

COMPARATIVE STUDY OF METHODS – Part Four

CYNEFIN

We are comparing LVT with eight methods of diverse characters. In doing so, we are implying comparisons between the methods themselves. In the earlier parts of this study, we showed the 'matrix' below with descriptions of its axes attached. Here, these descriptions have been removed. It is far better to have the methods speak for themselves.

SYSTEMATICS	DIALOGUE	SOCIAL DREAMING
TRIZ	LVT	CONSTELLATIONS
GOLDRATT	DEMOCS	CYNEFIN

Except for LVT, we are following the sequence shown here, working our way up through the matrix. We started with Goldratt's Theory of Constraints and will end with Gordon Lawrence's Social Dreaming Matrix. This month is the turn of Cynefin, where we will find work with 'world views' only implied in DEMOCS; that there are quite different ways of seeing reality.

7	8	9
4	5	6
1	2	3

The story is unfolding!

CYNEFIN

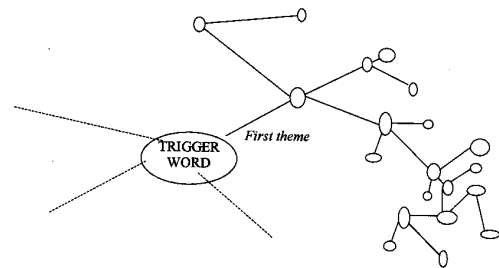
Cynefin is a Welsh word only roughly to be translated as 'place'. It is used by David Snowden and associates to signify *social complexity* in general and *contextual complexity* in particular. The Cynefin organisation is interested in the complexity that eludes order and prediction and represents an attempt to understand management issues on the basis of new emergent sciences of complexity.

Cynefin is concerned with how groups of people within organizations can come to articulate their experience and map it out in ways that can help them better understand what is emergent in their world. *Articulation, mapping and understanding* are generic common sense terms for basic operations which have been spelled out in various ways in the method of LVT.

This comparative study deals with two aspects of Cynefin as documented in their web site <http://www.cynefin.net/kbase.php> under 'Mapping conversations' and 'The new dynamics of strategy: Sense-making in a complex and complicated world'.

Conversation mapping – Bruce McKenzie

Conversation mapping is used when there are several *perspectives* involved. The group associates from a trigger word or statement into an expansive divergent process that produces series of statements or comments. Links of association are drawn in as lines and the technique is basically the same as in Buzan's MindMapping. Other graphic signs can be used. No attempt should be made to organise the shape of the linkages and chains of items. After the divergent phase, the group looks for ways of grouping or bringing together elements that are scattered in the display. This stage is called *assimilation*.



McKenzie says, "The shape of the 'picture' often has as many messages as the details of the words themselves, particularly after some novel lines of connections have been made." In reference to 'new connections', he says, ". . . there is a huge advantage in making linkages across theme lines – but these should be as novel as possible, representing connections that perhaps have not been made before". There are various guidelines on what to do in assimilation, in particular to identify 'emergent issues'.

Comparison with LVT

Four main features stand out.

A most critical difference is that statements made in conversation mapping (CM) are all written on the display surface, whereas in LVT they are written on distinct surfaces of separate objects. Once written in CM the statements are fixed in relation to each other. In contrast the statements in LVT (called MMs) are free to move around in relation to each other.

In CM the sequence of association of items is preserved and mapped. In LVT, the sequence is abolished and items placed at random.

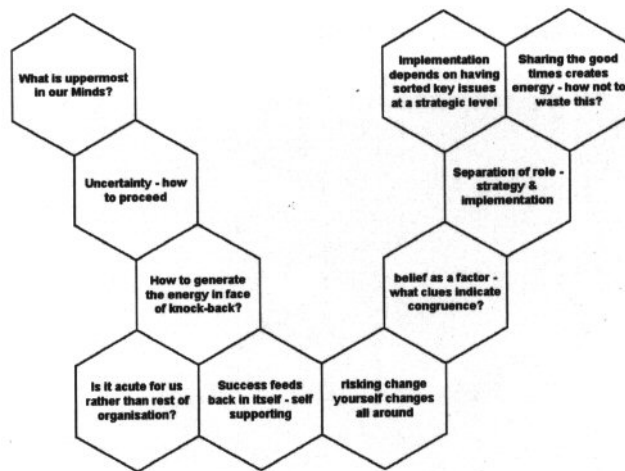
To make 'new connections' the participants in CM have to draw in connecting lines. Such new connections have their LVT equivalent in *groupings* of MMs that are made by moving mutually relevant ones together in physical space. In LVT connecting lines are seen as a distraction.

Seeing the picture as a whole shape and improving on the complex message correspond to the stage called Integrate in LVT. In CM people are advised to investigate the emergent issues. This implies understanding some underlying structure, which is made explicit in LVT.

Dialogue Mapping

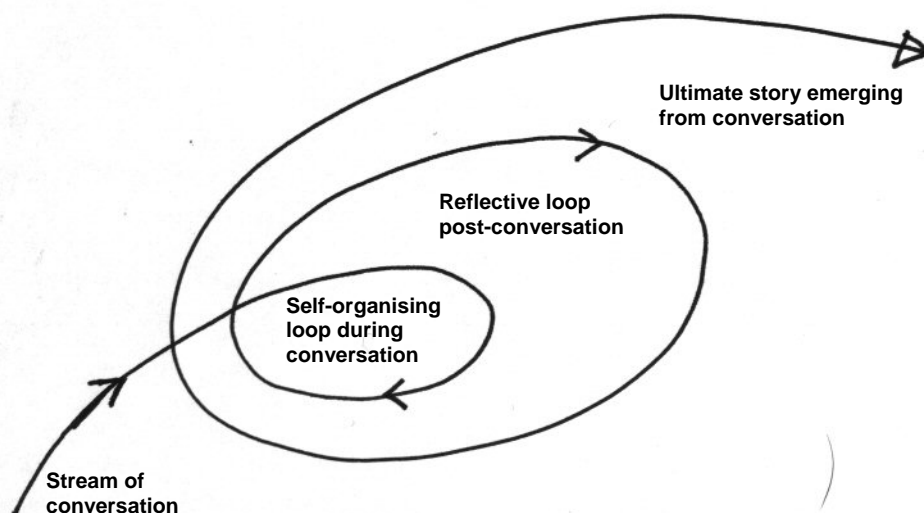
What is found in the CM process as successive steps of articulation (divergent process), mapping in new ways and then understanding of issues can be exercised to some degree simultaneously in LVT in what is called 'dialogue mapping'. Here a facilitator is needed or someone to take on the job of writing and mapping as the dialogue proceeds. It is therefore subject to the same limitations as any process dependent on a special role or skill of one person. However, the critical role can be rotated, shared and learned.

As the dialogue proceeds, the facilitator distils it into a series of statements on hexagons (as shown). Lines of hexagons represent a 'thread' of the conversation. Changes of direction of the line signify new threads or perspectives. The visual tool kit can enable *clusters* and *cycles* of thought to be represented. The result is an *articulate architecture* that can be reviewed (assimilated) by the group and is also open to change as new insights emerge.



Degrees of recording and mapping conversation

In conversation there is a *stream* or sequence of utterances in which, more or less, one thing leads to another. This is the *associative* element. At the same time on



another level there is a reflective and *organising* element which is making sense out

of the utterances by combining them to correspond to various types of meaning. The possibility of 'post-conversation' organisation only obtains if the content of the conversation is remembered, agreed and stabilised. Any actual 'post-conversation' process is actually another conversation and is different from the first in being based on products from it. Any actual conversation is not simply a stream of associations but has some degree of self-organisation.

Recording conversation as of the *stream* of utterance is one thing; mapping how the content is *organising* is another.

Just as any utterance arises in some way in response to what has been uttered before, so the way in which the content is organising *shapes* the conversation.

As far as recording utterance per se goes, there is first of all audio recording. This is a valuable tool. For example, participants in the recorded conversation can sit down afterwards and listen to the conversation, perhaps making notes of salient points and hearing new things. Comparison of their notes can lead to another level of conversation.

A recording can be transcribed and so make the interplay of people and how this influenced the course of conversation subject to scrutiny. It facilitates making written notes of salient points.

What we have called 'salient points' is another name for 'molecules of meaning' (MMs) as used in LVT. Participants can make their own MMs *during* the conversation; they might do this as writing down in short form their own utterances after making them, or even as writing down what they pick up from others. Consideration of writing leads to whether it is done in an individual or collective space. Individually, people make their own notes; publicly, they would write their MM (or equivalent) into a common display (as in CM).

Another dimension is brought into play with any kind of graphical component, which makes *mapping* possible. For example, CM allows for sequences to be recorded by connecting lines. In the dialogue mapping of LVT, sequence is shown by a series of touching hexagons. [The import of 'touch' is stronger than that of connecting lines because the latter come from the metaphor of rays of light which connect things 'at a distance']. The introduction of meaningful changes of direction (cf. 'lateral thinking') and configurations such as loops (cf. systems thinking) allows not only the series of utterances to be recorded as a sequence of discrete statements (MMs) but also *the way they are being seen as mutually relevant to each other* within higher order patterns of connection.

The mapping of conversation can be seen as marrying form with content. If content is represented by the *set of MMs* that have no order between them then form can be represented by the *aesthetic shape* of the totality into which the content evolves. In LVT, the basic three stages correspond to three degrees of combination between form and content.

The first stage, Gather, consists solely of the set of MMs and has no form besides containment within a given subject, question, issue, or situation.

The second stage, Organise, combines MMs into smaller sets that can be *groups* or strongly connected. The making and naming of these groups begins to show form.

The third stage, Integrate, takes the groups and configures them into a higher order unity or pattern. At this stage, the sense of form dominates over content and can lead heuristically to see missing elements or to realise new perspectives.

In the progression of the stages, more and more significance is to be given to the *visual* form of the display; to be taken as signifying information of a kind which is largely missing from any compilation of verbal information. In LVT:

Arranging MMs \longleftrightarrow **Structuring meaning**

Sense-making in a complex and complicated world – D. Snowden and C. Kurtz

<http://www.research.ibm.com/journal/sj/423/kurtz.pdf>

Organising is not a neutral process but stems from deep-seated priorities and beliefs about reality. David Snowden has drawn attention to the limitations of traditional and entrenched beliefs about being able to control events.

A new awareness of the ancient counterpart to order began over a century ago with Poincaré and several others, and has surged in recent decades. In fact there is a fascinating kind of order in which no director or designer is in control but which emerges through the interaction of many entities. Emergent order has been found in many natural phenomena: bird-flocking behaviour can be simulated on a computer through three simple rules; termites produce elegant nests through the operation of simple behaviours triggered by chemical traces; each snowflake is a unique pattern arising from the interactions of water particles during freezing. The patterns that form are not controlled by a directing intelligence; they are self-organizing. The new science of complexity spawned by these findings is interdisciplinary, touching fields from mathematics to evolution to economics to meteorology to telecommunications. In the domain of emergent order, the goal “to predict (and thereby control) the behaviour of systems not yet studied (but similar to those that have been studied) under conditions not yet extant and in time periods not yet experienced” is difficult if not impossible to achieve—but other goals are achievable.

Snowden points out that human systems are far more complex than the physical ones that have been studied. Humans can assume various identities in a transaction, they need not act according to predetermined rules and they can be aware of global patterns as well as react locally. Snowden calls the emergent order that can issue from human systems *unorder* to highlight its paradoxical character of not being known in advance.

In this essay the term *organisation* will sometimes be used to encompass all kinds of order and unorder. Organisation is the property of living systems and is more a process than a fixed state.

Snowden contrasts the realms of order and unorder:

In the ordered domain we focus on efficiency because the nature of systems is such that they are amenable to reductionist approaches to problem solving; the whole is the sum of the parts, and we achieve optimization of the system by optimization of the parts. In the domain of un-order, the whole is never the sum of the parts; every intervention is also a diagnostic, and every diagnostic an intervention; any act changes the nature of the system. As a result, we have to allow a degree of sub-optimal behaviour of each of the components if the whole is to be optimized.

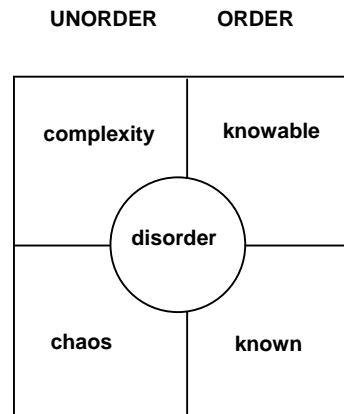
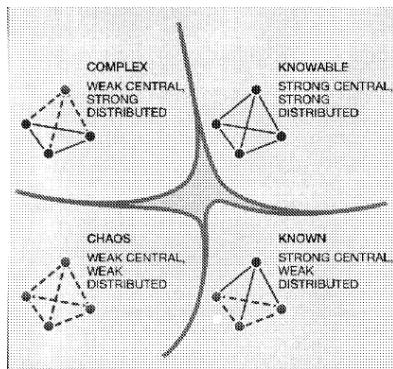
He also draws attention to the positive role of *pattern making* as well as its limitations.

Humans use patterns to order the world and make sense of things in complex situations. Give a child a pile of blocks, and he or she will build patterns out of them. Give an adult a daily commute, and he or she will build patterns within it. Patterns are something we actively, not passively, create, as Mary Douglas so well pointed out:

“...whatever we perceive is organized into patterns for which we the perceivers are largely responsible....As perceivers we select from all the stimuli falling on our senses only those which interest us, and our interests are governed by a pattern-making tendency, sometimes called a schema. In a chaos of shifting

impressions, each of us constructs a stable world in which objects have recognizable shapes, are located in depth and have permanence.... As time goes on and experience builds up, we make greater investment in our systems of labels. So a conservative bias is built in. It gives us confidence."

The Cynefin framework distinguishes five domains encompassing the play of order, unorder and disorder. Such terms as 'knowable' refer not to individuals but to the relevant community.



The realm of the known can be dealt with automatically by what is in place. That of the knowable requires data acquisition and analysis. The requirements in the realm of the complex are more conscious: Snowden speaks of 'probes' needed to look for emergent patterns and enhancing those which are 'desirable' and dampening down those that are not. The realm of true chaos, where cause and effect thinking breaks down entirely, requires a creative or 'uncanny' response. The central realm is where no response is forthcoming. The boundaries between the known and knowable and between complexity and chaos are relatively weak in comparison to the boundary between order and unorder.

In practice the Cynefin framework is used by first generating items (in LVT parlance MMs or 'molecules of meaning') from a universe of discourse involving a diverse group or groups of people ("collective sense making as a consequence of discourse").

The session begins with the collection of many items through structured brainstorming. The items might be communities, products, actions, motivations, forces, events, points of view, beliefs, traditions, rituals, books, metaphors, anecdotes, myths, and so on: they are any items that are important to the sense-making process. The items are related to one theme or issue of concern, which should be broad but not infinitely so. Whatever sorts of items are chosen (and multiple types are permissible), they should be diverse and concrete in nature: diverse to allow multiple perspectives to emerge, and concrete to move away from existing entrained abstract beliefs. We assure diversity by giving different groups of people different directions, by giving directions that are deliberately ambiguous and so can be taken in diverse ways, and by changing group compositions frequently so that people do not fall into entrained thinking. To keep items concrete, we rely heavily on narrative methods. These provide a rich context that allows patterns of experience rather than opinion or belief to emerge.

Snowden uses magnetic hexagons, the basic tools of LVT, to carry the MMs thus generated. The first step of mapping is then to select those MMs that can be easily ascribed to one of the four corners of the framework. As the process proceeds, more

MMs are added. Initially, this implies a large area for the domain of disorder in the middle. Boundaries are drawn in and MMs positioned on a boundary are partitioned. The aim is to pull in the boundary lines to reduce the area of disorder.

The mapping provides a basis for a reflective discussion. This has two main aims. First:

the group should accomplish Descriptive Self-Awareness, or a greater understanding of their own biases and potentials. This is also our goal in helping people go through the process, because it is our place to enable clients to achieve self-awareness rather than to provide "expert" advice, which has a much lower value in practice.

Second:

it provides a new shared language with which the members of the decision-making group can discuss situations, perspectives and possible actions.

The conversations around boundaries are most productive and sometimes metaphors are used to highlight how they are being perceived. In another approach, the negotiation of boundaries is dealt with in a more linear fashion.

when the workshop is large enough or when we feel that it is required, we often hold a parallel session of contextualization in which people are asked to distribute their sense-making items along a line, ranging from the most tractable items to the most intractable items. After the line has been completed (and there are many negotiations to place items in relation to each other), we ask people to find places along the line at which they feel that the underlying dynamic has shifted. In other words, we ask them to create boundaries along gradients. We then pull the line into a rainbow curve and place it on the Cynefin framework, with the most tractable items in the known domain and the most intractable items in chaotic space. This produces an alternate contextualization, with the same ultimate effect of creating the Cynefin framework anew, but with a stronger emphasis on the negotiation of where boundaries are found. We sometimes ask people to negotiate boundaries as though they were representatives of the different domains, coming up with a mutual agreement on what the boundary means and where it is placed.

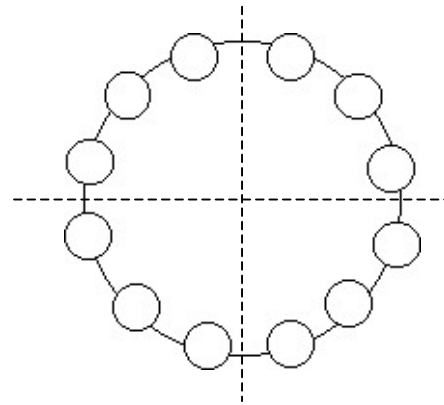
Further investigations can be made that concentrate on *movements* across boundaries. This generates a new vocabulary and domain of meaning.

Organisation

Making sub-sets of MMs (from the total set) implies boundaries and boundaries are then integrated into global forms. This is a process of *organisation* that can encompass different kinds of order (and unorder). The Cynefin method corresponds to the basic three stages of LVT. First there is Gathering of MMs. Snowden goes into how this can be *resourced* (where he emphasises use of narrative). Second there is Organising of MMs into different sub-sets. In the Cynefin approach, this is very dynamic and leads into discussion of boundaries. Third there is Integrating of the results from the previous stage. In the Cynefin framework, much work has been done on various methods for this purpose.

The basic form used in LVT at the stage of Integrating is that of a *ring-structure*. This is open to many different kinds of framework. MMs can be connected across the circle and the circle itself can be divided into different sectors. The diagram here represents a tetradic division. Snowden speaks of the automatic tendency to move clockwise, as from chaos (bottom left hand sector) to the known (bottom right hand sector). Organizations are subject to the pulls of past and future.

The ring-structure is not a fixed constraint but can be modified into any emergent form of meaning. However, a working group needs to develop the capacity to *read* the kind of mappings that can emerge through LVT or Cynefin process. In these mappings there is a fusion of form and content in which elements represent not only information but also *a way of looking at or making meaning out of information*.



Cynefin as a Meaning Game

The structure of organisation used in Cynefin exemplifies that of a basic *meaning game*. The concept of families of meaning games arose out of systematics and the development of more sophisticated aspects of LVT. In a meaning game, participants become players and take turns in making moves involving the selection and placement of MMs. They have a shared task of making sense of something. There are four main aspects to a meaning game:

1. **MMs.** There are units of meaning (such as words recognised by a group of people as meaningful) which in general we will call 'molecules of meaning' or MMs.
2. **Relevance.** Given a source set of MMs, different people will prefer one sub-set of this set to each other. One person will see what is 'most relevant' differently from another person.
3. **Arrangement.** Even if operating with the same sub-set of MMs, different people will arrange them relative to each other in different ways.
4. **Rules.** People working in a group can agree to a set of rules enabling them to combine together to produce a result that is meaningful to all participants.

In Cynefin, it is assumed that there are four distinguishable realities: the known, the knowable, the complex and the chaotic. A working group generates MMs and then maps onto a two-dimensional space, as has been described. There is an implied 3 x 3 grid 'behind' this display space which can be shown as follows:

A3	B3	A2
B4	C	B2
A4	B1	A1

The A's are for MMs that clearly belong to one of the four main realities. The B's are for MMs that straddle two domains and have to be clarified further. The C is for where everything is confused. There are rules for clarification procedures and also for development of the meaning of the intermediary locations (e.g. in terms of pathways, boundaries, etc.)