

Universal model

A terminology must be independent of any language, or, differently said, it must be valid for all languages without bias favoring some specific source language. Considering a terminology like Terminologia Anatomica, which is definitely a large-size terminology, such an independence is a real challenge: anatomy is universal and everybody agrees. However, we must concede that such a goal is rarely reached. A few languages have the lead, principally English which support the vast majority of the scientific literature.

In order to reach this major goal, a Universal representation of terms has been designed. The source representation of anatomical term is neither English, Latin or any other language, but it is replaced by a universal formula referring to an abstract vocabulary and providing relations between these components. The universal formulas are governed by a formal grammar documented elsewhere. As a result, a majority of anatomical terms can be represented by such a formula and a marginal part of them can be accommodated as exceptions, in order to reflect the cultural heritage and the tradition involved with the natural languages.

A recent discussion within FIPAT is about the RAT terms (Regular Anatomical Terms). Several rules have been proposed and the pros and cons have been presented. However, different opinions would be hard to reconcile and presently, if some points would find a clear majority, other points (rules 10 to 12) are far from a safe decision. By safe we mean a solution that does not induce a clivage in the community of anatomists.

As a summary of the present situation, we argue that the new TNA with automatic term generation in 5 languages brings new arguments to the discussion. It is also recommended that more factual arguments be presented.

It has been demonstrated by the actual implementation that most languages easily fit to the universal representation with an acceptance rate above 95 %. More versatile languages would anyway present an acceptance rate above 90 %.

It becomes immediately visible that this situation save a considerable amount of manpower for the design and maintenance of the terminology. A terminology of 50000 terms in 5 languages with an acceptance rate of 95 % will save 72 % of the work. And this calculation is very conservative.

In addition to this quantitative estimation, a qualitative benefit as been found. The reason is that terminology is difficult in any language and that the discovery of the good terms is not error prone and is facing multiple obstacles. The overall coherence of the terminology is difficult to reach and it is necessary to set a number of informal rules governing the usage of any language. As a general statement, one cannot escape this difficulty, but the universal formulas are able to guaranty a significant part of the whole.

The universal model of the terminology is progressively documented elsewhere.

In the future implementations of the TNA, the universal formulas will be made visible and the acceptance rate of any specific language will be documented.

The authors of the terminology expect from the universal model a tripple advantage: 1) saving resources without impacting the quality; 2) preserving when necessary the idiomatic facets of the natural languages; 3) enforcing the equivalency between languages.