

# Reclaiming Wasted Knowledge: Notes on the “New Paradigm” and the Potential Role of GESSO

by Michael Marien

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To get right to the point, let’s look beyond the statement that “the root cause of the current paralysis lies in the fundamental conceptions and perceptions which govern global society today.” (1) It is perfectly correct that there are many bad ideas in high places, caused by obsolete thinking, heavy lobbying of special interests, and “lack of political will” (a polite phrasing for an ill-informed electorate). But this is a symptom, and not the cause of our “intensifying problems” and widespread political inadequacy, if not paralysis.

Rather, *the root cause of our problems is an obsolete, industrial-era structuring for the production and distribution of knowledge.* (2) In short, massive infoglut, incoherence, and wasted knowledge. There is, in fact, no shortage of ideas, strategies, agendas, solutions, and new paradigms, as concerns the interrelated problems of employment, security, climate change, pollution, education, poverty, inequality, globalization, scarce resources, aging but growing populations, and the ever-growing proliferation of technologies that alleviate and/or aggravate these problems. In the words of Edna St. Vincent Millay many decades ago:

...Upon this gifted age, in this dark hour  
Rains from the sky a meteoric shower  
Of facts...they lie unquestioned, uncombined,  
Wisdom enough to leach of us our ill  
Is daily spun, but there exists no loom  
To weave it into fabric. (3)

The physical and biological sciences are doing quite well in the 21<sup>st</sup> century, aided by the Internet and global collaborations, as well as munificent corporate and government funding to advance research. The social sciences and the professions are doing less well, for lack of necessary “looms” to weave their findings and proposals into the fabric of public policy for sub-national, national, and global governance. Rather than following the sensible “medical model” of generalists working with specialists, the soft sciences and allied professions (especially law and journalism) are notably fragmented, with little or no effort at integration, synthesis, and overviews, as well as serious discussion and debate of conflicting and imperfect views, of which there are many.

## **Evidence of Debilitating Infoglut and Wasted Knowledge**

Information overload, or infoglut, has been a concern for at least 50 years, but has surely accelerated with the Internet and new social media. Three categories of contemporary information can quickly illustrate:

1. *International Organizations Relevant to Security and Sustainability.* A listing has recently been prepared of some 167 organizations, large and small, that are making some contribution to thinking about Security (broadly defined to include human security, human rights, economic security, food security, etc.) and/or Sustainability (climate change, planetary boundaries, the energy transition, etc.). This list can easily be expanded to more than 200

organizations, including WAAS, Club of Rome, various UN agencies, OECD, IEA, IIED, IISD, SIPRI, IUCN, IPCC, ISEE, Pugwash Conferences, Worldwatch Institute, Millennium Project, Earth Institute, Greenpeace, The Natural Step, Tellus Institute, Wuppertal Institute, and many more. The bottom line is that no single organization is on top of everything, but most if not all have something to contribute. Organizations concerned with sustainable development, however, appear to be converging on a general sensibility, although there are variations, and there are a few hints of growing overlap between “security” and “sustainability” (4).

II. *Major Publishers.* The Taylor & Francis Group includes Routledge, which has recently acquired Earthscan, the world’s leading publisher of environmental books. T&F publishes huge quarterly catalogs, each with overly brief descriptions of some 75-100 new titles related to security and/or sustainability. That’s some 300-400 titles per year, out of 4,000 per year published by T&F. Add to this the world’s largest think tank, the OECD, which publishes several hundred reports each year related to “green growth,” education, health, job creation, good governance, etc. (OECD is far beyond the clichéd image of a “rich” countries club which are not so rich today due to squandered wealth, and it increasingly analyses the “BRICS” and more.) The various agencies of the United Nations, added together, also publish several hundred reports per year. Several dozen university presses each publish anywhere from 10-50 futures-relevant titles per year (e.g., Harvard, Princeton, Yale, Oxford, Cambridge, Stanford, Chicago). And there are several dozen other professional publishers and think tanks also offering 10-50 titles per year (e.g. Brookings, Palgrave Macmillan, Island, Transaction, Sage, Paradigm, Rowman & Littlefield, RAND) as well as “trade” publishers (Random House, Penguin, Norton, Simon & Schuster, Public Affairs) that aim for the bestseller lists with important and/or more popularized titles.

III. *GlobalForesightBooks.org.* Since 2009, my fledgling website has posted brief abstracts of some 4,500 titles, arranged in 30 overlapping categories. In 2012 alone, some 1,200 titles were cited, and several hundred more could have been added. Applied to the WAAS Ottawa agenda:

**1) Economy and Employment:** some 150 titles on the recent economic crisis and what should be done, 160 on reforming the world economic system, 130 on work and job creation, and 130 on food and agriculture. Also see *CADMUS*, 1:5 (Oct 2012, 86-102) for my biblioessay encompassing 118 books and 10 organizations advocating “New and Appropriate Economics for the 21<sup>st</sup> Century.”

**2) Energy and Ecology:** some 195 titles on Sustainability, 185 on Energy, 230 on Environment and Resources, and 75 specifically on Water .

**3) Human Capital:** some 145 titles on Education (primary and secondary), 90 on Higher Education, 180 on Communications, 155 on Science and Technology, and 260 on Health (including global perspectives). Very little is published, however, on adult learning, which will be critical for the next few decades. A noteworthy new addition is **Global Social Policy in the Making: The Foundations of the Social Protection Floor** by Bob Deacon (Policy Press/Univ. of Bristol, Aug 2013, 208p) on a global policy initiative of the UN, G20, and ILO to ensure that all people have access to essential health care and income security.

**4) Governance and International Security:** 320 titles on Security and 300 titles on Governance (both U.S. and global). Also see *CADMUS*, 1:4 (April 2012, 147-157) for my biblioessay covering some 100 titles on international law and human rights in transition, and *CADMUS*, 1:3 (Oct 2011, 142-153) for my biblioessay covering some 100 titles on global governance of security, economic, and environmental matters. A noteworthy new addition is **The Quest for Security: Protection without Protectionism and the Challenge of Global Governance**, edited by Joseph E. Stiglitz and Mary Kaldor (Columbia Univ. Press, 2013, 412p, \$39.50; GFB Book of the Month, August 2013); especially see “Global Security

Cooperation in the Twenty-First Century” by G. John Ikenberry (pp.94-116) and “Restructuring Global Security for the Twenty-First Century” by Mary Kaldor (pp.117-142).

So is anyone trying to digest even some of these ideas in any of these sectors? Frankly, no one that I know of. Do any of these ideas get into the mainstream of public discourse? very few. These thoughtful books, reports, and articles keep piling up, due to structural incentives to keep adding to the pile, rather than analyzing it and injecting good ideas into political discourse. Meanwhile, global insecurity, climate change, and human suffering arguably continue to increase, and little or nothing is done: indeed, some governments—notably the US and Canada—are in gridlock, if not moving backwards insofar as seriously addressing today’s global challenges.

### **Elements of a “New” Paradigm from 1936: The World Brain of H.G. Wells**

We surely need a new master paradigm—a new way of thinking. (5) The “new intellectual paradigm” proposed by WAAS leaders seeks to “fully comprehend the interrelationship and interdependence of all dimensions of global society,” optimize human welfare and well-being for all people, recognize universal human values, and place central importance on Human Capital and Social Capital (curiously omitting the importance of endangered and undervalued Natural Capital). (6) But this vision is a very broad *agenda*, more than a paradigm—a worthy collection of new, newish, old, and evolving global goals increasingly shared by many people, albeit articulated in different ways. So it is not especially new, or a paradigm. Rather, *the new paradigm we need should focus on process, not content*.

The WAAS vision is very similar to the recent Report of the High-Level Panel of Eminent persons on the Post-2015 Development Agenda, **A New Global Partnership: Eradicate Poverty and Transform Economies Through Sustainable Development** (July 2013, 69p; GFB Book of the Month, July 2013), which also calls for “a new paradigm” involving a universal agenda driven by five big transformative shifts: ending extreme poverty for all, focusing on sustainable development, transforming economies for jobs and inclusive growth, promoting peace and good governance, and forging a new global partnership in a new spirit of cooperation. The High-Level Panel does not explain how this new global partnership can be brought about, but, arguably, it should involve the many individuals and organizations that are thinking about and working for sustainable development and peace (more broadly defined as security).

The paradigm suggesting how to do this is not at all “new,” but was outlined in a 1936 lecture by H.G. Wells at the Royal Institution of Great Britain, where he called for a “World Encyclopedia” as a new institution to “bring all the scattered and ineffective mental wealth of our world into something like a common understanding...a scheme for the reorganization and reorientation of education and information throughout the world...a concentration, a clarification, and a synthesis...every university and research institution should be feeding it...bringing together many apparently conflicting systems of statement...a clearinghouse of misunderstandings...to hold men’s minds together in something like a common interpretation of reality.” (7)

In a subsequent lecture in 1937, Wells continued the World Encyclopedia theme, calling for a “sort of mental clearing house for the mind, a depot where knowledge and ideas are received, sorted, summarized, digested, clarified, and compared...this organization need not be in one place: it might have the form of a network...the material beginning of a real World Brain...a perpetual digest and conference and a system of publication and distribution...in direct touch with all the original thought and research in the world...the dominant factor in directing the growth of a new world...(with) thousands of workers at this

business of ordering and digesting knowledge where now you have one (8) WB, 69-71, 79-80)

These collected papers and addresses were later published in a volume entitled **World Brain**, and the concept has been referred to several times since then, notably by former US Vice President (and should-have-been President [9]) Al Gore, who, in his encyclopedic 2013 work on six drivers of global change correctly cited the Wells description of a World Brain as “a sort of mental clearinghouse for the mind where knowledge and ideas are received sorted, summarized, digested, clarified, and compared.” However, Gore goes on to gush that “what began as a metaphor is now a reality” due to the Global Mind: “the global Internet and the billions of intelligent devices and machines connected to it.” (10). Curiously, in an otherwise well-documented book, Gore offers no evidence that the World Brain/Global Mind is now “a reality,” which is hardly the case. Indeed, toward the end of his book he confesses that “attention and focus are diluted by the Internet.”

### **The Proposed Encyclopedia of Security and Sustainability**

A relatively modest proposal is being formulated in the spirit of H.G. Wells that will address the problem of infoglut and wasted knowledge. The three principals behind the *Global Encyclopedia of Security and Sustainability Online* (GESSO) are George Thomas Kurian (WAAS Fellow, president of The Encyclopedia Society, and editor or co-editor of 26 previous encyclopedias), David Harries (a nuclear engineer, former director of curriculum at Canada’s National Defence College, and associate director of Foresight Canada), and Michael Marien (director of GlobalForesightBooks.org and founder of *Future Survey*, published monthly by the World Future Society for 30 years).

GESSO will promote a broad view of “Security” (including energy security, economic and job security, cyber-security, human rights, public safety, etc.), a broad view of “Sustainability” (covering the ever-expanding variety of alternative views as to what should be done), and the growing overlap between these two broad realms.(11) It will examine environmental and other security threats in world regions, and in major countries and cities, and how governments, corporations, and cities are responding. It will assemble information on more than 200 global organizations concerned with security and/or sustainability, and seek intellectual and financial contributions from many of these organizations. All new contributions and updates will be announced in a monthly “GESSO Newsletter” distributed online, and the GlobalForesightBooks.org website will be upgraded and linked to GESSO, identifying all new books and reports related to security and sustainability, and other global issues.

The GESSO project is not as extensive as the World Brain proposed by H.G. Wells, nor will it employ “thousands of workers” as Wells envisioned. But it will hopefully involve hundreds of individuals and organizations, in the spirit of fostering the “New Global Partnership” proposed by the UN High-Level Panel, and accelerate the process of transition to a more just and sustainable world. Even if less than a full-fledged “World Brain,” GESSO will nevertheless be the first encyclopedia to build a bridge between two critical sectors, with the understanding that sustainability is not possible without security, and that security is not possible without sustainability. If successful to any appreciable degree, this in itself would be a major accomplishment!

The World Academy of Art and Science could be facilitator of an umbrella organization for GESSO, the major sponsor of GESSO, or a major sponsor, along with perhaps the Club of Rome and/or several other organizations. It will require serious commitment to the integrative mission of GESSO, and, in turn, WAAS would become widely known for this distinctive and important role.

## Principles of the New Process Paradigm for GESSO

- 1) GESSO will seek the very best facts and scientific evidence, along with trend analyses, forecasts, and proposals for improving security and sustainability, broadly defined.
- 2) These facts, forecasts, and proposals will be succinctly rendered, with key references (aided by GlobalForesightBooks) and links to related themes, in a broadly integrative perspective reflecting the underemphasized “scholarship of integration.” (12)
- 3) Contributors will be encouraged to emphasize fully-considered costs and benefits of present policies, as well as alternatives, in that much financial and human wealth is currently wasted or poorly invested.
- 4) Evidence-based conflicting views will be welcomed, ranging from “realist” to “idealist” Overall, GESSO will be guided by “hard-nosed human-interest idealism.”
- 5) GESSO will seek to be a major feed-in to the post-2015 UN single universal agenda for sustainable development (13), and point out the multiple new paradigms (14) that are being proposed in general, as well as for the universal agenda. However, proposals must not be “unworkably utopian” (15), e.g. abolishing war (especially in that much can and should be done to reduce the incidence and extent of war).
- 6) Reports from UN agencies, OECD, and World Bank, ILO should be baselines for most entries. For example, to promote decent jobs and livelihoods for all and reduce wasted human capital, recent publications from the UN’s International Labor Office should be cited, such as **World of Work Report 2013** (June 2013, 120p; on international labor standards and the agenda for “job-rich growth”), **Work Sharing During the Great Recession: New Developments and Beyond** (May 2013, 250p), **Working towards Sustainable Development: Opportunities for Decent Work and Social Inclusion in a Green Economy** (2012, 288p; on the right policy mix to create more and better jobs), and **Global Employment Trends for Youth 2013: A Generation at Risk** (August 2013, 70p; on the continuing youth employment crisis in all countries). If these reports are lacking, deficiencies should be identified and better schemes proposed. But consult the baseline first!
- 7) As a *global* encyclopedia, attempts will be made to secure contributions from many countries, while recognizing most of the literature on security and sustainability is from “Western” countries, especially the US. We welcome suggestions to engage thinkers from Asia, Africa, Latin America, the Middle East.
- 8) Similarly, GESSO will aim for a better gender balance, but this will also be difficult. As a benchmark, the 1996 *Encyclopedia of the Future*, co-edited by WAAS Fellows George Thomas Kurian and Graham T. T. Molitor, had 60 female contributors out of some 450, or 13.3%. We hope for 20% in GESSO, but it may be a struggle.
- 9) Several *anonymous* contributions will be solicited. As noted by David Harries, there are thoughtful individuals in the security field who have much to say, and would love to say it, but do not wish to endanger their careers.
- 10) GESSO will be freely available worldwide, similar to Wikipedia, if properly subsidized. The newsletter update may be available only by paid subscription.
- 11) Publicity will be essential. Editors and contributors will be encouraged to write “op-ed” spin-offs from their contributions. Once underway, a documentary film--or film series--may be possible. And an annual hardcover book assembling the “best from GESSO” should also be helpful.
- 12) Simplistic terms that impede constructive thinking about security and sustainability will be questioned, e.g. rather than opposing “capitalism” vs. “socialism” it is more productive to consider the pros and cons of various “capitalisms” in today’s world; also the deficiencies of “democracy” (often a cover for semi-democracy or creeping plutocracy), the

shallowness of “debate” (real in-depth debates are needed), and assumptions “knowledge society” as functional (especially aided by the Internet).

13) “Old” ideas as well as “new” ideas will be considered (e.g., the 1936 proposal for a World Encyclopedia, an idea whose time has arrived); too much useful knowledge is wasted because it is implicitly “old”. Historical perspectives are needed so wheels are not constantly reinvented.

14) GESSO will be guided by principles of good information design, to make ideas and linkages as clear as possible. (16)

15) Evaluation is essential to enable ongoing evolution. In the words of Amazon.com founder and CEO Jeff Bezos, who recently bought *The Washington Post*, “It’s dangerous not to evolve.” (ABC News, 11 August 2013).

In sum, the recent UN High-Level Panel on the Post-2015 Development Agenda concludes that “The destination is clear: a world in 2030 that is more equal, more prosperous, more peaceful, and more just. Making this vision a reality must be a universal endeavor. Goals are the crucial first steps to get us moving in the same direction.” (emphasis added)

GESSO can also be one of the “crucial first steps” by defining the “us” who are already moving roughly in the same direction, and the best ideas that will get us there. In doing so, “A New Global Partnership” to eradicate poverty and transform economies can be facilitated. The High-Level Panel states that forging a new global partnership to drive the universal agenda is “perhaps the most important” of the five transformative shifts that are needed, based on a common understanding of our shared humanity in a shrinking world. This common understanding is useful, but even more important is the understanding that our “knowledge society” is not working well, and much useful knowledge relevant to a post-2015 universal agenda is wasted. Harnessing this knowledge through a better information system, as envisioned by H.G. Wells three-quarters of a century ago, may make the crucial difference. Arguably, it’s the “new paradigm” that is most needed.

## REFERENCES

- 1) Ivo Slaus and Garry Jacobs, “In Search of a New Paradigm for Global Development,” *CADMUS*, 1:6, May 2013, p2. Retitled as “Opportunities and Challenges for the 21<sup>st</sup> Century: Need for a New Paradigm” for Sept 16-18 Ottawa meeting. “Intensifying problems” is used by Slaus and Jacobs on p.1; I fully agree with this phrasing of our present condition.
- 2) Fritz Machlup, **The Production and Distribution of Knowledge in the United States**. Princeton NJ: Princeton University Press, 1961, 416p. A heroic mapping of the emerging “knowledge industry” by a Princeton economist, noting that “an ever-increasing part of GNP has been taken by the production of knowledge” (p.12). This is implicitly a theory of progress, although Machlup does note in passing that “there is ground for suspicion that some branches of the production of knowledge are quite inefficient.” (p.10)
- 3) Edna St. Vincent Millay, **Huntsman, What Quarry?** New York: Harper & Brothers, 1939, p.92. Cited in Bertram M. Gross (ed.), **Social Goals and Indicators for American Society, Vol 1, The ANNALS of the American Academy of Political and Social Science**, May 1967, p.2. In the introductory essay, Gross advocates “more explicit attention to transeconomic goals and data” and “increasing utilization of sophisticated information in the policy-making process.”
- 4) Early indicators of an overlap between security and sustainability include formation in 2010 of the United Nations University’s Institute for Sustainability and Peace (UNU-ISP)

with 18 faculty, a recent anthology on **Environmental Security: Approaches and Issues** edited by Rita Floyd and Richard Matthew (Routledge, Dec 2012, 302p) which claims a new “field” of study, and **Taking Up The Security Challenge of Climate Change** by Rymn J. Parsons (U.S. Army War College Strategic Studies Institute, Carlisle Papers, Aug 2009, 20p and 126 footnotes), arguing for “sustainable security,” an expanded concept of national security, as “the policy that should overlie these new strategies,” in that climate change “may prove to be destabilizing on a massive scale.” (p.1)

5) WAAS Fellow Sesh Velamoor, former executive director of the Foundation For the Future in Seattle, has identified the “Operant Paradigm” as “a devastating combination of ideas that are squarely responsible for the current state of affairs and, what is worse, an unquestioned continuation of faith and belief in them.” (Cited in Michael Marien, “The Megacrisis and the New Master Paradigm: Toward Shared Understanding,” *Journal of Futures Studies*, 16:2, Dec 2011, p.162.) The problem of changing socio-economic paradigms, however, is that the audience is not composed of scientists who follow truth-seeking conventions, but of politicians and voters with a wide variety of values, interests, and understandings. The oft-cited “bible” of paradigm change, **The Structure of Scientific Revolutions** by Thomas S. Kuhn (University of Chicago Press, 1962, 172p), was strictly addressed to the “hard” sciences, with examples from the history of astronomy, electricity, and chemistry (especially see Chapter 10, “Revolutions as Changes of World View,” pp.110-134). Although the “paradigm” concept can be applied to the “soft” sciences, changing paradigms and ideologies in the social sciences, not to mention in public policy, appears to be far more difficult—and should be recognized as such.

6) Slaus and Jacobs in *CADMUS*, 1:6, p.6

7) H.G. Wells, **World Brain**. London: Ayer & Freeport NY: Books for Libraries Press, 1938, pp.17, 20, 22, 35.

8) *ibid.*, pp.69-71, 79-80.

9) Al Gore, **The Future: Six Drivers of Global Change**. New York: Random House, Feb 2013, 558p. (GlobalForesightBooks.org Book of the Month, April 2013). If reason and fairness had dictated electoral outcomes, rather than quirky election laws, Gore would have clearly won the contested presidential election in 2000, where some 18,000 ill-designed “butterfly” ballots in Palm Beach County, Florida, were disqualified because they were double-punched for both Gore and minority candidate Pat Buchanan. Voters presumably punched Buchanan by accident and then chose Gore. Even if each candidate received 9,000 “half-votes,” Gore would have been the victor. If this had happened, presumably the U.S. government would not have squandered \$3 trillion on the war in Iraq (estimate by Joseph Stiglitz and Linda Bilmes), nor allowed the lax financial regulation that enabled the ruinous Great Recession.

10) *ibid.*, p.45.

11) See reference #4.

12) Ernest L. Boyer, **Scholarship Reconsidered: Priorities of the Professoriate**. Princeton NY: Carnegie Foundation for the Advancement of Teaching, 1990, 147p. This seminal report, more important today than ever, argued for “a new vision of scholarship” that gave equal attention to the Scholarship of Discovery, the Scholarship of Teaching, the Scholarship of Integration, and the Scholarship of Application. Although not spelled out in any detail, this is still the “Bible” for justifying much-neglected integrative studies, as well as more attention to application, dissemination, and “service to the nation and the world.” (p.23)

13) U.N. Secretary-General’s High-Level Panel of Eminent Persons on the Post-2015 Development Agenda, **A New Global Partnership: Eradicate Poverty and Transform Economies Through Sustainable Development**. New York: United Nations Publications,

July 2013, 69p (GFB Book of the Month, July 2013; full report at [www.un.org/sg/management/pdf/HLP\\_P2015\\_Report.pdf](http://www.un.org/sg/management/pdf/HLP_P2015_Report.pdf)).

An earlier report by the High-Level Panel on Global Sustainability, **Resilient People, Resilient Planet: A Future Worth Choosing** (United Nations, Jan 2012, 94p; GFB Book of the Month, June 2012; full report at [www.un.org.hsp](http://www.un.org.hsp)) is mentioned in passing only in a footnote, which does not bode well for “a new global partnership.”

14) See [www.GlobalForesightBooks.org](http://www.GlobalForesightBooks.org) box for “Paradigm-Breaking Books,” describing well over 100 recent books offering new paradigms on security, sustainability, governance, society, education, etc.

15) The U.N.’s High-Level Panel on Post-2015 development (reference #13) warns that the sustainable development agenda should not be “unworkably utopian” (p.14). Rather, it urges that a limited number of post-2015 goals and targets should be adopted, and each should be “SMART: Specific, Measurable, Attainable, Relevant, and Time-bound.”

16) Robert Jacobson (ed.), **Information Design**. Foreword by Richard Saul Wurman. Cambridge MA: MIT Press, 1999, 357p. Includes an essay by WAAS Fellow Robert E. Horn on “Information Design: The Emergence of a New Profession” (pp.15-34), who writes that “Simply storing large amounts of information on computers and retrieving it does not solve our information needs; in fact, gigantic storehouses of information overload us with too much information... What we need is not more information but the ability to present the right information to the right people at the right time, in the most effective and efficient form.” (p.16)