



# The BackBone Thesaurus (BBT):

## Evolving a meta-thesaurus for the humanities through collaborative, distributed thesauri maintenance and development

E.Tsoulouha [1], H.Goulis [2], G.Bruseker [1]

[1] ICS-FORTH, [2] Academy of Athens

### BBT in a nutshell

The BBT<sup>[1]</sup> is the research outcome of work undertaken by the *DARIAH Thesaurus Maintenance WG*<sup>[2]</sup> in an effort to design and establish a coherent overarching thesaurus for the humanities, under which specialist thesauri and structured vocabularies used across scholarly communities can be aligned and form a thesaurus federation.

It aims at enabling cross-disciplinary resource discovery while ensuring compatibility with thesauri that cover highly specific scientific domains and areas of knowledge in development.

It is constructed and maintained collectively by a distributed group of DARIAH affiliated organizations (AA,<sup>[3]</sup> DAI,<sup>[4]</sup> FORTH,<sup>[5]</sup> FRANTIQU<sup>[6]</sup>)

[1] [www.backbonethesaurus.eu](http://www.backbonethesaurus.eu), [2] [www.dariah.eu/activities/working-groups/thesaurus-maintenance](http://www.dariah.eu/activities/working-groups/thesaurus-maintenance), [3] [www.academyofathens.gr](http://www.academyofathens.gr), [4] [www.dainst.org](http://www.dainst.org), [5] [www.ics.forth.gr](http://www.ics.forth.gr), [6] [www.frantiq.fr](http://www.frantiq.fr)

### Methodological principles: The design of BBT

- ❑ BBT makes use of a small number of high-level concepts (facets & hierarchies).
- ❑ BBT facets and hierarchies were obtained through a bottom-up analysis of classificatory systems used by humanities researchers.
  - ❑ Only the **intensional properties** of the specialist thesauri concepts were taken into consideration for the definition of BBT high-level concepts.
  - ❑ BBT concepts are completely disjoint from one another and are divided in:
    - FACETS:** mutually exclusive high-level concepts that appeal to general categories of human perception
      - ❑ are to some extent “objective” and valid from a cross-disciplinary perspective.
    - HIERARCHIES:** stand in a hierarchical isA relation to their respective top terms
      - ❑ are differentiated among them by at least one salient intensional feature.
  - ❑ **BBT assumes an open-world position:** facets and hierarchies within them do not exhaust the domain they classify.
  - ❑ **BBT is deliberately open to revision.**

**What do all the concepts listed under *Disziplinen und Fachrichtungen* have in common?**

- ❑ they (roughly) correspond to professional/scientific branches
- ❑ they are exerted by individuals who have acquired the skills required to perform them
- ❑ they involve the adoption and application of (well-defined) domain-specific methods

**How do the concepts listed under *Disziplinen und Fachrichtungen* differ from one another?**

- ❑ they each refer to an area of professional/scientific expertise, well-demarcated by the subject it studies and the methods and practices it applies

**Fig. 2:** BBT is open to revision (sources: iDAI.welt Thesaurus; PACTOLS Thesaurus)

**Fig. 1:** example of a bottom up semantic decomposition (source: iDAI.welt Thesaurus)

**Fig. 3:** links to BBT top-term “materials”

**Fig. 4:** overview of the BBT concepts and proposed changes

**Fig. 5:** discussing a proposed change

### BBTalk: a tool for federated thesaurus management

- ❑ BBT aims to bring together a federation of vocabularies spanning the Arts and Humanities and to render them interoperable.
- ❑ BBTalk<sup>[7]</sup> is an online service for managing thesauri integration with the BBT and updating its content, when necessary.
- ❑ BBTalk offers a thesaurus alignment functionality allowing end users:
  - ❑ create links among specialist thesauri and the BBT [Fig. 3]
  - ❑ provide evidence confirming/disconfirming the high-level terms of the thesaurus itself.
- ❑ Clashes between BBT concepts and thesauri aligned to it can be resolved by updating the content and/or structure of the BBT [Fig. 4].
- ❑ Updating the BBT involves the introduction of new high-level terms plus the deletion/merging or splitting of existing ones.
  - ❑ BBTalk keeps track of such actions and allows for version control.
- ❑ Changes are implemented after careful consideration and discussion among the BBT managing team, until consensus is reached.
  - ❑ BBTalk supports discussions among end-users and its managing team [Fig. 5].
- ❑ BBTalk supports multilingual content.
  - ❑ BBT content is now available in English, French, German and Greek.

[7] <https://www.backbonethesaurus.eu/BBTalk/>

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