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BBT in a nutshell

The BBT^[1] is the research outcome of work undertaken by the *DARIAH Thesaurus Maintenance WG*^[2] 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,^[3] DAI,^[4] FORTH,^[5] FRANTIQU^[6]).

[1] www.backbonethesaurus.eu, [2] www.dariah.eu/activities/working-groups/thesaurus-maintenance, [3] www.academyofathens.gr, [4] www.dainst.org, [5] www.ics.forth.gr, [6] 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 [Fig. 1].
 - ❑ 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** [Fig. 2].

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-demarkated by the subject it studies and the methods and practices it applies

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

Fig. 2: BBT is open to revision (sources: iDAI.welt Thesaurus; PACTOLS 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^[7] 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/>

REFERENCES: Daskalaki M. & Charami L. (2017). *A Back Bone Thesaurus for Digital Humanities*, ERCIM News 111, October 2017, Special theme: Digital Humanities, ERCIM News 111, October 2017 URL; Doerr M., & Kalomoirakis D. (2000). A Metastructure for Thesauri in Archaeology. Ljubljana, Slovenia, 18-21 April. BAR International Series 931, Archaeopress, Oxford, 117-126; Georgis Ch., Bruseker G., & Tsoulouha E. (2019). *BBTalk: An Online Service for Collaborative and Transparent Thesaurus Curation*, ERCIM News 116, January 2018, Special theme: Transparency in Algorithmic Decision Making, ERCIM News 116, January 2018, URL; Murphy G. (2002). *The big book of concepts*. Cambridge, MA: MIT Press; Svenonius E. (2003). “Design of Controlled Vocabularies”, in: *Encyclopedia of Library and Information Science*, DOI:10.1081/E-ELIS 120009038, New York, 822-838; *Thesaurus Maintenance Working Group, VCC3, DARIAH EU. (2015). Thesaurus Maintenance Methodological Outline*. Greece. Retrieved from http://www.backbonethesaurus.eu/sites/default/files/workingpaperonthesaurusmaintenance29_05_2015.pdf.

