

## The BackBone Thesaurus (BBT):



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

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## **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> FRANTIQ <sup>[6]</sup>)

**Methodological principles: The design of BBT** iDAI.welt Thesaurus (de) [...] Materialien (de) iDAI.welt Thesaurus > Aktivitäten > Disziplinen und Fachrichtungen -Anorganische Materialien (de) BBT makes use of a small number of high-level concepts (facets & hierarchies). -Organische Materialien (de) PREFERRED TERM (i) 1 Anthroponymes BBT facets and hierarchies were obtained through a bottom-up analysis of BROADER CONCEPT Aktivitäten [...] classificatory systems used by humanities researchers. NARROWER CONCEPTS Afrikanische Archäologi M 6 Sujets Altamerikanische Archäologie [...] Only the intensional properties of the specialist thesauri concepts were taken Altamerikanistik 🗖 🗁 matériaux What do all the concepts listed under Alte Geschichte Image Internet alliage Disziplinen und Fachrichtungen have in into consideration for the definition of BBT high-level concepts. céramique Altertumswissenschaften common? Altorientalistik Cristaux BBT concepts are completely disjoint from one another and are divided in: Analogiestudien 🕨 🗀 gemme Anthropologie Imatériaux de construction **FACETS**: mutually exclusive high-level concepts that appeal to general categories matière organique Antikenrezeption Let they are exerted by individuals who Architekturgeschichte 📄 matière première of human perception have acquired the skills required to Architektur 🕨 🗋 métal inimerai perform them Archäoastronomie are to some extent "objective" and valid from a cross-disciplinary they involve the adoption and Archäobotanik 🕨 🗖 minéral perspective. application of (well-defined) Archäologie recyclage domain-specific methods Archäometrie I roche **HIERARCHIES**: stand in a hierarchical is A relation to their respective top terms Archäozoologie verre Astrologie How do the concepts listed under Fig. 2: BBT is open to revision are differentiated among them by at least one salient intensional feature. Astronomie Disziplinen und Fachrichtungen differ (sources: iDAI.welt Thesaurus; **Biblische Archäologie** from one another? PACTOLS Thesaurus) Bodenkunde

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

- BBT assumes an open-world position: facets and hierarchies within them do not exhaust the domain they classify.

BBT is deliberately open to revision.

BBT Version: 1.2.2									
Scope Note This term classifies physical substances that are constituents of material objects or are used in their construction, but whose individual substance is not a factor in the objects' function (e.g. gold, water, bricks, etc.) The term may include pure raw materials, processed or unprocessed, and also materials that have been modelled and are incorporated into objects. Their main attribute is that they cannot be individualized, that is, they cannot be distinct "units" with clear and distinct boundaries or roles in respect to other units of the same or different kind.						genesesorganizationsNatural ProcessesGroups and CollectivitiesnaturalSocial Collective EntitiesdestructionsSocial Collective Entities			
Term Name Translations	υλικά Greek 🔻						organic built environment mobile objects Materials Material Things		
Translation of Scope Note	anslation of Scope Note Ο όρος περιγράφει υλικές υποστάσεις που αποτελούν συστατικά υλικών αντικειμένων ή που χρησιμοποιούνται στην κατασκευή τους, χωρίς η ατομική τους υπόσταση να παίζει ρόλο στη λειτουργία του αντικειμένου (π.χ. χρυσός, νερό, τούβλα κ.ά.). Τα υλικά μπορεί να περιλαμβάνουν καθαρές πρώτες ύλες, επεξεργασμένες ή ανεπεξέργαστές, αλλά και υλικά που έχουν μορφοποιηθεί και ενσωματωθεί σε αντικείμενα. Χαρακτηριστικό γνώρισμα των υλικών είναι ότι δεν μπορούν να εξατομικευτούν, να αποτελέσουν δηλαδή διακριτές «μονάδες», με σαφή και διακριτά όρια ή ρόλο σε σχέση με άλλες μονάδες του ίδιου ή διαφορετικού είδους.						inorganic structural parts physical features of material objects disciplines intentional offices functions Activities <sup>destructions</sup> Roles human interactions roles of interpersonal		
URI	https://vocabs.dariah.eu/bbt/Concept/000003						relations Living Be	ing	
Facet	Materials					Geopolitical Units	-		
	Table of Local Thesauri Connections						symbolic objects propositional objects Types of Epochs		
Connected Term	BBT Term	Submitter	Submission Dat	te Connection Relation	Connection Id		methods Conceptual Objects concepts points linear extents		
Πετρώματα	materials	esavaidou	02.04.2019	Broader Match	2910	<b>0</b> -	natural languages supernatural beings formal languages <b>Geometric Extents</b> surface areas 3D volumes		
Materialien	materials	Lena	18.12.2018	Exact Match	2071	<b>\$</b> -	Fig. 4: overview of the BBT concepts and proposed		
chemical element	materials	Tsoulouha	31.07.2018	Broader Match	2039	¢-	changes		
weakly degradable substance	materials	Tsoulouha	31.07.2018	Broader Match	2038	<b>Q</b> -	chunges		
volatile substance	materials	Tsoulouha	31.07.2018	Proader Match	2027	*			
salt	materials	Tsoulouha	3 Submis	ssion form for creating a i	new term or fac	et for th	the BBT view	v mo	
radioactive substance	materials	Tsoulouha	3 Submit 3 Semant		Institution: FOR	TH FI	Field of Interest: Linguistics, Formal Semantics, Cognitive Semantics, Historical		
oxide	materials	Tsoulouha		mission Date: 18.09.2018	Version: 1.2	Sub	omission Id: 2037 Status: under discussion		
organic substance	materials	Tsoulouha	3						
nutrient medium	materials	Tsoulouha	3 New	BBT Term or Facet name	language [PA	RTHENC	120		
non-volatile substance	materials	Tsoulouha	3 Туре		Term				
metal	materials	Tsoulouha	3 Scor	Scope Note This term classifies types of			types of communications systems comprising of a finite set of elements and a set of	of	
lipophilic substance	materials	Tsoulouha	3				mbine them into a potentially infinite array of discrete expressions.		
isotope	materials	Tsoulouha	3 Broa	Broader Term conceptual objects					
isomer	materials	Tsoulouha	3						
ion	materials	Tsoulouha	3 Change	e Status 🔀 Forward to r	reviewer 🛛 🖾 Co	ontact U	Jser Hide Discussion		
insoluble substance	materials	Tsoulouha	3 Discus	SSİON (Visible to all curators	and to revie <u>wer:</u>	helfer, h	hgautier, MaurizioSanesi)		

they (roughly) correspond to
professional/scientific branches

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

Byzantinische Archäologie

## **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

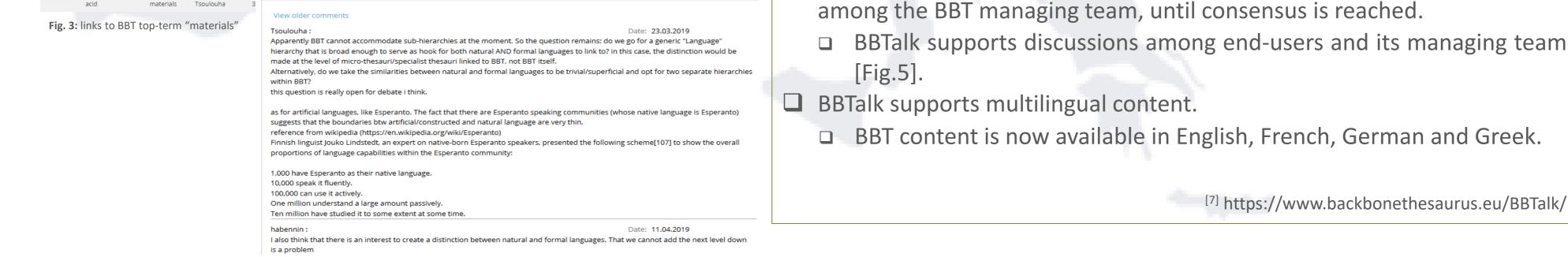


Fig.5: discussing a proposed change

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