People who are successful at facilitating transformational change have merged interpretivist social science, and complexity natural science in their thinking and practice. In this article I discuss how complexity science can help AI practitioners deepen their thinking and improve their transformational change practice.

Appreciative Inquiry practitioners face a dilemma when working with managers and clients who are not familiar with AI or other kinds of large group engagement processes: whatever change will occur has to be allowed to emerge from the process. In a world of goals, plans, strategies and quarterly reports, telling a prospective client that “we don’t know what the change will be but it will be good” does not instill a lot of confidence. Yet it is the very nature of emergence that makes AI so much more transformational than conventional diagnostic, change-management approaches. I believe that an understanding of how emergence works – being able to explain to leaders how it is their only viable response to the complex, adaptive challenges they face – not only aids an AI practitioner in securing more work, but in designing and facilitating transformational change processes.

For the past ten years Bob Marshak and I have been studying the intersection of two profound movements in social science that are influencing the practice of organization development today: post-modern philosophy, particularly social constructionism, and complexity science, particularly complex adaptive systems theory. We have labeled this Dialogic OD to group together and identify what is similar about a range of newer OD methods (Bushe and Marshak 2014; 2015). While AI has paid considerable attention to the former, there hasn’t been nearly as much attention paid to the latter. In this article I want to describe some of what I have learned from applying complexity thinking to my AI practice.

My research (Bushe, 2010; Bushe and Kassam, 2005) has found that AI leads to transformational change when it addresses or creates enough disruption to evoke self-organizing processes that are focused on what is widely desired. Self-organizing processes are channeled in useful ways by, amongst other things, increasing the richness of social networks so that like-minded and motivated people find each other and are encouraged to “make something happen”. Leaders and stakeholders pay attention to the ensuing experiments, resourcing and extending those they believe are
worth supporting. Complexity theory helps make sense of this process and provides useful insights into facilitating AI.

**Leading in a world of complexity**

As Ralph Stacey (2015) has pointed out for years, the experience we have in organizations does not fit the dominant managerial discourse that we teach, read about and see in presentations by consultants. Stacey’s inquiries began when, after a career in government, he wondered why so much time and effort was put into goal-setting and strategic plans that never resulted in much because what actually happened was so affected by circumstances and events outside anyone’s control. As shown in Table 1, the world of structure and control so prevalent in managerial discourse does not reflect the ambiguity, complexity and unpredictability of managerial life. If we were to take that experience listed in the right column seriously – as simply the way things are rather than a dirty secret leaders try to hide by assuming that if they “had their act together” their organizational experience would be more like the left column of Table 1 – how would we lead change and manage organizations?

<table>
<thead>
<tr>
<th>We talk about:</th>
<th>But what we actually experience is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizations in the abstract as systems, as “things”, subject to impersonal forces, for example, “drivers” of change</td>
<td>Organizations are conversations and what happens is influenced by who talks with whom, when and how</td>
</tr>
<tr>
<td>Independent, autonomous, rational individuals making choices and taking action</td>
<td>Our interdependence, and how we constrain and enable each other and can’t get much done without the consent of others</td>
</tr>
<tr>
<td>Wise, heroic leaders whose vision and acumen steer their organizations to success</td>
<td>That no one can control what everyone else is choosing and doing, and leaders often feel powerless to influence their organizations</td>
</tr>
<tr>
<td>Rational, analytical ways of making decisions, using big data and increasingly automated decision processes</td>
<td>Far from being purely rational, people are emotional and often unconsciously driven by the anxieties aroused by organizational life</td>
</tr>
<tr>
<td>Generalizable tools and techniques of management and leadership in the belief that they will improve organization</td>
<td>Situations so uncertain and the local contingencies so important that any generic tools we have are of very limited value</td>
</tr>
<tr>
<td>Results coming from the choices, intentions and strategies made by leaders and teams</td>
<td>Results emerging from the interplay of all the choices, intentions and strategies of all the stakeholders in both intended and unintended ways</td>
</tr>
<tr>
<td>The world being uncertain and ambiguous, but then proceeding to act, and demand others act, as if there was certainty and predictability, as if we can control large organizations</td>
<td>Sometimes we are surprised and sometimes we are not; we have very little control and we can never be certain about what will happen next</td>
</tr>
</tbody>
</table>

Table 1: The Difference between the Dominant Managerial Discourse and What Managers Actually Experience

Adapted from Stacey, 2015
Ron Heifetz (1978; Heifetz and Linsky, 2002) points in useful directions with his distinction between adaptive challenges and technical problems. While technical problems can be analyzed, understood, and have solutions applied to them, adaptive challenges can be ambiguous and complex. Often, no one really knows the right answer. Often, the solution to technical problems are within the authority of one leader to implement, while solutions to adaptive problems will require the engagement of stakeholders outside the authority of any one leader. Solutions to technical problems can be devised by those with expertise and then implemented through the chain of command; adaptive challenges can only be solved through the active participation of stakeholders, who must adapt to the challenge.

In a world of complexity, no one understands the cause–effect relationships between all the variables that will affect any corporate strategy – except in retrospect. One consequence is that attempts to manage adaptive challenges using conventional “set a vision–plan–execute” change methods lead to unanticipated consequences and the common experience of change-management failure. Snowden and Boone (2007) argue that the most effective way to make decisions in complex situations is to first try “probes” – small, fail-safe experiments to see what happens. From their study of corporations that thrived in complexity, Collins and Hansen (2011) call this “fire bullets, than cannonballs”. This appears to be the most viable, emergent strategy for change – stimulate the stakeholders affected by the adaptive challenge to produce probes, launch as many as possible, pay attention to what happens and follow up on those that show the most promise of success.

The necessity of disruption

In the natural world, without leaders or plans, what appears random resolves into pattern. Even strings of numbers produced from non-linear equations resolve into patterns. Organization emerges. Complex adaptive systems theory (Kauffman, 1995) is based on the observation that, under conditions that appear chaotic, systems will self-organize. When the social order (the pattern of social relations revealed in how people communicate, how people are included/excluded, how decisions are made, how conflict is resolved, etc.) is no longer adequate to the situation or coherent to its members, and there is little chance of going back to the way things were, a disruption has occurred. Disruptions can be planned or unplanned. They are always non-linear and, when planned, typically produce unintended consequences, some of which can be happy as well as unhappy. With the disruptions to current patterns of organizing, transformation is more likely to take place. (Holman, 2010; Stacey, 2005).

Dialogic OD practitioners are sometimes asked to help once a disruption has occurred; sometimes we are asked to create enough disruption for transformation to take place. For example, bringing appreciation into an organization that has operated mainly from a deficit mindset can create a great deal of disruption. Without disruption, emergent change is not possible, but in the dominant managerial discourse, disruption is something to avoid. I think sometimes managers hope that Appreciative Inquiry will help them change without disruption especially if
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they assume disruption will be a frightening, anxiety-laden experience. But AI has shown that it is possible for disruption to be an energizing, inspiring experience. Transformational change requires leaders to embrace disruption and understand it as a necessary attribute of transformational change (Holman, 2010; 2015).

Preconditions for emergent reorganization

Working with emergence requires that we understand the preconditions for systems to reorganize themselves to adapt to new levels of complexity after disruption. Owen has refined Kauffman’s (1995) theory of complex adaptive systems to identify six that he lists as essential preconditions for successful use of Open Space Technology. They are:

1. A relatively safe, nutrient environment,
2. Diversity of elements,
3. Complexity of connections,
4. Search for fitness,
5. Sparse prior connections and
6. Being at the edge of chaos.

(Owen, 2008)

If AI practitioners are going to work with emergence and self-organizing processes, they need to pay attention to this list because these are the pre-conditions for emergent change in organizations (Pascale, Millemann and Gioja, 2000). I think most would already be thinking about conditions one to three, but not necessarily the latter three. The search for fitness means that stakeholders experience a need to adapt and a sense of urgency about it. There is a discourse about AI not being concerned with problems, but it may be that AI can only be transformational when it addresses widely acknowledged problems that people are really concerned about. However, it does so through generativity rather than problem-solving (Bushe, 2010).

Sparse prior connections means that everything is not already organized – that there is, in fact, an element of disorganization – otherwise there is no space for new organization to emerge. Owen (2008) emphasizes the need for conflict amongst stakeholders in an Open Space event for anything transformational to emerge. How do AI practitioners think about the place of conflict in their change process? It may be that transformational change is not possible without conflicting perspectives bumping up against each other, leading to something new.

Systems do not go through a transformational process and reorganize at a new level of complexity without being close to the edge of chaos (but not over the edge into randomness). Owen lists a number of preconditions for successful Open Space, in addition to conflict, that ensure the change process brings stakeholders to that edge:
The design of the inquiry has to go beyond simply focusing people on the “best of” to focus them on what is truly meaningful.

diversity, urgency and passion. The importance of passion may not be emphasized enough in the AI literature. Sometimes describing and sharing “best of” stories can lead to contentment and complacency – a place where people feel very positive but, at best, only incremental change will result (Bushe, 2010). The design of the inquiry has to go beyond simply focusing people on the “best of” to focus them on what is truly meaningful, even if this evokes “negative feelings”, to bring people’s passion into the mix (Bushe, 2013). Without diversity, urgency and passion, there is much less chance an AI will result in much change.

Differentiation before integration

Part of what creates a close-to-chaos space in a planned change process like AI is the emphasis on increasing the diversity of participants and perspectives in the change process. AI practitioners, like all Dialogic OD practitioners, tend to appreciate the need to give voice to the divergent views, narratives and ideas that are already in the system, though often muted. Emergent change theory argues for accentuating those differences before any attempt to find common cause is made. For transformational changes to come from an appreciative inquiry, new ideas and networks need to emerge. According to Holman (2013, 2015), increased differentiation amongst participants, after disruption (or to create disruption), is critical for both new networks and new ideas to surface. The tendency amongst leaders (and perhaps consultants) is to seek coherence and integration too quickly, shutting down opportunities for truly transformational ideas and networks to be created.

For example, the purpose of the Dream phase in AI is to surface values and aspirations that enliven the system. I used to think the purpose was to illustrate the similarities in what people dream – a way to find common ground and the will to collaborate. I now believe that a transformative Dream phase will increase the opportunities for differentiation and divergence. I still think discovering we all want the same things can be useful, and perhaps at times necessary, but I now think a well designed Dream phase will help individuals to say what they really feel and want. A generative Dream phase will encourage people to stand for what is most dear and deeply held, which will have the effect of increasing the differentiation amongst participants. I think it is through the experience of many voices speaking to what they individually really care about, being heard and not being shamed for their differences, that real community is built.

There is a natural tendency to want to avoid complexity; sometimes a fear that if we surface just how confusing, conflicted and complicated the situation really is, we’ll be too overwhelmed. But it may be that only in becoming comfortable exploring the real complexity of what is, that more complex, adaptive self-organization can emerge (Storch, 2015).

Improvisation

As I have already described, a number of researchers studying the most effective way to make decisions and implement change when dealing with complex adaptive challenges suggest creating “probes” or “fire bullets” – that is, trying things out
Too often, most of the attention and effort goes into planning a Summit, and too little into what will happen after a Summit. This suggests the Design process in AI should be geared toward encouraging as many micro-innovations as possible, without leaders or groups deciding which to support before they are tried out. The Destiny phase then becomes a process of paying attention and learning from all those attempts, resourcing and supporting the ones that have the desired results. Roehrig, Schwendenwein and Bushe (2015) emphasize that this emergent approach to change needs to be planned for right from the beginning of the change process.

Too often, most of the attention and effort goes into planning a Summit, and too little into what will happen after a Summit. Yet organizational leaders may play a more significant role in the overall success of a change effort after a Summit than during it, and they need to be coached on it. Processes for tracking all the innovations need to be put in place and processes for learning from each of the probes created. It is essential that people are expected to put effort into trying what they have proposed, but also that they are not held accountable for succeeding. The assumption has to be that many of the initiatives will not succeed, and that useful learning will come from failure. Important learning needs to be celebrated and disseminated. If people feel that they have to succeed, many fewer will try, especially the more innovative and risky ideas, and more effort will be put into covering up failure than learning from it.

Ideas that show promise will need to be resourced and cultivated, which often requires leaders to have slack funds already budgeted for the “emergent unknown” – something that should be in place before a Summit is held. Leaders will also need to manage the integration of those innovations they want to keep and build into the organization. Sometimes, these will challenge and require commensurate changes in other parts or processes in the organization – one of the reasons it is so important to pay attention to ensuring that the power network of the organization is at least minimally engaged in and understands the purpose of the AI effort right from the start.

While emergence does rely on the improvisational actions of motivated individuals and groups and the natural self-organizing properties of social systems, to adapt to complex challenges, it still requires leader effort. However, this effort is focused less on goal-setting and decision-making, and more on creating the conditions for good ideas and new, adaptive practices to be recognized and integrated into the organization.

**Conclusion**

Thinking about the important place of disruption, emergence and self-organization in “planned” transformational change processes will, I think, help AI practitioners design and facilitate more powerful change processes. It will help us think in more innovative ways about how to enter and contract as consultants when no one knows what the change will actually be (Averbuch, 2015). It will inform how we think about the kinds of “containers” that are most useful for supporting emergent conversations and emergent actions (Corrigan, 2015; Storch, 2015). It may help us think about and see multi-party stakeholder inquiries in different ways (Gordezsky, 2015) and it will
‘It all began with appreciation – appreciation of others just as they are – which then seemed to move inexorably along a spectrum from respect, to trust, to hope, to some real sense of shared intimacy...’ Harrison Owen

certainly change, in significant ways, how we think about the role of the consultant in the day-to-day interactions that take place in a client system (Goppelt and Ray, 2015).

Ten years ago, in this journal, Harrison Owen (2004, p. 5) reflected on the importance of appreciation for self-organizing processes. Let’s give him have the last word:

Perhaps it is flawed analysis or just wishful thinking, but every time I have experienced community of the sort described above in an Open Space Event, or in the open space of our lives, it all began with appreciation – appreciation of others just as they are – which then seemed to move inexorably along a spectrum from respect, to trust, to hope, to some real sense of shared intimacy...There is a continuing mystery surrounding the manifestation of appreciation in open space, for it seems to happen all by itself. The facilitator of the event rarely spends more than 15 minutes starting it going, and then never intervenes in any of the multiple discussion groups that form. The only plausible explanation I have found for this mystery comes from all we are currently learning about self-organizing systems. ... One might conclude then, that the phenomenon of appreciation is actually a natural concomitant to the ongoing process of self-organization. And to really go out on a limb – if it turns out, as many scientists would suggest, that the Cosmos itself is the product of self-organization, perhaps the appreciative mode is deeply written into the process of cosmic evolution. Far out to be sure, but I find it a pleasant thought.

References


