

A Boundary Based Typology of Language Games: Making Sense of Systemic Interventions

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In general, Systems Thinking/Management Science Intervention Methodologies are designed to work in some predefined ways. However, authors such as Flood, Romm and Midgley make the case that methodologies can also be used in non standard ways. This paper reports initial findings of my research, looking at the role of intentions in these non standard uses. Towards that aim, it is proposed a typology of “language games” or ways in which the boundary of what is considered relevant in a situation can be affected. This typology draws on Wittgenstein’s philosophy, language pragmatics and the notion of boundary in systems thinking.

Non standard uses of methodologies

Systems Thinking/Management Science methodologies are conceptual tools developed and used by consultants, academics and management practitioners. They aim to address a huge range of organisational aspects such as processes, design, culture and politics (Flood, 1995), and guide undertakings such as the appreciation, analysis, assessment and action (Mingers & Brocklesby, 1997).

There is a great variety of methodologies, so deciding what to use in a specific situation can be confusing. Consequently a lot of work has been done trying to find what is the right way to take advantage of methodology’s intrinsic characteristics - such as philosophical underpinnings- and based on these, declaring *standard uses*.

This line of research have influential proposals such as Flood (1995), Flood & Jackson (1991) and Jackson (1991; 2000). Mingers & Gill (1997) contains a comprehensible collection on different views on the matter.

On the other hand, authors as Kay & Halpin (1999), Checkland (2000) and Taket (1994) have agreed that the practitioners and context are crucial factors that shape how methodology is used, making difficult to recognise an intervention as carried out from a particular methodological stand point.

Some proposals have been advanced to take advantage of these non standard uses. For example Watson et al. (1995) from an hermeneutic perspective explain that methodologies behave as metaphors, for this reason we can interpret and use them in un-prescribed ways. Flood & Romm (1995) argue that is possible to take the principles of one methodology and apply them to a second methodology, generating in this way a non standard use that they call the “oblique use”. Midgley (1997) commenting on Flood & Romm, suggests that there is more explanatory power if we consider that methodologies and principles are combined, achieving a synthesis in which a new method is created.

While Flood & Romm and Midgley propose non standard uses, adapting methodologies by replacement or synthesis of methodological components, Watson et al. obtain non standard uses based on interpretations not necessarily derived from

methodological grounds.

In some way I want to combine these ideas. The freedom in diverse uses from different sources as in Watson et al. (1995), but with the possibility to have some guidance to intervene in the process as in Flood & Romm (1995) and Midgley (1997).

In order to conceptualise different uses I have decided to look how agents through their agency and specifically intentions affect methodologies. Inquiring about how intention can affect methodology use requires abandoning the idea that there is an intrinsic or “true” nature in methodologies that have to be expressed in unique ways. It requires a philosophical position where factors like the context and specially the actor, can have a place in understanding such use.

I propose that a path rooted in the philosophy of language, specifically in Wittgenstein’s philosophy can offer us such possibilities.

Methodologies as language games

“Language is an instrument. Its concepts are instruments. Now perhaps one thinks that it can make no great difference which concepts we employ ... the difference is merely one of convenience” (Wittgenstein, 2001, §569)

Wittgenstein conceptualise language as a tool and rejects the idea that words carry intrinsic meanings: “the meaning of a word is its use in the language” (Wittgenstein, 2001, §43). Meaning arises from what is possible to do with any such word, giving us a window to conceptualise non standard uses of methodologies and how that use is affected by user’s intention.

Wittgenstein approaches language using the notion of language games as “objects of comparison which are meant to throw light on the facts of our language” (Wittgenstein, 2001, §130). Language game is defined as “the whole, consisting of language and the actions into which it is woven” (Wittgenstein, 2001, §7). Additionally “the term ‘language-game’ is meant to bring into prominence the fact that the speaking of language is part of an activity, or of a life-form” (Wittgenstein, 2001, §23).

Now we can turn to the question of if it is possible to apply the concept of language games to methodology use. Some arguments to support this possibility include:

- If language games are “objects of comparison” it follows that we can use them to learn and compare against methodology use.
- The use of methodologies as language games involves a “whole, consisting of language and the actions into which it is woven”.
- Inventing methodologies is like “invent[ing] a language” that “could mean to invent an instrument for a particular purpose” (Wittgenstein, 2001, §492)
- Examples of language games include giving and obeying orders, describing objects, reporting, speculating, forming and testing hypotheses, translating, asking, (Wittgenstein, 2001). What is more, Mauws & Phillips (1995) suggest that the concept is powerful enough to enable an understanding of managerial

practice in terms of collections of diverse language games. The use of methodologies seems to sit between these two sets.

- Intervention methodologies seem to share with games the variety and the absence of common features among them. Compare games such as board games, card games, Olympic Games, ball games, ring-a-ring-a-roses, or bouncing a ball against the wall. Next look at how intervention methodologies can include elements as diverse as psychodramas, computer simulations, or methods to encourage debate. Wittgenstein suggests that there is not a central concept running throughout all language games but rather a “family resemblance”.

In addition, there are some interesting gains from working with the notion of language games applied to methodologies. First, for Wittgenstein rules in language games cannot be private, so the understanding of a methodology use needs similarly to be seen as a social construction. This contrasts with the options to look at non standard uses (on the last section) that draws on explanations focused on individuals.

Secondly, apart from methodology use, the interactions, languages, activities and “forms of life” in the intervention context can also be considered in terms of language games. So when we are intervening what we are trying to do using methodologies (as a language game), is to affect the language games already in place, which is to say, we are using a tool to modify the tools that people in that context had developed in order to interact. What is more, because we are talking about tools that modify tools, it is also likely that the language games in place will modify the methodology in use.

Rules

“In philosophy we often compare the use of words with games and calculi that have fixed rules, but cannot say that someone who is using language must be playing such a game” (Wittgenstein, 2001, §81)

If we play with fixed rules, the likely outcome is that we will refer to standard uses of methodologies. However, Wittgenstein is suggesting that that is not to say that we must play in such a way. But what exactly can it mean not playing with fixed rules?

According to Wittgenstein, rules can be changed, created, or eliminated, “as we go along” (Wittgenstein, 2001, §83). Under those circumstances the rules on many occasions are not clear, incomplete, or even incoherent, but nevertheless people are able to accomplish tasks (Fogelin, 1996). This idea is also suggested by empirical research (Galantucci, 2005).

Wittgenstein’s view also involves the notion that rules have multiple uses. So it is possible to use rules to communicate and to condition behaviours, also sometimes we are aware of their existence but we choose not to follow them, and even if they are not explicit, they can be inferred from the context. In this picture:

“A rule stands there like a sign-post ... is there only one way of interpreting them? – So I may say, the sign-post does after all leave no room for doubt. Or rather: it sometimes

leaves room for doubt and sometimes not." (Wittgenstein, 2001, §85)

So basically rules guide but not rule. They help to make sense of what is happening and not necessarily are determining an outcome.

Language pragmatics, which is a field in which Wittgenstein is regarded as a pioneer (Bertucelli Papi, 1996), has proposals that work along this lines. One of them looks to move the understanding of communication from *rules to code-decode information to principles that help to infer it*.

In the first model, in order to understand a message, the people involved need to code and decode based on a common code (Littlejohn, 1999; Van Der Wiele, 1995). In contrast, in the inferential model proposed by Grice (1989), the speaker tries to show her/his intentions, and the hearer will try to make inferences based on his/her knowledge, the context and the evidence provided.

We can take advantage of inferential communication without talking. For instance, if work has to be done, I can leave the documents on somebody's desk. In fact it is also possible to take advantage of inferential communication by breaking rules when trying to convey a meaning. For example, people can be aware of X's knowledge about etiquette, so if X is not following the etiquette possibly X is using that knowledge to convey a special meaning, perhaps a joke, irony or a low opinion of the host. So etiquette here does not behave as a rule but as a principle that conveys Wittgenstein's idea that rules guide my behaviour.

Understanding communication based on inferences and principles, offers us the possibility of meanings conveyed in different ways and consequently with different uses. Furthermore, it show us a way to understand how intention can guide meaning. So I am approaching my research understanding the use of methodologies as language games, and the rules in terms of pragmatic principles.

The question now is how to find principles suitable to understand intentions in methodology use? To give an answer to this question, now I turn to the notion of boundary.

Boundary

"When one draws a boundary it may be for various kinds of reason. If I surround an area with a fence or a line or otherwise, the purpose may be to prevent someone from getting in or out; but it may be also part of a game and the players be supposed, say, to jump over the boundary; or it may shew where the property of a man ends and that of another begins; and so on. So if I draw a boundary line that is not yet to say what I am drawing it for" (Wittgenstein, 2001, §499)

Wittgenstein is suggesting that a boundary can have many different uses. This is reflected in how the notion of boundary has been conceptualised. In the past the tendency was to consider boundaries as attached to the structure of reality (for example the skin is the boundary that distinguishes our bodies from the environment).

More recently and thanks to the work of Churchman (1968; 1979), authors such as Ulrich (1983), Midgley (2000) and Yolles (2001), work on the idea that boundaries are "social and personal constructs that define the limits of the knowl-

edge that is taken as pertinent in an analysis” (Midgley, 2000: 35). Moreover these constructions are defined by “*contexts of meaning*” (Ulrich, 1983: 330).

Boundaries are relevant to non-standard uses because where exactly they “are constructed, and what the values are that guide the construction, will determine how issues are seen and what actions will be taken” (Midgley, 2000: 36). What is more Midgley also states that different boundaries will give rise to different methodological choices. Furthermore I would add that different boundaries imply also different uses in those methodologies.

It follows from the concept of language games that we can see what is inside the boundary as language games. In the same way the use of methodologies also can be seen as language games. It can be argued then that when used, these methodologies can have an impact on the boundaries of what is considered relevant. This is in some way in line to systemic intervention as “purposeful action by an agent to create change in relation to reflection on boundaries” (Midgley, 2000: 129).

What we need now is a way to consider the effects that methodologies can have on the boundary and inferential communication can assist us in it.

Sperber & Wilson (1995), building on Grice (1989), propose that an individual possesses a cognitive environment that encompasses all the assumptions that s/he uses to make inferences about communicative stimulus. Each time that a new stimulus arrives the cognitive environment change. New stimulus (that I will treat as information) can weaken or strengthen old assumptions according to their relevance.

The relevance of an input to an individual is understood then as:

- a. Other things being equal, the greater the positive cognitive effects achieved by processing an input, the greater the relevance of the input to the individual at that time.
- b. Other things being equal, the greater the processing effort expended, the lower the relevance of the input to the individual at that time.

(Wilson & Sperber, 2002: 252)

So basically something is relevant to somebody if it is possible to obtain many inferences from the stimulus and it is not difficult to reach such inferences. Therefore when we are trying to communicate something, we show others that they can connect our messages with their background and that they do not have to work much in order to do it.

Now my proposal is to treat the boundary of what is seen as relevant as the cognitive environment in Sperber and Wilson’s terms. From there we can now propose different ways to affect the boundary and consequently different ways in which a methodology can be use.

Typology

“One learns the game by watching how others play. But we say that it is played according to such-and-such rules because an observer can read these rules off from the practice of the game” (Wittgenstein, 2001, §54)

I have derived this typology working with my theoretical framework and afterwards comparing and refining with my observations of a team of researchers planning interventions. Through my observations I have been seeing how others *play intervention games*.

These games can be very complex, so as a first step I am following Canfield (1993) who inspired by Wittgenstein, suggests that is possible to look for basic games that can later help us to understand more complex interactions. At this stage the important characteristic that I am looking for is that these games behave as interventions, that is as “purposeful action[s] by ... human agent[s] to create change (Midgley, 2000, p113).

So I am working on the premise that intervening can be carried out through complex methodologies or small interactions that some times require just a few words or actions. In any case the interventions are going to *play* in relation to the boundary of what is seen as relevant to tackle the problem.

The classification that I propose, looks to reflect “a rather abstract property of the speaker’s informative intention: the direction in which the relevance of the utterance is to be sought” (Sperber & Wilson, 1995: 254). So let’s look now that different directions, assuming that they are successful.

Setting the boundary

The first operation with relation to a boundary is to set one. Basically new information that is not possible to infer from old information is introduced. This information enable actors to achieve big contextual effects with not a big processing effort. If there is already a boundary in place, a new operation of setting boundaries also, will give strength to that previous information.

Following the boundary

This involves obtaining combinations or consequences of already present information.

The contextual effects are small and easy to obtain. Basically it is following the rules, like when people are acting accordingly to a plan or examining the consequences of it. Old information grows stronger due to new internal connections.

Probing the boundary

It enables the actors to realise “where” is the boundary. Actors propose new information to see if is derivable or agrees with old information. If is derivable we have now a following. If it agrees, new information is introduced, the contextual effects tend to be small and the processing effort is small.

If the information it is not derivable and does not agree, it will stay out of the boundary but it tends to strength the old information.

Challenging the boundary

New information is introduced. This information is not derivable and does not agree with old information. In fact this new information weakens old information. There are big contextual effects and the processing effort tend to be big due that it also have to replace old accepted assumptions. The intended outcome is to change the boundary.

Wandering

It is like a combination of challenging plus following. Challenging because new information is proposed. Following because inferences are obtained from that new information. The big difference is that this new information does not pretend to replace old one. It is used to emphasise what is not going to be done. In that sense what it does is to strengthen the already present boundary.

Conclusions

If the aforementioned games behave as pragmatic principles perhaps it will be possible to observe something similar to what has been proposed by Leech (1983: 8):

- a. Principles/maxims apply variably to different contexts of language use.
- b. Principles/maxims apply in variable degrees, rather than in an all-or-nothing way.
- c. Principles/maxims can conflict with one another.
- d. Principles/maxims can be contravened without abnegation of the kind of activity which they control.

The typology proposed is based on communicative intentions. The idea is that through the *games* proposed it is possible to appreciate a systemic intervention process in terms of the dynamics in relation to the boundary. This possibility do not depend of the actors following a specific methodology. Also, the aim is to be able to use it as a way to reflect on the intentions and the effects that we want to achieve on the boundary, using gestures, words, phrases or methodologies.

The usefulness of such ideas still have to be improved and tested particularly those regarding the use of methodologies, but I think there is a case to show that the use of language games concepts can be useful to make sense of interventions.

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