

Terminology Management – Philosophical Ideas in the Fast Lane

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Summary. Terminology management is deeply rooted in philosophy. If investment in a terminology management system built for the localization process is to pay off, concepts must be placed into their conceptual system,. Time pressure, lack of skills and the relative novelty of the combination of applied linguistics and information science are underlying the main challenges.

Keywords. Localization, translation, ontology, concept systems.

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Introduction

Terminology theory as a field has been around for several centuries. Many researchers consider *Carl von Linné's* work in the 18th century the underpinning. It seems reasonable to recognize his taxonomy and naming conventions as the point in time where linguistic aspects of classifications gained in importance [1]. Since then *Wüster*, *Drezen*, and others have developed the philosophical foundations, most notably *Frege's* semantic triangle, and integrated terminology theory into applied linguistics.

Terminology as part of the localization process

In the wake of globalization, terminology management gained in importance. Today, millions of products and their corresponding documentation must be translated into dozens of languages. Many companies make predefined terminologies available to translators and localizers to increase translation speed, reduce mistakes, and get product recognition through standardized terminology. Ideally, concepts are defined during product development, localized and documented in a central terminology database, and reused over and over again during the localization process. This requires specialized skills and tools. A simple spreadsheet with a few columns was the predecessor of today's complex terminology database. Developing such a terminology management tool or buying an out-of-the-box solution can be rather expensive. It is even more expensive to maintain a terminology database. Therefore, it is imperative that mistakes in the individual terminological entry as well as the underlying conceptual system be minimized.

Challenges in terminology management

In many settings, definitions are the byproduct of the customer-focused authoring process. They are written primarily to explain a given function, process, result, etc. to the end user. If this effort is not coordinated, each writer could potentially write a definition with their audience and context in mind.

If terminologists are tasked with the selection of a definition from existing product documentation and the integration into the conceptual system in a centralized terminology database, information could be diluted or falsified. While automation of this process is still largely a dream, it helps if technical writers use one database to store their definitions and reuse what has already been authored. Translation occurs on the conceptual level: a translator reads a term in context, understands the underlying concept, transfers it to the target culture, and chooses an appropriate equivalent. A translator must thus understand the ontology of the source document to create a similar concept flow in the target language [2]. During this analysis, terminologists and translators discover mistakes in source documents. The placement of the concept in the target culture can disclose poorly chosen source terms or imprecision in the conceptual system of the source text. Translators encounter this phenomenon frequently; *Ceusters* proofed through algorithmic analysis that multilingual annotations can be used for quality assurance of conceptual systems [3].

Another factor that complicates the creation of conceptual systems is the high volatility inherent in the software industry. Terms and concepts can be very short-lived. The documentation of terms and the creation of conceptual systems must be well organized and strictly adhere to data category standards [4].

The pressure to deliver a given product to market earlier than the competition is tremendously high, therefore linguistic precision is not the uppermost priority. A single definition may cover two different concepts, when they have the same denominator. An example are the process and its result, both called “logging”, or a verb and a noun, e.g. “run.”

Conclusion

Terminology management is based on philosophical concepts and, if properly executed, results in knowledge systems and multilingual ontologies. So far, very few companies have succeeded in building a database of terms that is based on a sound ontology. Time constraints and different priorities have not yet been outweighed by the argument that systematic terminology management in a centralized database can save dollars and cents.

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