

May 31, 2008

Referee(s)' Comments to Author:

Reviewing: 1

Comments to the Author

I found this paper to be deeply problematic and would not recommend publication. Perhaps the best way to communicate this is to identify several seemingly smaller points in the paper that are troubling and then draw the larger conclusion from them. For example:

- The paper rests on several assumptions that are stated boldly but are, in fact, arguable and not defended. The reader who disagrees or only partially agrees with one of these assumptions will find the rest of the paper unpersuasive. Page four:

The first step in sustainability is realization that we must change or our "descendants are doomed." I think "doomed" is hyperbole. So is idea that world is aware that we must live sustainably. I don't think many of us really know how to do that or quite what that means. "There is no need to model the environment at all." Plainly to the extent that we do not fully understand the complex interaction of environmental and human systems, we do.

On the other hand change resistance or, perhaps, political will, is an important element in policy change and a concept that deserves attention. (The author might look to the public policy literature on this - but seems to be unaware of it.) AND - it is an element of many problems, for example, economic inequality. At this point, the author loses connection with the sustainability problems of global systems and the paper becomes rather irrelevant to the starting problem. (Later he admits this is a generic problem/structure, but if that's true the author should either forget about discussing sustainability and focus on political change, OR the author should consistently develop the linkages between these issues.)

The discussion of political motivations and beliefs among corrupt/virtuous politicians lacks context. It seems sometimes like it was written to apply to a western liberal democracy (where public opinion support is more important), but might be more applicable in describing other states where corruption is more common. Again, there is a literature on politicians and elections and it includes, but doesn't rest entirely on, pandering or appeals to voters self interests. I won't dispute that "falsehood and favoritism" have sometimes been a "dominate political strategy," but where - EVERYWHERE? ALWAYS? Nuance is completely lost here. This is another assumption that is not well supported.

The author then argues that politics is about true or false beliefs (memes). For the author, this is about factual matters and rational or logical arguments that might help bolster "positive" or "virtuous" outcomes. Somehow when there is low change resistance, telling people the truth achieves political outcomes (p. 10), but

when there is high change resistance, we need help in discerning the truth. This analysis suggests that high change resistance occurs when there are more politicians who can benefit by "falsehood and fabrication." Frankly, that's just not it. The tractability of political solutions is substantially more complex. Again, there is some literature on this. But in the author's view, impartial fact checkers can show us the way and will somehow provide the leverage to the system that will motivate policy change in a way the author supports.

What's missing here is any idea that political values matter. Much of resistance to policy change is not a disagreement on facts, although there are many of those. It is based, instead, on values disputes, including the values of individualism and social or collective good and the role of government in society. Through our value structures, we discern the "facts" that are important to us and tend to dismiss others or weight them less significantly. Our acceptance of the arguments of politicians is not simply because they tell us something that is appealing to self interest, but because of our self interests/values, the things some politicians are telling us make sense to us.

All that said, I'm interested in the idea of change resistance. But I don't think this author or his/her models, do much to enhance our understanding of it.

Reviewing: 2

Comments to the Author

Review

The dueling loops of the political power place

I find that the paper should not be published in the SDR, for the following reasons:

The purpose of the paper is far too ambitious: "... a new path to solving... the global environmental sustainability problem."; and as argue ahead in this review it does not meet its purpose.

The author does not set the case of the paper properly and immediately goes ahead to resolve what he believes is a problem that is not well defined. The author does not clearly illustrate the conventional viewpoint to the problem as it inadequately discusses the literature.

The following is very a strong statement with no evidence: "The world is aware that it must live sustainably" Is this so? In what sense? Who claims the same as the author does?

What is the evidence to claim that society does not want to adopt the practices for sustainable living? Is the author sure that society knows how to do it? Is this clear to society? The author does not show evidence to this respect.

Statements like the following create skepticism towards the paper: "there are two feedback loops in the human

system that, in the large, affect citizen's lives more than anything else. They are the loops that politicians use to gain supporters."

The sustainability problem is changed in the paper by one related to the politician's ratings, with little evidence of its validity.

The summary is very casual. The paper does not show a path to a very complicated problem that humanity confronts. The author fails to show that there is agreement regarding the sustainability problem and that this is just a problem to do with its implementation. The author fails to show that the issue is to do with: adopting practices that "will allow living sustainably". Note that this is the foundation of the paper.

For the author the problem becomes clear: detect political deception and "Politician will then respond correctly to the truth about the global environmental sustainability problem...". This is not proven.

As the author acknowledges "further analysis and much experimentation will be necessary to refine the concept model... Flaws may be discovered that must be addressed..."

Considering the previous arguments it is hard to believe that "the model and solution elements presented here should not be interpreted as the analysis or the solution but as a path to the solution." It is too early to conclude this and much more work is required.

Other issues to be consider by the author:

The abstract makes little sense before reading the paper. It does neither inform the reader about the general issues involved nor about the most important findings of the paper, in a clear and direct way. The abstract only includes the hypotheses of the paper.

Proper coupling is defined in its own terms. This is a typical circular argument. It goes like this: something is proper because it is appropriate.

One does not know how to read figure 1: To more human system less impact to the environment? Or more? Or negative impact to the environment?

"Figure 2 shows that to solve the crux of the problem, there is no need to model the environment at all? This is certainly not shown in Figure 2. Does the author mean that there is no need to understand the issues of sustainability? And that there is no need to understand the environmental issues and their relationship with society? The author has to clarify his case to this end.

The race to the bottom section is loaded with the author's personal views and believes. At least this is what it appears to be as his arguments are not supported on the literature. Arguments are very loose and not supported on the literature or on empirical evidence.

Representation of some of the cycles (in the paper) might be informative and probably correct in their own terms, however one is not sure of their connections to the problem of sustainability.

References are insufficient to support the paper and they are not complete. They are very few in numbers, in a topic that has been largely researched for over two decades.

Just an example on a related issue that may indicate to the author of the article the importance of the institutional arrangements and the technicalities involved. Policies on Energy Efficiency have been around for over two decades and progress has been limited, not because of corrupt politicians but because there are a multitude of factors that are difficult to grasp (some bounded rationality involved in society) and implement: these go from understanding efficiency opportunities (technical issues) to financial structural problems (who should assume the cost of policy implementation when these involve small businesses and the poor?). There is abundant literature that supports the above (e.g. see the Energy Policy journal, some issues in the late 80s and early 90s; check also JORS and Systems Research and Behavioral Science). For a recent, not technical, account please see the economist May 10-16th, 2008 (the elusive negawatt, pp78-80).