

Introduction

Perhaps the following is best read, speaking in Dave Snowden¹'s term, as a (hopefully) safe-fail experiment of sense-making of the multiplicity of contributions on what it takes to become strategic in the face of complexity.

The key argument discussed in the following relates to an approach of situational and shared sense-making in dealing with complexity. One of the premises of this argument is that it is important to consult a range of options on dealing with (manifestations of) complexity.

Complexity – the basic idea

What is complexity? There is no such phenomenon as 'complexity'. We may say that complexity is in the eye (mind) of the beholder. It is a human experience that relates to a process of making sense of the world in which we live. As far as we know, trees and animals do not think about themselves, or even about the world around them, and therefore probably never consider the world to be complex, because they cannot consider at all. Humans, however, try to understand, make sense, weigh their actions based on (realized) available options and more. We may therefore tentatively conclude that, above all, *we* are complex, and we tend to project our own complexity on the world around us. Strictly speaking, things are not inherently complex. We put that label on it, or the label of simple, of complicated or of chaos. Or else, we consider things to be complex, because of our limited ability to comprehend a situation or fail to have aspired control over it. So maybe complexity actually starts with our limitations, leading us to call a situation/phenomenon complex, then leading us to a desire to understand the complexity by studying it and trying to find patterns, bringing order in our own minds to be able to cope with the challenge of experienced complexity.

Complexity in a multiplicity of manifestations

Can we define what we mean by complexity? What makes us call a situation complex or even chaos? I would argue that this is a question that cannot be answered in general. Every situation/phenomenon has its own characteristics and complexity will be found in a different constellation of factors every time. Therefore, there cannot be one ultimate way of being strategic in the face of complexity. Moreover, it is questionable when authors discard past approaches to dealing with complexity while advertising their own approach. I would tend to take a more pragmatic approach, which is to realize that the very nature and diversity of manifestations of complexity ask for considering a range of possible entry points. For example, whatever happens in the future, scenario thinking cannot be done away with. We will probably become more aware of its limitations. But the fact that an approach or tool turns out to be limited, or even partly based on wrong assumptions, does not mean we will need to discard the idea altogether. It is the typical 'throwing out the baby with the bath water' situation.

We are getting closer now to the idea of putting a rather comprehensive list with reading material out. A strictly evolutionary approach to science and critical thinking will tend to say that we are basically getting smarter and for that sake, the latest contributions to e.g.

¹ See www.cognitive-edge.com

complexity thinking will be the most advanced. Dave Snowden seems to be among those who argue in this way when he uses a graph that shows his approach to sense-making ahead of his predecessors' approaches². Concerning our understanding of the world around us in terms of physics, mathematics, etc., we may indeed say that there is a case of progressive understanding³.

However, when we consider social organization, social systems, social innovation, social change and more that relates to society, we may doubt whether there has been a clear progression in understanding. It is not uncommon for people to refer back to wisdom literature that is two thousand years old and older, to find it accurate and relevant in these days. And even if someone would insist that our understanding about social systems has evolutionarily progressed, the question is whether this fundamentally altered human interaction *in practice*. In other words, is cognition making all the difference, or is (much) more involved in the quest for 'civilization'. We may be on the 'cognitive edge', but is that what matters most? I will leave this as an open question for the moment.

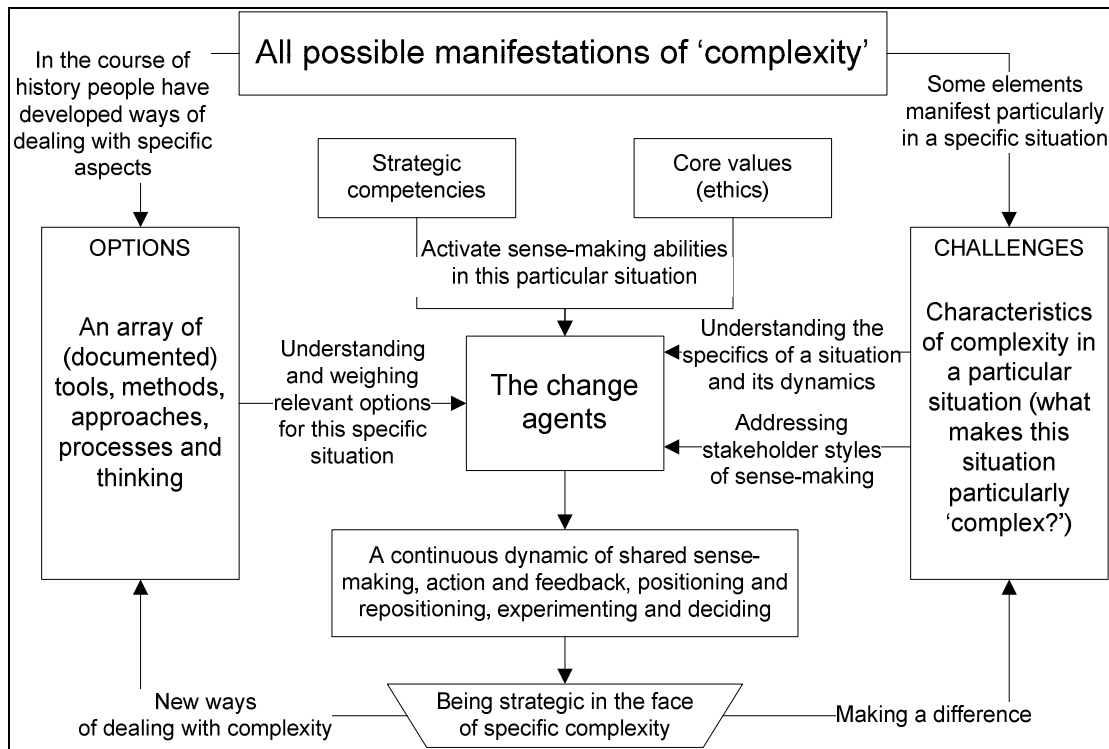
To further complicate things, epistemological questions raise the issue as to differences in cognition and sense-making. Someone, or even a group of people may think they are on 'the cognitive edge', but we can ask '*whose* cognitive edge?'. Or, someone may say his/her views are coherent and those of others are not. Again the question may be asked, 'coherent in *whose* experience/understanding?'. We have different ways of understanding coherence, and different ways of making sense of complexity. Since 'modesty is the mother of all virtue', we can be absolutely convinced of being on the cognitive edge, but we will need to respect other people's integrity in their own sense-making process. Dialogue, debate, and discussion is important, even trying to persuade others to follow your line of argument and of sense-making is fine, but ridiculing other people's styles of sense-making or doing worse than that, will only further induce complexity.

Therefore, I would argue for a situational approach to sense-making in complex situations. Situational then refers to the acknowledgement that strategies for dealing with complexity need to be developed in view of the specifics of a situation. Those specifics include the particular way in which key actors in that situation make sense of the world as they experience it. Hence the need for a process of *shared* sense-making aimed at arriving at a shared understanding (that which overlaps in terms of making sense). Facilitating such processes is key in multi-stakeholder dialogues. Different stakeholders will be helped by different available sense-making options. Consequently, there is a need for consulting different types of approaches in catering to different styles of sense-making.

The following picture summarizes this proposition of situational sense-making in complex situations. It is not meant to be perfect as we know "all models are wrong, but some are helpful". So please do not read too much into the figure. Because of using boxes and arrows, it may appear to be a mechanical approach, which it is not intended to reflect. It rather tries to put on the table what may be core areas to consider when trying to be strategic in the face of complexity in a practical way.

² Slide 8 in <http://www.cognitive-edge.com/ceresources/presentations/Wageningen.pdf>

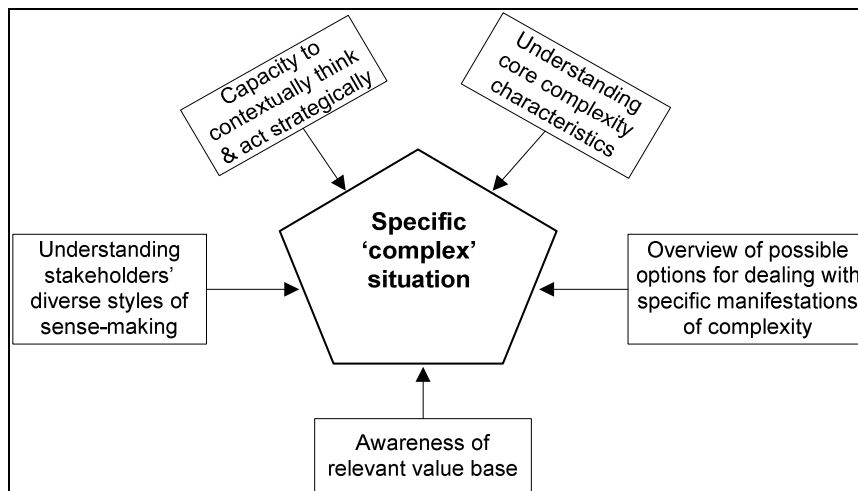
³ Though I would then add that, unfortunately, the more we progress in understanding, the more we also realize what we do not understand. Nanotechnology was not a (complexity) concern fifty years ago, simply because we were not even aware of things at that level of detail. For that reason, complexity in the eyes of our ancestors may have been actually less than what we experience now. In other words, increasing knowledge often enhances experienced complexity.



This picture brings out five main categories of opportunities for strengthening competences/capacities of change agents to allow them to facilitate processes of shared sense-making and strategizing in the face of complexity:

1. Activate strategic competencies and a value-base to support sense-making processes;
2. Make sense of what spells complexity in a particular situation (the challenges);
3. Address key stakeholders' (differences in) sense-making styles;
4. Make sense of various options as regards their ability to address specific complexity issues;
5. Adaptively determine what it takes to be strategic in the face of the specifics of complexity in a particular situation.

In summary, when approaching a specific situation in which one intends to make a difference, the following elements can be considered:



In this approach to dealing with complexity, we can build on so much that is already available, rather than trying to strive for a perfect (new) approach that would supposedly once and for all solve all complexity issues. E.g. in terms of characterizing the manifestation of complexity in a specific situation, distinguishing between 'simple', 'complicated', 'complex', 'chaos'⁴, can be helpful. In terms of sense-making styles, this is perhaps an area that requires further study. I tend to expect such differences to relate strongly to cultural, religious (in the broadest sense of the word, which includes (new) atheism), and educational backgrounds. Sense-making through e.g. scenario thinking may appeal strongly to some, but not to others. Providing a mix of sense-making⁵ methods and processes will therefore be helpful in multi-stakeholder dialogues.

The breadth of contributions on what it takes to be strategic in the face of complexity, I consider it to be cumulative understanding⁶. The challenge is to know what will help in what kind of situations for what kind of actors. Yes, there are differences in quality and scope, but I would prefer to speak in terms of limitations of certain contributions, rather than speaking of useful and useless contributions. Some contributions may only provide a small idea, which may seem insignificant to the majority of readers. But for some readers, that small idea may be just what they need in the specific situation that they encounter.

It may be interesting to explore what the focus of capacity development efforts in international cooperation is in view of the five suggested categories, as well as the extent to which integrative competences/capacities of change agents are considered.

An attempt to categorize ways of dealing with complexity⁷

In order to be able to understand the available options, we need to move away from looking at literature as dealing with complexity in general, and move to a categorization of what specific aspect of complexity in what kind of situations is being addressed in a particular approach.

When browsing lots of books and articles on the wider subject area of 'being strategic in the face of complexity', a pattern seems to emerge in terms of how various authors seek to address the quest for being strategic in complex situations.

Quite a few authors work with more than one of the following approaches (and some approaches overlap), but surprisingly many seem to be looking for a silver bullet. As mentioned before, I would suggest to take a situational approach, which means considering the characteristics of a specific situation and then see what requires the focus of attention.

In the perspective of situational sense-making in complex situations,

⁴ See Cynefin framework by Dave Snowden (www.cognitive-edge.com).

⁵ This presentation may be of interest in connection with this: <http://www.slideshare.net/peterjones/dialogue-collective-sensemaking>

⁶ In line with the quote (usually) attributed to Sir Isaac Newton: "If I have seen further, it is by standing on the shoulders of giants.". He is criticized for his (supposedly linear) worldview by some writers on complexity, but may be showing a deep insight for them in this quote.

⁷ This text is adapted from a pre-conference blog that I wrote for the The Broker (www.thebrokeronline.eu)

More fundamental approaches focus on:

- Learning to think strategically to be able to adapt and find position in unknown situations with unknown problems (including what is called adaptive or resilience thinking);
- Understanding interconnectedness, synergy and coherence (thinking in systems) to be able to comprehend complex dynamics;
- Ability of empathy, meta-cognition and other ways of looking beyond oneself and one's own perspective to arrive at shared values and purpose;
- Learning and understanding about how change (actually) happens;
- Intuition, practical wisdom, sense-making and other ways of tapping into core functions of life;
- Emergence and sense-making processes;
- Chaordic thinking and 'sensing' as alternative ways of 'getting in touch' with complex realities.

More applied approaches focus on:

- Activating scenario thinking to get a feel for the direction in which complex dynamics may go;
- Establishing simplicity – activating thinking in metaphors and stories to reduce complex issues to digestible/comprehensible proportions;
- Communicating complex matter in a clear format to establish shared understanding;
- Learning-orientated monitoring and evaluation to allow for receiving critical guidance along the way to be fed back to (adaptive) management decision making;
- The essential role of leadership and managing through basic principles.

More straightforward, practical approaches focus on:

- Creating visual representations of complex issues to create overview of and insight into what is involved in those issues and how subsets relate to each other;
- Being on top of critical information to know what needs to be considered in addressing complex issues (incl. use of 'dashboards');
- Creating an enabling environment to bring out potential for addressing complex issues;
- Algorithms, modeling and simulation techniques for creating abstract understanding into the future.

This categorization is work in progress. A next step would be to improve on the above categorization (and provide more explanation and examples) and show how different categories relate to each other. Another would be to put tags on writings on strategy & complexity in terms of the specific manifestation of complexity that is being addressed in what type of setting. The above 16 tentative categories give an indication of what these tags may look like.

We will be working on establishing such overview, but I would hope that the above contemplation will help the reader in considering for him/herself what would be relevant in the specific situation in which he/she finds him/herself. For an overview of websites, books, articles & reports directly or indirectly related to 'being strategic in the face of complexity', please check out <http://portals.wi.wur.nl/navigatingcomplexity/>.