

Reflections on sustainability and cyber sustainability

*Can't we just do something? **Today?***

Intro

The arguments presented by Stuart (Walker) and by Bran (Knowles) are incredibly compelling. To be sustainable, cyber or otherwise, it is clear that a fresh worldview is required in order to even *understand* the nature of the problem: to get to the right questions to ask. Bran's argument points out that oftentimes an attempt to be "green" on the surface, is actually counter productive (I've done my recycling, so therefore I can buy a new laptop....?), supported by Stuart's critique of the triple bottom line (TBL) as *true* total cost accounting. The quadruple bottom line (QBL) is a great step forward, but naturally leads you to ask these questions:

- What is it "we" (within whatever system you care to talk about - local, metro, national, global) want to achieve?
- *And [within the answer to the question above] how far will "we" go to change things?*

Challenges

The challenges encompassed with this sustainability "problem" seem almost endless. *To be sustainable* seems to be the mother of all "wicked" problems. One immediate challenge is the age-old technique of ruining an argument via misdirection: in each discussion our group has had, the high level arguments tend toward confusion, and lead to smaller unrelated arguments, that, however accurate, distract from the higher level issues (and this happens with an enlightened group of people..) This reaches its logical conclusion when the discussion turns to "what does it mean to be human?" or "what is the nature of existence?" How can these discussions be framed so that this doesn't happen so readily?

More locally, problems exist around our perception of happiness. It seems that most contemporary perceptions of happiness are linked to consumption (in the west/developing nations anyway). A radical innovation that would help to mitigate this is how to make "the system" (or society) see a life that's lived sustainably, as a happy life. Some people do this, but it's rare. Also, for those that do, they're often uneducated about their practices. Can the QBL be applied for individuals? I think Stuart's quote "a holistic approach, from a knowledge economy based on what we can do, to a **wisdom** economy based on what we should do" is hinting at getting to the bottom of this, but it still begs the question: *how* to make it happen? the ideals of the QBL become very profound when applied to individuals.

Incremental vs radical

Something that really inspired me was a BBC journalist talking about the difference between incremental gains vs radical innovation. Radical innovation is inherently risky: most attempts will fail - but the *potential* is immeasurable. Incremental innovation *will* deliver benefits, but they're

usually temporary, and are inherently smaller. Figuring out how to balance these two classifications of work (or research), in order to fit the problem, is essential. Should *all* investment in incremental research be scrapped right now? Should *all* our budget for sustainability research go into radical ideas? Maybe we shouldn't bother with research at all, and just go for broke on a whacky idea!

Solutions?

As hinted at when calculating the relative gains of incremental innovation next to radical innovation, the solutions to these problems may seem unlikely, or indeed hard to deliver, but I believe there are, broadly, two approaches to delivering solutions here:

(1) we can do nothing, and a change in worldview will emerge naturally over time, driven by environmental factors. We see this happening already, the influence of climate change is unignorable. This is the "do nothing" (or *only* make small incremental changes) approach. The world will be fine, it will regular itself eventually, and in the meantime we can continue our "modern success". The reason why this is an unattractive option, is that it seems we've arrived in the vicinity of a tipping point: most people are aware that if nothing is done *right now* then irreversible damage will have been done to our planet (as we know it).

Or, (2) we can accept our trajectory, but in the meantime attempt to deliver a combination of incremental gains and radical gains. This itself I think would involve a two pronged, targeted research approach. We know well how to do incremental research, *but*, the problems outlined by Bran need to be taken into account (the greenwash problem, the problem of making it look like sustainability is the key, when consumption is actually what is going on) - something needs to happen to combat that. Only once that is addressed with incremental gains be *actual* gains. The other prong is to put faith into radical ideas. How to make radical innovation work? Research suggests that it emerges in cross/inter disciplinary research settings, so we're in the right place. But maybe we need to be even more radical...

This still doesn't address the issue of what these radical innovations will be. Part of the problem seems to be that a lot of the radical ideas appear so wacky that nobody takes them seriously. But is this a problem of the ideas, or a problem of the perception, and the establishment? I posit that we're so ingrained in our thinking that we're not willing to take a risk. The problem with how ingrained consumerism is with our existence (that even attempts at being sustainable, are actually just extensions of our tendency to produce/buy more stuff) is akin to how ingrained incremental, proven, research is with the way we acquire new knowledge. We need to step it up a bit..

How about state backed micro-markets? How about a 3D printed world? How about teaching the value of being radical in schools today? How about a global ubicomp network that can house all of our data in a cloud that belongs to all of us and is energy efficient? How about deciding that we want to live in a Ghost-in-the-shell/Matrix style virtual world? How about the semantic web that

encodes every web transaction with information about how sustainable it is? How about forcing all the companies (and individuals, and education establishments) to file total cost accounts legally? How about changing the term that we elect governments for to 20 years? How rationing meat consumption, internet access, or air travel? How about making a big sacrifice for the sake of the future, or alternatively, how about shouting loud and proud that you are *not* willing to do any of these things?

How about putting all of those things to a national (or, screw it, global!) vote tomorrow? If it comes back “No”, then at least we’ve asked the question.

It is frustrating that there’s a lack of action.

I don’t know exactly what I’m prepared to change for sustainability’s sake, but I’m very aware that muddling through and pretending *the effort I have made is enough* and supposing that technology, and everyone else, will deal with it is not providing me with any satisfaction. I think there are a lot of people like me that are aware what’s happening at the moment isn’t great, are prepared to get onboard if there’s something that *is* great: but right now there aren’t any worthy options to get behind!