

To make sense by perspectives

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Summary

It is easy to find problems and malfunctions in contemporary management. Habits of superficial consensus are one of the causes; that is one of the starting points of this study. As a remedy a certain method has been developed and tried. Its main idea is to make the choice of perspectives and postures explicit. Perspectives will here be the way to see by metaphors, by systems theories or by philosophical schools, e g by any reference with completeness and structure and with a definable focus. And preferably with a name so that its application may be declared, communicated and remembered. By posture I mean the way to appreciate information. It may be for example to accept something as a truth or just as a suggestion or as a hypothesis. Philosophers like Immanuel Kant with his categories, Plato with his shadows in the cave and David Hume with his auto criticism and many other philosophers give examples of how appreciations may vary. So, sense-making is made in different ways.

Model-builders and model-users today need to appreciate and to make sense of their models. Are those models something like truth or reference or what? These questions have become reality in the author's professional experience. They have imposed themselves in work for making overviews, for assessments and in setting priorities, and they appear now again in an ongoing methods development for risk management.

Key Words: Perspectives, sense-making, risk management.

CONCEPTS

Design lives in symbiosis with learning, understanding and analysis. The one makes better sense in connection with the other. And the one helps the other. We normally wish to understand before we act and make our efforts of design. We should also think the other way, e.g. to have some ideas of future action before we start our efforts to learn and understand. See for example le Moigne (1995) who calls this approach projectivity. This point brings us directly into the theme of our article.

We learn better if we do it in a specific *perspective*. We can then focus relevant issues. We become able to express clear questions. We get a framework for overview, scanning and prioritizing and a pattern for fair comparisons. Finally we have a framework for our memory and for reviewing our selections. This is what Swedish universities teach us to call *problemativering* (problematization?). That is to give research realistic limits.

We change our perspectives the whole time and especially good authors are said to do so. For design and for repair are different perspectives. Doing it for different stakeholders most often makes different perspectives. Strategy and vision are different. Some perspectives may be identified with a focus or a system's delimitation, others with the way to see, still others with a specific slicing of the world. We have an infinity of examples. We have epistemologically striking examples from classical philosophy, where David Hume (1739) on some pages rubs out, annulates, the whole causality concept. On other pages he states a kind of opposite: We can not live without thinking in cause and reason!

A more recent philosopher, Michel Foucault (1966 and 1970), is more explicitly a master of perspectives though he hardly ever uses the word. Instead he writes about the *discourse* as a very real information management and about the *épistémè* as its logical paradigm. He makes us see their cruel, very real, impacts in society in how different minorities are treated. What is extremely useful for me is when he comes to the conclusion that our present occidental culture founds its thinking upon a human *mode d'être*. In my understanding of this expression I include both the perspective and the sense-making of it. Of course Foucault has read and been influenced by the Copernican revolution of Immanuel Kant (1781) which states that all our knowledge stems out of our perspectives, our categories he says.

Should I define the concept of a perspective? I think so, but I can not do better than offering the phrase: *'You take a perspective and you get an aspect'*. We may also see the *perspective* as an organisation of facts and ideas, a structure which is also called *world-view* or slicing of the world, but that is a too specific a formula to cover all that a perspective could be.

I write about learning for design (with a special preference for the design of crisis management systems). I write about what is learned and how learning is perceived, appreciated and integrated: sense-making. The role of the perspective is great. It gives the framework for the subject matter learned. Perspectives may also define the personal posture with what is learned. We explain in perspectives and we understand in other perspectives.

One *perspective* comes by the author and another by the reader. This is not obvious, since one could instead think of the text itself (or of a model) as representing a perspective. In fact the relation between author and reader may be described as a dialogue and as a process. Terry Griffith (1999 and 2003) writes about this *sense-making* with information systems innovations in a way which may have a more general interest. She defines the following phases for sense-making:

- a general alert with something new,
- recognition of a discrepancy,
- conscious deliberation,
- a feeling of multiple triggers,
- deliberate initiatives,
- adaptive structuration /mental models

- promote insights
- set focus, use and redesign

The differentiation Terry Griffith offers is a general pattern for sense-making in *design*. It is about different features as triggers and about different levels of implementation, not about different perspectives or different kinds of sense-making. It is the latter that we shall elaborate in this article and in this we need Griffith's phases as a basic definition of what we speak about.

From the science of literature, Beata Agrell (2002), we may borrow the Swedish word *läsart*, which literally would be species of reading in English. It is on purpose that the expression species, *läsart*, shall make us think of taxonomies. Species of reading must be distinguished and even systematically learned if we are to design well and defendably. That is the thesis I develop and defend in this article. I do not however go as far as Karl Popper (1934), supported by David Hume (1740), suggest it, verify by refutation. That will be for later on. I give the conjecture now with some deductive backing.

What about *tacit learning* then? Surely there are different ways of performing tacit learning. Anyhow it is the way to learn without being aware of how you do it. What is tacit knowledge? That is to know without knowing how to transmit that knowledge. Silent knowledge is another expression for it. I claim that tacit knowledge may be just as structured as clear knowledge. It may guide you without ambiguities even if you are not able to describe how this comes. You would feel it as intuition and by this one you can be coherent or not. Sense-making may also be tacit or not. That is, you may assess or not your kind and degree of knowledge consciously.

I shall claim that it brings considerable advantages of making tacit learning conscious and explicit, both with respect to what you learn and with respect to how you make sense of your learning. What are the other alternatives then? The obvious one is not to consider the concept of a perspective at all but to work directly with piecemeal knowledge and with partners and from a hidden unquestioned world-view. A variety of this is to not even consider alternative options but to work incrementally around one idea. A third possibility is to consider perspectives critically, but not to distinguish between producers' and consumer's perspectives. Surely there are more kinds of approaches.

MODERN REALITIES

We all face risk differently. Aron Wildavsky (1982) writes a provocative chapter about a tribe which suffers all kinds of peril: poverty, famine, war, illness. Thunder and lightning also happens and that is their major threat as they see and feel it. The other problems are just habits, nothing to bother about.

It is natural to find the most striking management problems in risk and crisis management. There is policy in the precautions and there is policy in the crisis management. The local world views, the priorities and the risk aversions differ and that causes conflict. Some win and some loose. In all sectors of society though we find problems with organizations' priorities, directions and dynamics and with their more or less hidden perspectives.

Ian Mitroff and Harold Linstone (1982) describe major occidental disasters like the Bhopal, the Exxon Waldes, Chernobyl and Three Mile Island and they find that the safety attention mainly is about technical factors, not human or organizational ones. All these events are explained by defective a priori over-views. The nasty Pearl Harbour and Twin Towers' surprises should be explained differently. Here the responsible authorities had defendable over-views and even indications, but the sense-makings somewhere missed.

Jean-Michel Larrasquet (1996) describes with a certain pathos how still a Cartesian-Newtonian-Taylorian paradigm reigns in modern European organizations creating a vulnerable rigidity and inertia. The point he makes and develops is that the dynamics of organizational learning is insufficient. I agree and here I supplement some more explanations focusing the role of the more or less explicit perspectives being used.

Abdul Khakee (2003) makes a nice exposé of different evaluation paradigms/perspectives and also he regrets that real practice is so much behind in relation to existing methodology.

In recent consultancy of my own I have noticed strange foci. Public administration agencies consider risk management only for the safety of their own bureaucracies, not for their whole sector responsibility. More specific lacunas are also discovered for example about transport and storage capacities and with all kinds of reserve and fall back routines. How many heads of civilian enterprises and agencies anywhere have got sufficient and updated deputies? I can not help believing that the lacunas noticed depend on an unwillingness to use explicit perspectives as search tools. Efforts to make perspectives explicit do not appear in any authorized handbook of risk management I have seen in any country though the research side mentions this as a major option.

Generally speaking, and in an effort to explain the problem, I see the following administrative pathologies:

- The importance of quantitative data is overestimated.
- Insufficient and rigid over-views lead to lacunas in discovery and in invention,
- Ignorance about how priorities are set,
- Ignorance about options discarded,
- Local logics and paroidal powers dominate,
- Incoherent compromises,
- Superficial treatment of symptoms,
- Misunderstandings and parsimony in cooperation between working-groups and between administrative levels,
- Not so precise adaptation to intervention objectives,
- Difficulties in assessment, control and scrutiny of management studies,
- Weak understanding of what is actually achieved by a management study,
- Difficulties in subsequent teaching, learning and memorizing.

MODERN OPTIONS

Operational research and systems analysis have made considerable efforts to cure management pathologies. As all know it rose rapidly after the war but it got stuck in a positivistic trap while overrating its abilities. Then, already in the seventies its repute declined, to the detriment, I say, of transparency and even honesty in the real management. Superficial consensus took over to put it bluntly.

On the scientific side I am afraid that the main stream still sees key determinants as more interesting than perspectives. Glaser, E. M. et al (1983) for example presents a discussion in their last paragraph where the *broad picture* (in a quotation from Amitai Etzioni) is opposed to determinants like interests, values, constraints, cost and feasibility.

Often enough, I agree, problems do not lend themselves well to explicit structures, but I claim that a combination of structure and intelligent sense-making can make miracles. Sometime I even say that anything goes provided you know afterwards what you have done. That is sense-making and that comes if you have defined your perspective.

Management and systems science in general have already offered methods for analysis and design using the perspective concept. Let us start with giving a few building blocks originally offered by scientists who have been relatively explicit about their perspectives.

West Churchman introduced the perspective concept for his systems approach already in 1968: *The systems approach begins when first you see the world through the eyes of another*. Later, in 1971 he became more specific redesigning classical philosophy into perspectives for modern management. His students Harold Linstone and Ian Mitroff (1993) offered a slightly varied, simplified but still flexible, message building upon the three perspectives technical, individual and organizational views.

Peter Checkland (1989) writes:

Systems engineering ignores Weltanschauungen. Soft Systems methodology cannot afford to.

He uses the German *Weltanschauung* since he finds no good English word for what should be said. In any case this word would only be half-way towards the *perspective* concept including sense-making that I go for. I include the way to do and to perceive.

Edgar Morin and Jean-Louis le Moigne (1999) argues deeply and well for perspectives to be attached and contingent to ideas of future action, without being as precise as many others about possible details in these contingencies. This way of thinking they call *projectivity*.

Donald de Raadt (1991 and in several later works) describe ethical, social, biological and technical perspectives with an emphasis on the first one.

John P. van Gigch (2003) describes perspectives on different levels of abstraction where the higher levels are generic to the lower ones and where a focus on too low a level may have disastrous consequences for the qualities of design. By simpler words Edward de Bono (1973) teaches something similar when he pleads for abstractions as generators of ideas.

Colin Eden (1998), leaning on the psychologist G A. Kelly, teaches the importance of using the clients own words when offering advice. This is to prepare a concerted sense-making already in the first phases of a design process. See for example Eden & Ackerman (1998).

Werner Ulrich (1983), who works with applied systems analysis as well as being a philosopher offers a fine introduction to Immanuel Kant (1787) and both of them explains the necessary subjectivity in any perspective. Kant offers his two kinds of categories, those of thinking functionalities and those of kinds of vision. Can we as synonyms say epistemology and ontology? Anyhow the list of categories offers a menu of possible subjectivities. The two philosophers also indicate the possible dialogue between empirics and theory.

Mike Jackson (2003), as Chris Argyris, speaks about second order learning for the change of perspectives. Gerald Midgley (2000) writes about implementation in successful consultation and about the learnings of such processes in different perspectives. Both come from a Northern England systems culture. They describe different ways of learning, for example on technical and human levels, for iteration, for immediate results and by shift in foci and in systems delimitations.

The methodological elements mentioned so far will help us a great deal in matching the pathologies mentioned, but not with all of them.

- Bringing qualitative and quantitative information together by complementary perspectives will still be difficult (Gregory, A. 1996; Agrell, P. S. 1997)
- We would need to learn about what each kind of information would bring so that we could judge the value and sufficiency of their contribution in relation to a total need of information and knowledge.
- Labels of quality and usability do not come directly by ontologically defined perspectives. This blocks mutual understanding and co-operation.
- Ontological perspectives steal attention from epistemological ones.

MAKE SENSE

So I wish to go on beyond the scientists mentioned so far for another metaphysical variety, how to make sense of a given perspective. Simone de Beauvoir (1947) is a good start with this, since she gives so clear alternatives and since she obliges you to take a stand. Her postures are the following:

- The subdued or luke-warm
- The serious
- The nihilist

- The adventurous
- The passionate
- The aesthetic.

These are grand choices of posture and de Beauvoir obliges us to choose. This will then be a stable existentialistic choice.

A Swedish philosopher Sören Halldén (1991) writes about choices on a smaller scale in a chapter called *A multitude of truths*. He refers to a multitude which represents how differently the one and the same story/text may be perceived. These choices are not so stable. They depend on the situation:

- To take it seriously
- As a joke
- As a wish
- As another's view
- As connected to a past
- As a flatter by
- You may notice what is there or what is not there.

Both philosophers write explicitly that life is affected by the way we take care of our knowledge.

Based upon successful consultancy cases Jean-Claude Moisdon (1992) and his centre describes how analytical tools may serve very different purposes, often enough just as a provocation to start a discussion. In this the items of research are not efforts to conclude as many would think, but instead the start of a learning process. Those are honest and direct but at the same time they are tools for an inquiry which has got both a direction and an opening for partners in the work to offer new perspectives. We see clearly with Moisdon how the sense-making of the management tools is the key to a successful methodology.

Let me also shock you by mentioning an old master who is rather forgotten and often underestimated. I think of James Miller, the inventor of the Living Systems Model. I agree that his ambition of creating a common systems language and of finding general laws for survival is positivistic and in that way not so modern even if good design (Ahari 2003) and analysis (Fränberg 1994) are still done with Miller. However Miller has exposed a subtle feeling for how to use a systems model, any systems model, a message which may not surface if you do not study his own original writings. The following use is suggested in the last chapter of his grand book. Miller (1978).

- To make a framework for the organization of concrete facts,
- As an instrument for search and for setting priorities,
- As a framework for teaching and understanding between levels in an organization,
- As a framework for fair comparisons between organizations,
- As a means to see analogies and to express hypothesis by those.
- As a framework for assessments and for setting standards for vital functionalities,
- As a framework for the expression and the trimming of improvements.

His distinction between transducers, decoders and encoders should also be mentioned. The message and the mail are not the same thing. The languages of the sender and of the receiver are not the same. There we see the seed to a modern view of the power of the perspective. This is different to the view exposed by for example Glaser, E. M. et al (1983) where a similar distinction is not exposed and the word perspective is not used. Miller makes, I think, is a good start of a theory of sense-making in management. It is also a good illustration of what I want to say, that the kind of making sense can completely change the value and the qualities of a tool and of an analysis.

I can also refer to an effort of my own where priorities had to be set in a command system, Agrell (2004). The sense-making there had to be based upon the assumption that the results of the study were to be used as an input to expensive test-bed simulations. I have another example, where the sense-

making should be the fusion of results from different perspectives (Agrell 1997:2). *Sense-making* I called *appreciation* at that time (Agrell 1997:1).

My own list of sense-makings is the following (Agrell, P. S. 1985):

- to design
- to initiate a discussion
- to give a warning
- to make aware
- to give a syntax or a language
- to explain
- to increase the feeling for a problem
- to identify problems
- to lay out aspects of a problem
- to give arguments
- to test coherence
- to criticise
- to invite criticism
- to explore
- to give frameworks
- to formulate goals and objectives
- to create consensus
- to allocate responsibilities
- to make agendas
- to clean up a discussion
- to claim excellence
- to transfer a responsibility
- to decrease a psychological anguish.

This is still a useful list of options, but some subtle meanings of Jacques Rorty should be added. The French professor of Management, Jacques Rojot (2003), has got an important paragraph in his great *Théorie des organisations* where he states that every serious and fitting analysis must renegotiate its meaning the whole time. He has also got a nice list of kinds of meaning: *humor, ironi, sarcasm, the tacit and the feeling of complicity*. Filtering of course goes with all these kinds of sense-making. This kind of abstract sense-making comes easily in the shadow of more tangible management or the setting of foci. If so, he writes, that disables technical as well as social abilities.

I shall also add some items from my sister Beata Agrell (2004), from her science of literature research. Her main thesis is that there is real design in the reading. Kinds of reading are among others the following:

- semiotic reading
- realist approach vs symbolic reading
- reading to get a spectrum of interpretations
- passionate reading
- reading between the lines or on them
- reading what is in the text or what is not there
- reading in dependence on a social context and prior knowledge
- read to interpret or read with a purpose of ones own.

CONCLUSION

Practice is very far from the risk management research frontier and the same may be noticed in many other management areas. Especially it seems difficult to get explicit perspectives applied though this is a key issue among researchers.

There is also much to do within management science itself to improve real management. Especially it is not ready with its sense-making, and in risk management the lacunas are important, maybe because of the subjective and political character of the issue. Management Science has reasons to look for help in other sciences like literature and philosophy. A transfer of that kind is tried in this paper.

Especially risk- and safety analyses do need rethinking. They need a not too superficial thinking in perspectives and in sense-making. The need for this is especially great in risk management because of the ambiguities and uncertainties involved and because of the subjective and political character of the issue. There is policy in the precautions and there is policy in the crisis management. The local world views, the priorities and the risk aversions differ and that causes conflict. Some win and some loose.

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