Sustainable Development Goals: Creating more actionable process outcomes.

I recently had the opportunity to listen and provide reactions to some important work being done by the UN's Friends of Governance for Sustainable Development (UNFGSD) on the Sustainable Development Goals[1] in preparation for progress reports and subsequent meetings. My specific task was to react to presentations on ***"what issues for global sustainability not currently addressed in SDG work might emerge from technological change?"***

Ways to frame investigations of this question were well addressed by foresight[2] and scenario planning[3] process examples from the Canadian government and the UK's School of International Futures. Their papers are found on the Friends of Governance for Sustainable Development website: http://friendsofgovernance.org

On the chance they are of interest, I am here providing thoughts and suggestions on some broad topics:

- Foresight and scenario planning process' power and limitations when applied to the SDGs
- Likely barriers to effective, actionable and meaningful outcomes in the SDG process and what might be done to make the process more effective in addressing our shared futures, and
- Some thoughts by people much smarter and wiser than me on the relationships between scientific knowledge and the choice to act differently.

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[1] https://sustainabledevelopment.un.org

[2] Processes intended to improve the ability to predict or the action of predicting what will happen or be needed in the future

[3] Scenario planning may involve aspects of systems thinking, specifically the recognition that many factors may combine in complex ways to create sometime surprising futures (due to non-linear feedback loops). The method also allows the inclusion of factors that are difficult to formalize, such as novel insights about the future, deep shifts in values, unprecedented regulations or inventions. - Wikipedia

Tech Innovation and the future.

There are, every day and everywhere, large "bets" being placed on the value of innovation in energy, synthetic chemistry, medicine, robotics, information technology, communications, new forms of currency and artificial intelligence. In some cases, the innovations are following demonstrated need and how the power of information can solve existent problems. In other cases, the technology is being deployed to shape consumer expectations and demand as the combination of venture capital and technologists create solutions to problems that we didn't know we had. In almost every instance, the innovators are not accountable for the largely unpredictable ripple effects of the innovation.

In farming, for instance, the multitude of innovations in genetic engineering for disease resistance, nutrient effectiveness, water management, GPS-enabled equipment and supply chains with electric unpiloted electric vehicles suggests that increasing populations can be well-nourished. These innovations are largely silent on economic dislocation for those whose lives have been associated with rural vocations.

The "Law of Unintended Consequences"[4] applies to every innovation as well as the policy framework that intends to meter its effects. These consequences may be positive, negative or merely neutral, but they veer off from the intent of the initial action.

It may be the case that the SDGs will be best served not by trying to anticipate innovation but by tracking the consequence of the innovation through the 17 goals so that the negative consequences can be mitigated before undesirable futures are too deeply embedded.

Advances in Artificial Intelligence (AI) may provide ways to more quickly recognize both the positive and negative consequences of innovation. While there may be good reasons to fear the invasion of privacy and socially manipulative uses to which AI could be put, there is also amazingly powerful good that could come from the tool's ability to do fast data mining to identify causal relationships so that investment of scarce resources can prioritized at the triggers of problem cascades.

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[4] Robert K. Merton in 1936. *The Unanticipated Consequences of Purposive Social Action*, which covers five different ways that actions, particularly those taken on a large scale as by governments, may have unexpected consequences.

"In a study published in Nature on July 3, researchers from the Lawrence Berkeley National Laboratory used an algorithm called *Word2Vec* sift through scientific papers for connections humans had missed." [5] Imagine having such an algorithm created to sift through all the research being compiled on discrete research investigations to ferret out connections that humans might miss. This would go a long way toward answering the yet unanswered questions about "how does this relate to that" and "if we were to solve this complex problem that transcends so many issues, where would be best start?" Is there an academic/industry partner out there to create such a tool?

A key question, perhaps <u>the</u> key question for the SDGs is, given that there are dependent relationships within and across each of the 17 goal areas, what ought to be the priorities. There are groups looking at relationships but, so far, not at primacy. It is often said in management literature that *"if you have more than three priorities you really don't have any priorities."* For a variety of reasons related to the robust democracy of constituents for every part of every goal, it is likely that the effective of the knowledge being created will be diffuse rather than focused making the process less effective than it otherwise might be. If the question of the SDGs was "Given what we know today about the present and future trends, what three problems would we try to solve first?" then, perhaps, scenario planning processes could be effective.

Foresight/Scenario Planning[6]

I should begin by saying that there remains within the literature substantial debates over the utility of scenario planning processes.[7] It would seem that, as often the case, they will work if the people involved want them to.

In general, and everything about this is much more complicated than I represent here. These processes have to do with:

- **Acknowledgment** that *planning for the present is a fool's choice* no matter how comforting it feels. Change is the status quo. It is time that makes the present seem permanent

[5] *https://www.vice.com/en_us/article/neagpb/ai-trained-on-old-scientific-papers-makes-discoveries-humans-missed*

[6] I will use the more generic term scenario planning

[7] https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/overcoming-obstacles-to-effective-scenario-planning

- **Acceptance** that though *the future is somewhat constrained by the past, it is mostly indeterminant, random and uncertain* but that is no excuse to not prepare for what is most likely to happen when weighted probabilities can be assigned.
- **Recognition** that no change of substance happens independently. Each change bumps up against other things within its own system and adjacent systems and changes them to some degree. *Single system thinking will never manage change effectively.*
- **Scanning knowledge horizons** to determine when the *relevant unknowable emerges as knowable so that action can be taken* to manage downside risk and optimize upside outcomes is the most cost effective and socially responsible way to address the future.
- Based upon an assessment of likely consequences of change for key determinants of future, **preposition adaptation strategies that the organization/government/population will recognize as technically and politically acceptable.**

In military intelligence, scenario planning has to do with protecting national security by anticipating new threats, preparing to overcome those threats, and hopefully trying take steps to diminish the threat or maximize opportunities. In business it has largely to do with managing relatively narrow-band risk related to protecting shareholder and stakeholder value. The SDG's, concerned as they are with manageable global and distributed human existential risks[8] within and across natural and human-created systems, will certainly test the capacity of any scenario planning process.

Changing weather complicates national defense planning and drives up capital costs. Within national governments and treaty organizations such as NATO national defense and mutual aid planning incorporates many SDG topical areas into its threat assessments. Organizations such as the US's CIA *Center for Climate & Security*[9] are engaged in research like that being pursued within the SDG process but focused on their own priorities. The US Navy along with General Services Administration are addressing emergent sea level and storm surge risks for dockside,

[8] Existential and manageable key notions not well addressed in the SDGs. i.e. probabilities can be assigned to cataclysmic asteroid strikes that make human continuance improbable. Because we are currently ill equipped to intervene, they are both existential and not manageable per se and not discussed as a sustainability issue except by a few. Substantial seismic events and associated tidal waves are also beyond our control. But we can predict them within reason and take steps to avoid the worst outcomes through land use and design decisions, so they are in my terms manageable. Not managing makes them existential threats.

[9] https://climateandsecurity.org/

warehousing, fueling and base housing, etc. The increased power of ocean storms is a great problem for national defense aviation.

In the business and organizational development world the most notable example of effective foresight was done by Royal Dutch Schell in the 1970's. The structure of the effort was based upon methodologies the Rand Corporate developed for the Department of Defense. Again, very simplistically, Shell was trying to answer the question "With regard to resource supply and demand, and societal variables, how probable is it that a specific thing that affects us might occur and what plans should we put in place for probable events of greatest consequence?"

Shell's leadership invested in prepositioning plans and strategies to address potential possible futures because preparation provided first mover advantage when the future became real. The costs of doing plans for something that didn't occur paled in comparison to the financial benefits of having strategies in place to address new realities. Getting agreement among their leadership and the various constituencies within the corporation to spend resources preparing for unknowable possibilities cannot have been free of conflict. Given the largely unified corporate culture and shared objectives of the Shell enterprise however, getting agreement on need, process and investment in managing outcomes must have been easy compared trying to do something within the UN system.

Shell and other private sector scenario planning examples makes little sense for the SDGs. National Defense examples don't work either. In both of those types of examples the scope of the considerations is narrow, authority to assign priorities exist, and decisions on investment are not diffused. To put it another way, scenario planning works within defense and business because within each is someone with the power to finally decide where to focus when making hard choices. This is one of the things that so confuses the private sector about the UN – they know who the leaders are but the decision-makers may be less easy to find.

The SDG Question

Unlike the relative narrow questions considered in typical scenario planning, the ***SDGs are attempting to take on a combined and distributed existential problem. How ought human societies and the subsystems that enable and constrain their well-being change if the species to survive in conditions better than one can reasonably predict today?***

Un-asked, but underpinning the enormity of the question, is ***…And, in this change, who will be the relative winners and losers?*** While it is possible for everyone to be better off it seems impossible that everyone will be equally well off. As I once heard (can't remember where) equity has to do with distribution. Equality has to do with getting fair access to a game where

most of the winnings have already been taken off the table. For the SDGs to be effective as a framework for understanding the present and constructively reacting to conceivable possible futures that create more just human and economic systems they need to be understood as political and moral issues.

Because the United Nations is an association of national interests and communities of interest, if the SDGs are to be actionable then people will need to authorize and insist that their institutions act in different ways than they currently do. Majorities of interests will need to see themselves as being well served through the changes necessary to reduce the risk that human society will not fair well in the currently likely futures. And, current "winners" in the global game will need to see themselves as continued winners in futures even where benefits are more equitably distributed.

Constituency maps based in the battle over the primacy of pronouns will need to be reweighted. The current "I" vs. "They" structure of most societies (I am harmed, they are the cause, they should change) needs to better empower "We" pronoun, as in "if we can't work together to solve the most important of our existential threats, even if it is not the threat in which my constituency has the greatest interest, then we, collectively, are screwed."

I think the SDG process needs to rethink itself. None of the work would need to change. The research and science are critical. But, for the SDG to have real, actionable meaning for human society it needs to be a political/moral process with scientific/technical attributes rather than a scientific/technical process with the potential for political consequence.

A Framework for Informing Political Choice

In 1620 the English natural scientist and philosopher Francis Bacon[10], considered by many the founder of empiricism and the scientific method, published his *Novum Organum: True Directions Concerning the Interpretation of Nature*. In Part 1 he sets out a series of aphorisms that describe why, in his view, we are so blind to reality. Aphorism 49 is particularly relevant to our time as we move further toward ***I vs They*** conflicts in which there is no room for doubt and all that matter are subjective certainties. In it he says the following:

*"The human understanding is no dry light, but receives an infusion from the will and affections; whence proceed sciences which may be called "sciences as one would." **For what a man had rather were true he more readily believes** (emphasis added). Therefore he rejects difficult things*

[10] Yes, another old white guy

from impatience of research; sober things, because they narrow hope; the deeper things of nature, from superstition; the light of experience, from arrogance and pride, lest his mind should seem to be occupied with things mean and transitory; things not commonly believed, out of deference to the opinion of the vulgar. Numberless in short are the ways, and sometimes imperceptible, in which the affections colour and infect the understanding."

In other words, interpretations of facts are always shaped by emotions and prejudices and one should assume that no matter how rigorous the peer reviewed science of the SDG research once it is in the public domain it will be interpreted with bias. Not only the bias of others but bias within your own group as well. To not understand this is to not understand the amount of anger and mistrust about the need to rethink how we should proceed as a human society. Any group, be they environmental, political, social, economic, religious otherwise, that sanctifies its own interpretation of truth regarding human causation in dangerous changes in natural systems is playing the "I vs They" game.

As the Nobel Laureate Physicist said *"It is imperative in science to doubt; it is absolutely necessary, for progress in science, to have uncertainty as a fundamental part of your inner nature. To make progress in understanding, we must remain modest and allow that we do not know. Nothing is certain or proved beyond all doubt. You investigate for curiosity, because it is unknown, not because you know the answer. And as you develop more information in the sciences, it is not that you are finding out the truth, but that you are finding out that this or that is more or less likely."11*

For me, this means that that any SDG process must have as a fundamental attribute the ability to test ideas and interventions, admit error and make changes even if the need to change is embarrassing. In financial terms it is far less expensive to admit mistakes and change than it is to continue doing things that clearly don't work even though the political cost can be high.

Another issue needing to be addressed in the SDG process (and life in general) is referred to by Richard Barnard as a problem of privilege. More pervasive that financial or status privilege, this has to do with the belief that it is their right to decide what is to be spoken about, how the issue is to be framed. One key discussion is "what won't we talk about." Lest one think this is an issue only for entitled conservatives and political elite, every powerful interest group

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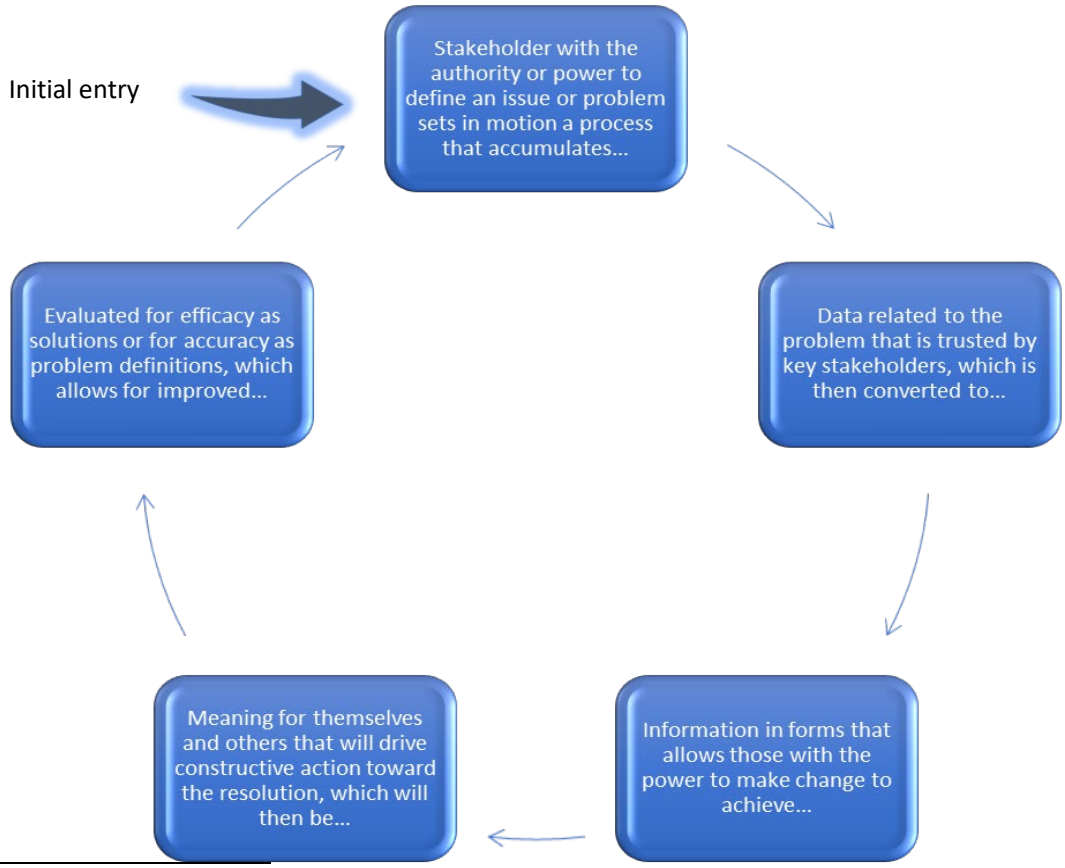
[11] From one of his John Danz lectures collected in the book The Meaning of It All.

engaged in the SDG process has its own individuals and organizations that reserve the privilege to define what is to be talked about and how the terms of the conversations are to be defined. It is necessary that the question "who decided that this isn't something to talk about?"

One way to look at the look at the political/moral translation of the SDGs is through a process that links queries to data to information to meaning to action to evaluation and so on. I learned to use this approach when I was an urban planning director.

In the City of Seattle planning struggles I regularly frustrated because I was not smart enough to see that no matter how much I wanted to tell the public what data ought to mean to them and what they ought to do in response. Being too smart for me, they reserved the right to make their own decisions. And, being as pluralistic as anywhere else, their meanings were highly diffused and subjective. Eventually we worked with them to use data that they trusted as well as our own so they could arrive at their own shared meanings. Only then were we able to get a majority to act in the same direction.[12]



[12] At least two Ph.D. thesis have been written about this but they are pretty dry.