



Semantic Mapping

Effective Problem-Solving and Organizational Change with Semantic Maps – Part 1

By Dr. Alexander Schieffer

Language is powerful: it can unite a business or Balkanize it into a chaotic storm of cross purposes.

The tool of semantic mapping harnesses language to expose the disparate perceived meanings and implications of business decisions, and then to unify all employees around a common purpose.

Semantic maps graphically represent the spheres of meaning surrounding concepts. Using semantic maps, one can acquire orientation in the thinking and understanding of other organization members regarding practical terms regularly used in a problem-solving context, with an understanding shared by all concerned (and recognizing the differences from one's own thoughts and understanding).

Part 1 of this article grounds the reader in the Semantic Mapping concept. Part 2 will describe a detailed implementation in a large software organization attempting to move from custom projects to a standard product offering.

Introduction: Thesis, Approach, Article

Thesis: As long as the key terms used to describe an organization and its goals are loaded with differing meanings among its employees, an organization cannot change in a goal-oriented fashion.

Reason: The collective action of individuals is the central prerequisite for the ability of organizations to develop successfully. But how can collective action among the organization members be generated? We think in concepts, and the terms that we use mirror our personal interpretations of reality. Every individual interprets reality differently. These differences are the result of differing experiences, socialization and cultural background, etc. They manifest themselves in the terms that are used to describe reality and in the spheres of meaning—the semantics—that lie behind these notions. Consequently, members of an organization cannot effectively act in unison if they do not define a common conceptual world regarding the self-perception and central objectives of the organization. As long as they fail to do this, the problem of subliminal perspectives working against each other on the basis of differing semantics arises. This results in inefficiency.

The approach: The Semantic Mapping instrument solves the problem of conflicting perspectives and allows sustainable changes to be made. Semantic maps make actors' individual spheres of interpretation visible. Individual maps serve as the basis for the development of a common map for the organization as a whole. Such a common map aids collective action, helping to build and sustain a dynamic and adaptable organization.

The article: This article will describe and demonstrate, by means of a practical case, how Semantic Mapping can be implemented to achieve collective action by all actors.

I. THE PROBLEM

THE SEMANTIC TRAP

Regardless of whether it is a business, a party or a community of states, an organization has prospects of success only when all its members pull together toward the proverbial common goal. It is correspondingly the management's central task to lead the actors towards common, goal-oriented action. Leadership touches upon communication—effective leadership therefore involves clear communication. But what does clear communication actually mean? Human beings gain understanding on the basis of language. However, this understanding is often only superficial. One usually assumes

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that one has understood someone else correctly. As a rule, the wording and sense of a communication is not scrutinized. This is not only right but also necessary—in many cases of human communication, detailed questioning is unnecessary and can even be impractical and disturbing. A cursory understanding is often all that is needed as a basis for action.

Herein lies the catch. The cursory, superficial understanding of the terms used is not enough when the problem that is to be solved is so complex that there is a multitude of possible interpretations. Superficially, if at all, there is a common understanding of how the organization should conduct itself (e.g., strategy, mission, guidelines, processes). However, underneath the surface, the different interpretations cause conflicting courses of action.

These conflicting courses of action block the organization because a large part of its power of action is not directed towards its actual purpose, e.g., the production of screws. Rather the organization wears itself out through the cancelling out of internal differences of which it is often unaware. The danger of differing actions and subsequently of conflicts within the organization increases with the complexity of the situation and the speed with which the situation changes. However, an extremely high level of complexity and dynamics are among the central challenges currently faced by organizations.

Over and again we fall into the 'semantic trap' because we overlook the fact that along with the phonetic and grammatical dimensions of language, there is also a semantic dimension. While we mostly understand each other on the superficial dimension of phonetics and grammar, misunderstandings lie in the invisible—or rather, inaudible—semantic dimension. It is precisely this dimension, however, that decisively affects our actions. Semantics determines how action, as the pragmatic dimension of language, actually turns out.

As a rule, the wording and sense of a communication is not scrutinized.

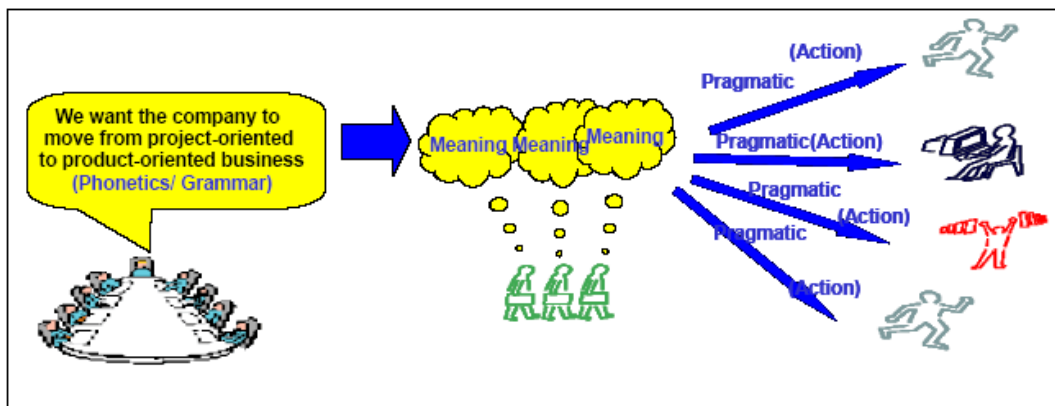


Figure 1: The Semantic Trap

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Communication is based more heavily upon participation and less on power.

If there are misunderstandings on the semantic level, then collective action is barely possible. In organizations constructed on a hierarchical model, collective action is demanded through hierarchy. In such organizations, communication is based, above all, on power. However, hierarchical organizations tend not to be in the position to deal with a high level of complexity and are less open to development and adaptation. Decisions are made almost exclusively at the top of the hierarchy. In this type of organization the management is expected to have the answers and to know how the organization should act and develop.

In a highly complex and dynamic environment, organizations are moving increasingly further away from the hierarchical model. Flatter hierarchies and network organizations are taking their place. Expressed in simple terms, this means the following: decisions are being made according to the subsidiarity principle at the lowest possible hierarchical level; management personnel are fashionably being described as 'coaches'; problems have to be solved using the principle of cybernetics; dialogue is an important keyword. In this type of organization, communication is based more heavily upon participation and less on power. Decisions are made collectively.

But beware: although the organizational and communication models are changing, the 'semantic trap' is just as apparent as it was before. Collective action as an approach has been achieved but it remains unstable and falls apart again and again, for apparently inexplicable reasons.

This is because the individual interpretations still exist 'underground' and they lead to further divergent courses of action. These constantly result in the organization blocking itself; inefficiency and internal conflicts arise. To get out of this negative cycle, organizations have to open up to the semantic level of communication.

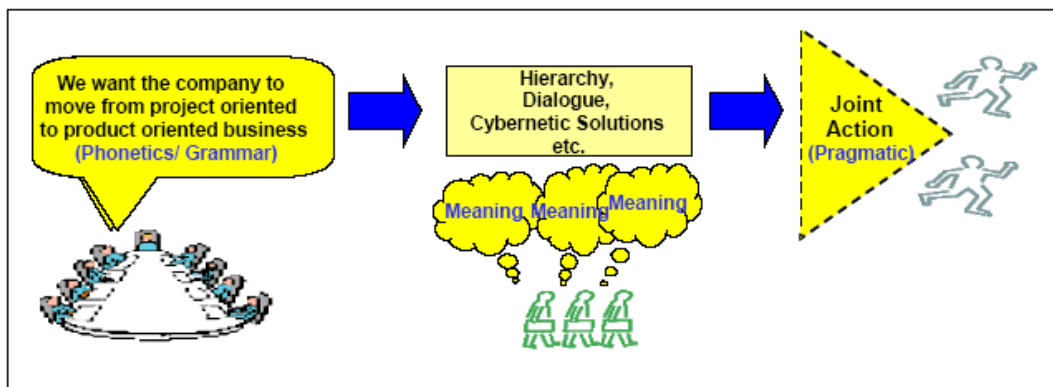


Figure 2: Still in the Semantic Trap

II. THE SOLUTION

ESCAPING THE SEMANTIC TRAP WITH SEMANTIC MAPS

To get out of the semantic trap, organizations have to make themselves accessible to the hidden level of semantics. On the one hand, tensions lying at this level could block the organization. On the other hand, they contain an enormous potential to shape and change. Nevertheless, to make use of this potential, the semantic divergences have to become visible. Semantic maps offer this possibility.

What is to be understood by Semantic Mapping? Semantic maps graphically represent the spheres of meaning surrounding concepts and the central terms used to describe a practical problem in an organizational context. Using semantic maps, one can acquire orientation in the thinking and understanding of other organization members regarding practical terms regularly used in a problem-solving context, with an understanding shared by all concerned (and recognize the differences from one's own thoughts and understanding).

Semantic maps make transparent the spheres of meaning that individuals have developed for terms. They reproduce semantic spheres and compile them in a type of map. The maps show what individuals understand by the central concepts of, for example, 'leadership', 'strategy', 'achievement', and make them visible to the individuals themselves and to others.

Example of a Semantic Map for 'Achievement'

The employees of a business probably all profess a high demand on their individual and collective willingness to achieve. The following discussion of the semantic sphere of the term 'achievement' and the subsequent development of a semantic map demonstrates how diverse this can appear. At the interpretation level of language, please consider the statements:

- 'Achievement is good.'
- 'A high level of achievement is very good.'
- 'We need more achievement.'
- 'We're fed up and do not achieve enough anymore.'
- 'Our business aims to achieve!'

These or similar expressions can be heard everywhere. Achievement is the magic word and more achievement leads to success. We live in an achievement society.

The semantic sphere of achievement is filled, above all, with the following elements: a lot of hard work; great effort; suffering; individual achievement (it has to be possible to award achievement to a particular person); career; assessment and marks (good achievement = good marks). The one-dimensional view: whoever works hard also achieves a lot. Other aspects are hardly taken into consideration. Pressure to achieve: pressure is needed for achievement; extrinsic motivation: motivation has to come from outside, i.e., from superiors, not from inside; etc.

Organizations have to make themselves accessible to the hidden level of semantics.

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What different meanings could people take from the word 'achievement'?

The following lists some other elements that can also be found in the semantic sphere of the term 'achievement': appetite for achievement, the fun factor, intrinsic motivation (motivation comes from within), achievement does not just come from the isolated work of one person but is the result of many aspects (e.g., the freedom to realize oneself through coherence between achievement targets and personal goals, owing to the comprehension of achievement as collectively attained, etc.).

From the short discussion of the concept of achievement, the first draft of a semantic map can already be drawn. The visualization and comparison of the numerous terms on the semantic map allows inconsistencies within the semantic sphere to be tracked down.

The concept of achievement was chosen as an example because it is mostly engaged positively and consequently used without further reflection. When one talks of achievement, listeners usually know what is meant by it. One does not mull over or discuss its textual meaning. We suppose that we understand ourselves what is meant by it and also, what other people understand by it. An active textual understanding of this concept appears unnecessary.



Figure 3: A semantic map for 'achievement'

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Some organizations are aware of the possible different interpretations and the related potential for conflict. The attempt to 'attain clarification' prompts a number of organizations to implement an official semantics and firmly anchor in the organization central concepts (such as leadership, knowledge, teamwork, innovation). This leads to two types of problems. The first occurs when the official semantics is not reconciled with the semantics of the organization members. The second problem lies on the level of the different official semantic spheres. For example: a business has introduced 'innovation' as one of its central concepts, in the semantic sphere of which elements such as 'future direction', 'toleration of mistakes', 'willingness to take risks', and 'creativity' belong. If this firms' semantic sphere for 'leadership' is at the same time populated with elements such as 'power', 'discipline', 'apportioning of the blame', 'perfection' and 'omniscience', etc., then in practice (actions, behavior) the two sets of semantics will thwart or neutralize each other.

If they are used properly, semantic maps can form a good basis for overcoming internal misunderstandings and inefficiencies and help organizations achieve collective action. A practical case will be used to demonstrate how this can function.

Next week: A detailed example, and the Conclusion

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