario building as the driving process for generating sustainable solutions to urban development, land use, site selection, etc.	
Existentially realized strong sustainability	Forges an urban regime (or controlled growth coalition) organized around a local policy agenda embracing strong sustainability and its political requirements	
	Establishes agricultural partnerland employing sustainability-guided farm practices to provide essential food to community	
	While trading for critical non-locally producible resources and products, effectively decouples from globalizing processes that would colonize the locale and integrate it into dependent commercial relations	
	Institutionalizes a planning system that includes a stockholder-driven and collaborative multi-scenario building process that feeds into and complements representative democratic institutions (discursive democracy and representative democracy)	

A major difference between green and sustainability stems from the scale and scope of these policies and practices. Not only does green typically operate on only one leg, or dimension, of sustainability, it overwhelmingly focuses on individual products (more environmentally friendly pesticides or fertilizers; more energy-efficient windows, refrigerators, heaters) or on a single facet (higher mileage, less-polluting automobiles) while leaving relatively intact the larger systems within which these products are embedded. Certainly, greener cars, more environmentally benign pesticides, and more energy-conserving windows are good things, or at least better than their predecessors.

But the advantage of sustainability resides in its emphasis on the combination of green products, the sustainability-oriented processes that manufactured them, and the recyclable components with which they were constructed. As William McDonough and Michael Braungart demonstrate in Cradle to Cradle: Remaking the Way We Make Things, sustainability has the advantage over green products and practices in that such products are integrated into the larger system of sustainable production processes and their materials or modules are not merely recycled, but "upcycled" (i.e., the natural and technical nutrients of products are converted without waste into the raw materials for other green products or the components for other products).14 In this sense, green products and processes are, at best, a subset of wider sustainable building, farming, or manufacturing processes, but not the reverse.

The differences between green and sustainability, then, are not a matter of "mere semantics." Activists organizing for sustainability in the streets, around the neighborhoods, or on campuses must understand these differences and recognize when agencies and organizations are advancing mildly progressive and reformist green agendas and when they are pressing for genuinely sustainable ones. They also must heed the adages that the good is sometimes the enemy of the better, and that picking the low-hanging fruit in the name of sustainability is often merely postponing the larger and more formidable task of confronting and revolutionizing the controlling systems of energy, food production, water, transportation, and construction.

Beyond a "Green Party": The Foundations of a Sustainability Rubric

Differentiating between green and sustainability provides an excellent opportunity for engaging in a more expansive undertaking—locating green and sustainability within a wider continuum that has informed sustainability discussion and policy mak-

ing around the globe. The means for performing this task involves rubrics, a practice that has grown popular within education and student assessment. 15,16 Rubrics are designed by assessment specialists to evaluate the degree of success in learning a particular idea, developing an individual or collaborative student project, or presenting a student-taught learning unit. A rubric is composed of an enumeration of different levels of understanding, or competence in apprehending, a concept, theory, or practice. In some cases, understanding or competence is not only indicated by categorizing on a hierarchical scale but by assigning points to signify the success level. In such instances, each category or level describes the criteria needed to attain the score at each level.

Sustainability's attractiveness—and now its even more-favored, supposed synonym, green—is largely based on the fact that its vagueness is both its greatest strength and its most evident weakness. As a result, sustainability programs often engender confusion and sagging popular support because, over the long run, understanding of sustainability's core meaning and its essential practices remains obscure. In taking a page from educational assessment specialists, the sustainability rubric in Table 2 starts at ground level with a set of defining criteria of environmentalism (Level 0) and moves from smart growth (Level 1), green products (Level 2), and weak sustainability (Level 3) to moderate or transitional sustainability (Level 4) and finally to strong sustainability (Level 5) and existentially realized strong sustainability (Level 6).

The placement of environmentalism at ground level, or the lowest plateau in the sustainability spectrum, acknowledges its role as a forebear of sustainability while underscoring that it is not truly an expression of sustainability. The origins of environmentalism in the United States have been well detailed in many historical and theoretical writings, 17-20 and this background is presumed in the listed characteristics and presuppositions. The inclusion of environmentalism in this rubric is important because some simplistic and poorly founded versions of sustainability continue to import environmentalist assumptions; for instance, the presumption that the relationship between economic growth and the environment are matters of balancing one against the other or the extraction of funding via government taxation to institute policies of environmental repair or reclamation necessitated by the "negative externalities" of economic growth.

Smart growth is incorporated into this rubric as the next point on the continuum. While the late '80s and early '90s were the high tide of the smart growth movement, there is growing recognition, especially among elite circles, that the plights of many North American cities, and the consequent decline of center cities, are tied to the fiscal crises



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of the '80s^{21,22} Although it remains popular in some parts of the country today, smart growth was a dumb sustainable strategy because it tried to graft elements of neo-traditional and other smart planning onto a continued, but moderated, urban or metropolitan growth strategy. The resulting formula was meant to transcend the contradictions of an economic policy that accepted indefinite pursuit of local economic development (i.e., growth) and a planning approach that sought to overlay smart urban design, transportation, and town-and-country alternatives to urban sprawl and suburbanization. Its inability to overcome this central predicament exposes its shortcomings and elitist moorings.

We enter the more familiar, but contested linguistic terrain of sustainability with the placement of green movement and weak sustainability in the rubric. While green-talk emerged well after weak sustainability, and is in some sense its predecessor and its later incarnation, it is a less-articulated, not an improved, version of weak sustainability, and is placed below weak sustainability in the rubric. Weak sustainability has its genesis in the Brundtland Commission report, with its minimalist, but widely embraced definition of sustainable development: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."23 Weak sustainability also helped trigger the operationalization of sustainability with the three-legged tripod metaphor. But it remains mired in the latent environmentalist assumption that separates economic development (growth) and environmental sustainability through practices intended to ameliorate the negative consequences of the former upon the latter.

Transitional sustainability is the category most closely identified with the current rage for LEED (Leadership in Energy and Environmental Design) certification standards and practices.^{24,25} Transitional sustainability promotes a whole-building approach by recognizing the importance of performance measures in five key areas. Its virtue is at once its bane in that its focus is at a scale (i.e., a single building) at which sustainability cannot be realized. When LEED practices are combined with urban planning and design and underwritten by ecosustainability subsidies negotiated by land developers, they can make impressive strides toward strong sustainability (the Vancouver model being the most illustrious example^{26,27}). Still, transitional sustainability risks two temptations: promoting a narrow agenda fixated on a single building as the terrain for surrogate sustainability, or reverting to a topdown technocratic approach, whose advances can be quickly erased by changes in political outlook and urban governance at the local/municipal level.

With strong sustainability, it is understood that growth (quantitative increase) is not equivalent to development (qualitative improvement) and that the

city region is the basic unit of sustainability and its minimal scale, as we have originally proposed.^{28,29} Strong sustainability opts for a strategy in which sustainability and economic development are fully integrated from the beginning. The strong sustainability definition surpasses meliorist and tendentious definitions: "a local, informed, balance-seeking process, operating within a sustainable area budget, and by so doing exports no negative imbalances beyond its budgeted territory or into the future."30 This implicit distinction between weak and strong sustainability departs from other ways in which these two terms have been framed. Within the field of economics, for instance, the distinction between weak and strong sustainability turns on the substitutability or nonsubstitutability of natural capital for other kinds of capital.³¹ But to our minds, strong sustainability underlines two critical elements: the proper scale for sustainability work; and the holistic, systemic, and synergistic character of strong sustainability.

Finally, at the end of the sustainability spectrum is existentially realized strong sustainability. This category explores strong sustainability as a condition and the political means for realizing it. The presumption is that politics is the ineluctable field of struggle upon which strong sustainability will be fought and won. Because, as we believe, the appropriate scale of sustainability is the city region, the aspiration to bring strong sustainability to the everyday world is and must ultimately be bound up in the campaign to forge an urban regime or controlled growth coalition.³²⁻³⁶ These bodies of literature and theory have only now begun to be integrated into the study of urban sustainability³⁷ and much spadework is needed.38

The promise of the integration of sustainability theorizing and urban regime and growth coalition analysis is the exposure of social obstacles to institutionalizing sustainability at various levels of governance. At the same time, the partial successes and advances by urban sustainability programs and projects taking place around the world are culminating in a new synthesis of theory and practice that will mutually nourish both.

Conclusion

This essay seeks to overcome some of the muddled thinking and vague conceptualizing that have clouded the strenuous and even valiant efforts made to bring sustainability to the world. As has been argued, only a strong sustainability framework of understanding and practice can meet the looming threats to local and global ecosystems and enrich the human and social hosts (human beings and communities) whose lives and fortunes depend upon the ecological health, robustness, and well-being of those more encompassing natural processes. Behind the linguistic caviling, conceptual debates, and policy controversies over going green and achieving sustainable cities are real and vital stakes that hang in the balance—not the least of which, our lives, those of our progeny, and our life-giving planet depend upon it.

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Address correspondence to: Ernest J. Yanarella, Ph.D. Department of Political Science University of Kentucky 1659 Patterson Office Tower 101 Main Building Lexington, KY 40506

Email: ejyana@email.uky.edu