# Abstract

To relocate information that was once filed by a computer is not trivial at all. Especially regarding displays of complex technical systems, it appears that the search for and even more so the attribute analysis of objects often do not succeed the way they could, despite increasing networking of hard- and software in the course of globalisation.

This phenomenon originates from the separation of content and meaning of an information, which is necessary for mechanized information processing; “content” meaning the actual elements of information that are stored in data media, while their meanings are reflected by the human brain when implied exclusively in definitions and processing algorithms in the way the programmer had interpreted the problem.

Yet, the actual knowledge carrier is the meaning of information which depends on how the user describes his need for information. An improvement of efficiency thus is conditioned by the manner of formalization of meaning.

To be successful in formalizing meanings of complex systems, it is necessary to clarify its structuring.

Approaching the subject as done in the philosophies of Immanuel Kant and Georg Wilhelm Friedrich Hegel, who were assuming that knowledge about an object can only be obtained by the addition of reflections from different perspectives on the object itself, each view describes one aspect of the real object, where its term takes over a rather conjunctive role.

With the help of determined technical systems it can be shown that the method of classifying and identifying labeling provides a possible juncture for that matter. The standards designed to label generating plants etc. with a focus on referential labeling can effect much more than simple identification through tagging.

Based on different model views of one complex technical system, a labeling consensus, respectively a code of abbreviations for system structures becomes essential to help coordinate between functional, local, material, logistical and other aspects of the system.

Object terms can therefore be used as structured labels that are correlated to each other. This creates a table of links between several aspects that is not only identifying the object, but does also contain its meanings structured by its elements of classification. In other words, it is a table about the correlated objects of the complex system, whose different labelings represent indicators to the records.

The strings of classifying abbreviations are formally retrievable and can be evaluated without necessarily accessing the object’s various attribute tables of an aspect. Thus, a mechanism can be created to make complex systems more graspable and transparent in terms of their object structures.

Access to previously filed contents will then happen via the respective code symbols of a regional clear text language and is therefore possible for all participants of the consensus, globally. Based on this method, contents can be compared in real terms, because their meanings are equal throughout the whole system’s conceptual hierarchy, due to the created code of abbreviations.

Nevertheless, this method requires a consistent and by communication internalized modeling consensus and software which completes the translation of aspect terms into the

abbreviations used by the system. Also, it is naturally inevitable to clarify the conditions to all partners involved and to achieve their acceptance.

This includes the software requirements which result from its use, whether it be the capture, the search or the evaluation. This software should easily be implementable in all software systems involved, each time an object needs to be termed.

Of course, the general approach specified for technically determined systems – examples for the structure and labeling of installatory and structurally systems can be reviewed in the appendix – is as well applicable to variable data and economic structures.