

Thesaurus Maintenance WG

Developing a model for sustainable interoperable
thesauri maintenance

16-17 June

FORTH, Heraklion, Crete



BackBone Thesaurus (BBT)



Work packages

1. Intellectual principles of thesaurus maintenance methodology
2. Social collaboration (Workflows, Decision procedures, Volunteers for running services)
3. Tools
4. Empirical material for testing

Backbone thesaurus: Methodological outlines

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Designing the backbone thesaurus

Our main task: to design a backbone thesaurus for the Humanities that is valid irrespective of the specific branch of its application.

The main issue in this process: each field has developed its own system of classification so that it is impossible to have access to all the information related to a user's query or to map the information from different fields so that the same word will be used to denote the same meaning.

For that reason we pay a lot of attention to build the proper **methodological principles!**



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Planning the method

Our goals in designing the method:

- **Interdisciplinarity**
- **Intersubjectivity**
- **Provision of a consistent, comprehensive, reasonable and logically correct classification system**

Misleading criterion: the affinity of the meaning e.g.: Bride (person), Wedding dress (material object)

In order to achieve these goals we appeal to categorical semantics!

Categorical semantics

Categorical semantics provide us with the theoretical background for the detection and the determination of the top-level concepts in a principled way in order to build a **common, coherent** and **consistent** thesaurus within the framework of DARIAH.

Categorical semantics are based on primary concepts (facets) which could be seen as the preconditions of the way we perceive our reality (Person, Matter, Activity, etc.)

In this context we search for the intentional properties of the terms.

Intentional properties

- Characteristics expressing the **nature/substance** of a concept and providing an **unambiguous recognition** of an item **as belonging** to a category.
- Intentional properties are essential: **necessary** and sufficient conditions for belonging to a category, cannot be replaced without loss of meaning.
e.g. bachelor is defined as 'unmarried man'. Not being married is an essential property of a bachelor, because one cannot be a bachelor unless he is an unmarried man (necessary condition) and any unmarried man is a bachelor (sufficient condition).
- Recognition must be based on **accessible** information
- When sufficient intentional properties are implicit or not commonly accessible, the term is defined through confining or referring to commonly known phenomena:
e.g. human being, necessary: DNA, genetical. Accessible: confining morphological characteristics.

Intentional properties

Why is the detection of the intentional properties a crucial task?

- It leads us to the fundamental concepts i.e. to the top-level concepts (facets and hierarchies) that are used in categorical semantics in order to classify terms from every field of application. They are concepts, in which all the other concepts and terms can be analysed. Such concepts are, for example, person, place, activity, conceptual object, time-span, etc.
- It keeps the interrelationship between the top-level concepts and the specific terms of each field alive. The upper-level concepts are the result of the application of a bottom-up method, by virtue of which we can define the intentional properties of the terms. The bottom-up method prevents us from imposing a priori top-level concepts on the experts and makes the links-bonds which relate a term to a concept obvious.

Bottom-up method

- Clearly defined relationships between the top-level concepts and the terms emerging from each specific field guarantees the preservation of the specific meaning of each term.
- The bottom-up method helps us to select and define the top-level concepts which are suitable enough to cover the requirements within each classification system.
- The interactive relationship between the terms and the top-level concepts helps us to find out any shortcomings with respect to the hierarchies and the facets we propose (it could be the case that our proposed hierarchies need to be complemented with new ones in order to cover the requirements of a classification).

The inviolable rules

In this procedure of the bottom-up method the inviolable rules are:

- That we apply the **IsA relationship**, by means of which we can avoid the categorical errors resulting from the subsuming of terms under hierarchies and facets which present different properties than those of the indexed terms.
- That we **never define by negation** (eg. “the object of perception is all the things that a consciousness is not!”).

“Good” top-level concepts

A top-level concept could be used successfully not only when...

it can be deduced from the intentional properties of a term,

BUT also when...

new properties can be deduced from the already known and accessible: these properties are called potential properties.

potential properties are **consequences** of the nature of a thing. They may be confined to a category **or not**. They may appear at some instances at some time.

e.g.: potential properties of the bachelor: no children, is male or female (not a child), live alone etc.

An “open world” classification

If we follow the methodological guidelines mentioned above we end up with a classification system that **does not divide** the world in closed spheres of meanings according to specific characteristics, **but brings to light hidden connections** between the terms and establishes concept relationships!

The golden rules of hierarchy building

- Levels of hierarchies are **never absolute**. Even Facets may have **generalizations**.
- Levels of hierarchy are **never complete**.
- Generalizations are **never unique**.
- Sets of sibling concepts **are never complete**. Anything that **does not fit goes** into the **next level** category, until a better specialization is found.
- **Don't** complete levels by “**other objects**” or “**elephants and none-elephants**”.
- **Particulars** (gazetteers, person lists) are **NOT terminologies** (but other KOS).

Based on this, we **avoid** most **arbitrariness** and context dependency.
Collaborative development of an upper level becomes **feasible**.

Benefits of the faceted classification:

- Reveals the complexity of a term and reduces it to its fundamental components.
- It is **not** an artificial classification of the terms or a “**top to bottom**” classification, but is **generated from** the **analysis**/decomposition of one term in its elementary characteristics.
- A term can be classified in multiple hierarchies (e.g. doll toys/visual works).
- Is independent of the context, within which each a term appears although the context is crucial for the classification of a term in facets.
- Is based only in a restricted number of fundamental concepts.
- Can be expanded without disrupting or disorganizing existing facets and hierarchies and enables thus **compatibility** between different classification systems from different domains **without imposing terms on the experts**.
- It does not presuppose knowledge regarding the exact context of the terms.

Analyzing the backbone thesaurus: Facets, hierarchies and narrower terms

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Facets

- ✓ **Activities**
- ✓ **Natural Processes**
- ✓ **Materials**
- ✓ **Material Objects**
- ✓ **Epochs**
- ✓ **Conceptual Objects**
- ✓ **Groups and Collectivities**
- ✓ **Titles Offices**

1. Facet: Activities

The “**Activities**” facet comprises types of intentional actions that result in the preservation, creation, production, modification or destruction of an entity (living beings, conceptual/material objects, groups, social, intellectual, physical etc. phenomena).

ActivitiesRemark

- ❖ It is important to note that actions that are unintentional are excluded from this facet. Such actions may result from natural processes (natural disasters, geneses, changes due to natural causes), the non-conscious actions of subjects (e.g. the actions of people that are under the influence of drugs) as well as coerced actions performed in conditions that deprive persons of their free will. The fundamental criterion for the exclusion of these kinds of actions from the “activity” facet is the will, the ability of a subject to choose his purpose according to his judgment. Insofar as the will is the criterion for the determination of an action, the notion of “purpose” is the starting point for building the hierarchies of the “activity” facet .

Hierarchy Disciplines

Disciplines: This hierarchy comprises types of branches of professional or potentially professional occupations socially and/or legally acceptable under the criteria of sector self-subsistence, practice efficiency, adoption of common methods and transferability of knowledge and expertise. Each sector includes types of unified activities that express some sort of professional or potentially professional specialization.

Disciplines Remarks

1. It is important to clarify that the terms classified in the “disciplines” hierarchy should not be confused with the actor who performs an act or with the results of his activity or the method used in order to achieve this result. The actor as “the efficient cause”, the result as “the final cause” and the method as the sum of the rules and constraints that an actor follows in order to perform an act, are different terms which belong to different facets and hierarchies.
2. When determining the activities classified in the “disciplines” hierarchy we should not confuse the history of a specific discipline ie the specific temporal and spatial environment in which this discipline appeared and was perceived with the type of activities characterizing this discipline.

Hierarchy Disciplines

- **Narrower terms:**

- a) **Construction of material objects and installations:** It comprises disciplines concerning types of activities that aim at the production or change of material objects or installations. The construction or change may concern only a part of the object or an installation or the whole thing. The products of this type of activities have a material and exchange value.
- b) **Conception and comprehension of phenomena:** It comprises disciplines about types of activities that aim to conceive and understand social, natural, historical, cultural etc. phenomena, types of phenomena that had occurred in the past, or are occurring today or phenomena which we might predict will happen in the future (e.g. weather forecast). They also should be communicable and remain true when evaluated. The conception and comprehension of phenomena may concern a part of the phenomenon or the whole thing. (e.g. science, research etc.)

Hierarchy Disciplines

- **Narrower terms:**

- c) **Provision of knowledge and expertise:** It comprises disciplines about types of activities aiming at the provision and communication of already acquired knowledge and expertise. In this sense, the activities classified under this term do not aim to produce new knowledge and / or expertise or to change the existing, but to maintain it (e.g. teaching, provision of services).
- d) **Production of works and/or phenomena of aesthetic value:** It comprises disciplines concerning types of activities which, while they may involve the construction of material objects or of installations, are primarily designed to attach aesthetic value to them or to foster aesthetic values through the creation of corresponding phenomena.

Activities

Disciplines

Construction of material objects and installations

Conception and comprehension of phenomena

Provision of knowledge and expertise

Production of works and/or phenomena of aesthetic value

Performances

HierarchyEvents

- **Events:** This hierarchy comprises types of intentional activities carried out by at least one actor causing or changing phenomena or states of affairs on the social, political, financial, cultural and intellectual level.
- **Narrower terms:**
 - a) **Social events:** It comprises complex activities carried out by a group of individuals in order to organize and hold recreational, ritual, social events (e.g. parties, national, religious etc. celebrations, exhibitions, book presentations, inaugurations, festivals, official ceremonies, sports/charity events, competitions, leisure trips etc.).

HierarchyEvents

- **Narrower terms:**

- b) Confrontations, conflicts:** It comprises types of complex activities (a combination of activities) that presuppose at least two actors or groups of actors, who understand their interests and demands as competitive and thus aim at their satisfaction through their involvement in situations of controversy (coups d'état, legal actions, wars, revolutions, strikes etc.)
- c) Political, social and economic occurrences:** It comprises types of complex activities (a combination of activities) that presuppose at least two actors or groups of actors, aiming at the emergence or change of political, social and economic conditions.
- d) Group management:** It comprises complex activities carried out by at least two people aiming to form, modify or dissolve any form of unitary relationship of any kind (economic, religious, athletic, political, etc.) which also has organizational characteristics. A precondition for the formation, modification or dissolution of any form of unitary relationship of any kind is the adoption of certain common beliefs, goals, decisions and / or the shared performance of actions

Activities

Disciplines

Construction of material objects and installations

Conception and comprehension of phenomena

Provision of knowledge and expertise

Production of works and/or phenomena of aesthetic value

Performances

Events

Social Events

Confrontations, conflicts

Wars, Civil Wars, Wars of national liberation

Political and Social Occurrences

Migration (human)

Group Management

Hierarchy Intentional Destruction

Intentional destruction: this hierarchy comprises intentional activities causing the end of existence of an entity or of a valid state of affairs.

Hierarchy Functions

Functions: This hierarchy comprises types of activities that are structural parts of a relatively stable complex system of permanent and self-contained procedures that repeat themselves within this system and thus contribute to its preservation. Although functions are part of a wider system, each function is completely distinct from the rest. As structural parts of a complex system, functions are types of actions that play a certain role within a system and aim at a specific goal, which they must accomplish. In this respect it is not possible that the purpose which a certain function has to achieve is different from that for which the function is performed. In other words, the purpose of a function is one of its identity criteria.

Consequently, the notion of the function univocally relates the actions performed and the target achieved by these actions in such a way that, if some other target is achieved due to external factors, we speak of a different function or activity.

Activities

Disciplines

Construction of material objects and installations

Conception and comprehension of phenomena

Provision of knowledge and expertise

Production of works and/or phenomena of aesthetic value

Performances

Events

Social Events

Confrontations, conflicts

Wars, Civil Wars, Wars of national liberation

Political and Social Occurrences

Migration (human)

Group Management

Intentional Destruction

Functions

examples

Facet: Activities
Examples

Examples

Facet: Activities

Hierarchy: Disciplines

Narrower term: Production of works and/or phenomena of aesthetic value

It comprises disciplines concerning types of activities which, while they may involve the construction of material objects or of installations, are primarily designed to attach aesthetic value to them or to foster aesthetic values through the creation of corresponding phenomena.

Performances

Scope note: In the performing arts, a performance is the artistic enactment of one or more works of art before an audience by a performer or a group of performers. Performances can take place at designated performance spaces (such as a theatre), or in a non-conventional space (on the street, in warehouses or in open-air spaces).

Examples

Facet: Activities

Hierarchy: Events

Narrower term: Confrontations, Conflicts

It comprises types of complex activities (a combination of activities) that presuppose at least two actors or groups of actors, who understand their interests and demands as competitive and thus aim at their satisfaction through their involvement in situations of controversies (coups d'etat legal actions, wars, revolutions, strikes etc.)

Wars

Scope note: Large-scale, most often armed, conflicts between two or more parties, nations, or states.

Civil Wars

Scope note: Wars between organized groups within the same nation state or republic, or, less commonly, between two countries created from a formerly united nation state. The aim of one side may be to take control of the country or a region, to achieve independence for a region, or to change government policies.

Wars of national liberation

Scope note: Conflicts fought by nationalities to gain independence. The term is used in conjunction with wars against foreign powers to establish separate sovereign states for the rebelling nationality. From a different point of view, these wars are called insurgencies, rebellions, or wars of independence.

Discipline: History, Contributor: [Helen Katsiadakis](#) (Academy of Athens)

Examples

Facet: Activities

Hierarchy: Events

Narrower term: Political, social and economic occurrences

It comprises types of complex activities (a combination of activities) that presuppose at least two actors or groups of actors, aiming at the emergence or change of political, social and economic conditions.

Migration (human)

Scope note: Human migration is the movement of people from one place to another with the intention of settling temporarily or permanently in the new location. Typically migration refers to movement over long distances and from one region, country or continent to another. It does not refer to movements with no intention to settle in the new place, such as nomadic movements, traveling, pilgrimage etc. Migration applies to movements of individuals, family units or large groups. It covers both voluntary and forced movement owing to political, economic or other causes.

Discipline: History, Contributor: [Helen Katsiadaki](#) (Academy of Athens)

2. Facet: Natural Processes

- **Scope Note:** This facet comprises changes in states, in things and in entities that result from natural causes (e.g. earthquakes, floods).

HierarchyNaturalDisasters

Natural disasters: This hierarchy comprises changes in states of affairs, in things and in entities that result from natural causes which lead to their dissolution or to their modification to such a degree that their identity changes completely.

HierarchyGeneses

Geneses This hierarchy comprises changes in states of affairs, in things and in entities that result from natural causes which lead to the appearance of new entities/things/state of affairs or to the modification of the existing to such a degree that they are transformed to a new entity that is fundamentally different in nature.

3. Facet: Materials

Scope note: This facet comprises 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 (eg gold, water, bricks, etc.) The facet may include pure raw materials, processed or unprocessed, and also materials that have been modeled 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.

4. Facet: Material Objects

Scope note: The Material Objects facet comprises things with physical substance that constitute complete units and have a relatively stable form with identifiable boundaries. Such units can be natural or man-made (with regard to origin), simple or complex (with regard to composition) or consist of parts. In this latter case it is possible that the parts are either distinct and independent from the unit of which they are part (e.g. a cave on a mountain) or that they have to be defined with reference to the sum of the parts (e.g. chess-chessmen).

4.Facet: Material Objects / mobiles

HierarchyMobiles

1. Mobile objects

This hierarchy comprises a) objects originally manufactured as artifacts e.g. figurines, statuettes, quivers etc. b) objects that have been transported as a whole to a museum e.g. altars, columns, fountains, temples etc. c) objects that have been detached from monuments e.g. mosaic inlays, column capitals etc., d) objects that may exist either as movable or as immovable monuments e.g. tombs transported to museums.

HierarchyImmobiles

2. Immobiles: This hierarchy comprises monuments that were, and still are, attached to the ground, and they cannot be moved without loss of their value as evidences.

Narrower terms:

- **monuments:** They are individual edifices, buildings, or simple structures, plastic or painted works that are in situ, or are functional parts of bigger building complexes i.e. Megaron, Temple, Stadium, Bell tower, Stele, Fountain, Buttress, Crypt, Monastery hostel, House, Boarding house, Dormitory, Workshop, Kiln, Sanctuary, Mausoleum, Tomb, Refectory, Gate, Odeon, Theatre etc.

ImmobilesNarrowerTerms

- **Complexes:** are aggregations of individual buildings – edifices that have a functional relationship i.e. a Sanctuary complex or a Monastery. The individual structures of the Complex, like for example, a Theater, a Stadium, a Refectory etc. are recorded as individual monuments.
- **Installations:** are structures of considerable length, like Road networks, Water supply networks, that extend beyond the boundaries of individual counties, and are sometimes under the care of different Ephorates.
- **Residential complexes:** Residential complexes or parts of residential complexes can include recorded sites, individual monuments, complexes etc. like an Acropolis, a City, a City ward etc.

HierarchyPhysicalFeatures

3. Physical features: The hierarchy comprises specific formations that are integrally adapted to certain material objects. They cannot, therefore, be separated from the carrier-object, but they also do not identify with it, since it is only a part of the carrier-object that carries the entire feature. In this sense, the feature is fixed, with respect to the carrier-object, while any attempt to remove it will result in the loss of part of the carrier-object. They may have two- or three-dimensional geometric extent, but there are no natural borders that separate them completely, in an objective way from the carrier-objects. Instances of Physical Features can be features in a narrower sense (scratches, holes, reliefs, surface colours etc.), while in the wider sense, they are portions of particular objects with borders that are not absolutely defined, such as the core of the Earth or the head of a marble statue.

HierarchyStructuralParts

4. **Structural parts of material objects:** This hierarchy comprises kinds of objects especially constructed to be parts of a complex material object. These objects have autonomy in relation to the complex object of the appropriate type, to which they are intended to be added. Despite their autonomy, however, they are not independent in terms of their intended function, but are structural parts of the object, ie they have a specific function within the module to which they belong and which they form.

Example

- **Facet: Material Objects**
Examples

Facet: Material Objects
Hierarchy: Mobile Objects

Stelae

Scope note: Concrete pieces of stone erected usually upright as monuments, bearing inscriptions



Discipline: Classical Archaeology, Contributor: [Gerasimos Chrysovitsanos](#) (Academy of Athens)

5. Facet: Epochs

Scope Note: The facet “epochs” comprises types of cultural, social, intellectual phenomena consistent with each other thus creating intelligible unities. These types of phenomena are spatially and temporally limited and their consistency relies on the appearance of at least one qualitative element that links them in a unity. The spatial and temporal restriction is a formal feature of the facet “epochs”. That means that the facet “epochs” has no reference to specific realizations of these types of phenomena. Consequently, this facet does not include time periods such as the Renaissance or the Roman period, or the period of the Balkan wars etc., but the types of their categorization, i.e. the abstract concepts by virtue of which it is possible to conceive the cultural, social and intellectual phenomena as coherent.

6. Facet: Conceptual Objects

Scope note This facet comprises objects whose essence remains the same regardless of the carrier. They are products of the human activity supported by the use of technical or electronic devices (digital photos, geometric measurements etc.) or without it (concepts, thoughts). The fact that they are materially produced does not determine their identity. Conceptual objects have the ability to exist on more than one particular carrier at the same time (paper, electronic signals, photos, human memories etc.), without the latter changing or altering their identity. On the contrary, any alteration of the conceptual object itself (removal of a part, revision etc.) changes the definition of its identity.

Conceptual objects exist as long as they can be found on at least one carrier (human memory included). Their existence ends when the last carrier and the last memory are lost.

HierarchySymbolicObjects

1. Symbolic Objects

This term comprises identifiable symbols and/or any aggregation of symbols, that have an objectively recognizable structure and that are documented as single units (sets or arrays of signs). Symbolic objects may serve to designate something, or to communicate some propositional content, but they don't depend on what they designate or communicate. They can exist on one or more carriers simultaneously without this feature adding to or removing from the identity of the symbols. Being objectively recognizable and documented as single units, symbolic objects are independent of the material carrier and the symbolized content as well. Consequently Symbolic Objects may or may not have a specific meaning.

6.Facet: Conceptual Objects/Symbolic Objects / Information Objects

Symbolic Objects Narrower term

Information Objects: It comprises all types of products of human mental activity having an objectively recognizable structure and being documented as single semantic units. Information Objects give us information about the propositional content of a conceptual object. The content and the symbols used are linked in such a way that any attempt at transcription to another set of symbols normally leads to the alteration of the information. Being a semantic unit that connects the information and the symbol, every Information Object assumes in advance the Symbolic one, but not vice versa. That is why the Informational Object is a subdivision not only of the Propositional Object but of the Symbolic as well. It allows us to draw conclusions about the socio-historic and cultural framework of the Object, its creator and the way it was created. For example the various forms of primary reference data (archives etc.) used in scientific research.

HierarchyPropositional Objects

Propositional Objects

This hierarchy comprises mental contents produced by human activity, representing data of physical, logical or psychological realities or even fiction. These objects, though expressed by the use of symbols, do not depend on them, a fact that allows their transcription to another set of symbols. However a propositional object sometimes can not be differentiated distinctively from the used symbols (e.g. a poem).

Narrower term:
Information Object

HierarchyMethods

Methods: This hierarchy comprises systems of specifications, restrictions and regulations about the design (this involves setting the principles, specifying the requirements and the means for achieving the desired result, estimating the consequences and the expected outcome) and / or the performance of the necessary activities (application of the selected principles and rules, provision and activation of the means and requirements for the realization of the chosen goals, re-estimation of the consequences) in order to achieve certain results of a specific type.

Narrower Terms

Procedures: it comprises restrictions, standards and rules concerning the succession of steps that should be followed in order to achieve a certain type of result.

Techniques: It comprises rules, restrictions and requirements relating to the performance of activities aiming at the production of material objects.

examples

- **Facet: Conceptual Objects**
Examples

Example

Facet: Conceptual Objects

Hierarchy: Propositional Objects

Narrower term: Information Objects

Decrees

Scope note: Texts drawn up and balloted by the institutional bodies of the Greek city-states (boulē, the assembly [*ekklēsia*]) through varying procedures in the different city-states

Honorific decrees

Scope note: Decrees attributing honour (materially or morally) to an individual for the services he provided to the city-state (polis)

Related Terms: **Epigraphy, Inscriptions, Stelae**

Example

Facet: Conceptual object

Hierarchy: Propositional Object

Narrower term: Information Object

Identity

Scope note: The distinct features, whose combined conceptualisation and expression substantiate persons and/or groups

Social Identity

Scope note: An individual's self-concept based on specific biological, social and cultural parameters (ethnicity, religion, language, social class, gender etc.), as derived from his or her interaction with the broader social environment.

Gender Identity

Scope note: Gender identity is an aspect of the social identity referring to stereotypes about the characteristics and the roles of its bearers, according to the dominant social and cultural norms regarding their biological sex.

7. Facet: Groups and collectivities

- **Scope Note:** This facet includes relations of any kind (economic, religious, athletic, political, national, etc.) that are the result of the joint actions of at least two people. These relations should be based on the adoption of common beliefs and / or goals and / or activities and should present organizational features.
- Ethnicities
- Political parties
- Artistic groups
- Groups of demonstrators

8. Facet: Titles, offices

- **Scope Note:** This facet comprises properties that are assigned to a person or are acquired by them or arise from his relationship with other persons or objects. The assignment of these properties to a person is statutory and / or socially recognized, even if it stands for a very short period of time. Therefore the properties included in this facet are not the physical properties of the subjects as living beings. They are socially mediated and acquire their meaning within the framework of an organized community.

Counterexamples

1. Example: TaDiRAHA: <http://tadirah.dariah.eu/vocab/>

Broader term: Research Activities

Narrower terms: capture (conversion, data recognition, discovering, gathering, imaging, recording, transcription) creation, enrichment, analysis, interpretation, storage, dissemination, meta-activities.

Scope Note: Research Activities “are usually applied to one or several research objects. An article about modelling of manuscript properties would therefore be tagged with the tags “Modelling” and “Manuscript”. A plain text editor would be tagged with the tags "Writing" and "Code" and "Text””.

Counterexamples

But:

The definition of activities is based on another other concept, that of “research objects”.

- The definition makes no reference whatsoever about the intensional properties of the term.
- The hierarchical division of the broader term does not demonstrate a necessary connection between the narrower (capture, data recognition, discovering, gathering imaging recording clean up) and broader terms.
- Narrower terms are not actually narrower since they are not specializations of the term “research activities” but they also appear in other contexts.

Counterexamples

2. Example (www.openfolklore.org/et/tree.htm). Context-oriented classification system:

Top of the hierarchy: Dance

Narrower term: Dancer.

But:

Dance is an activity while dancer is a Person. The only relationship between them is external, on the basis of the context and not of the essential characteristics of the concepts.

Counterexamples

3. Example: (www.openfolklore.org/et/tree.htm).

Top of the hierarchy: Health

Scope note: “Knowledge, beliefs, and practices that concern conditions of the body and the mind, including diagnosis and prognosis, treatment, and care”.

Narrower term: Death

But:

death is a negation of health!

Health and death are not “knowledge and beliefs” but situations/state of affairs.

Counterexamples

4. TaDiRAHA: <http://tadirah.dariah.eu/vocab/>

Broader term: Digital Humanities Research Objects

Narrower terms: Persons (but persons are not objects!!)

Research (but research is an activity and not an object!!!)

Interaction (but interaction is also an activity!!)

Methods (is a process and not an object!!)

5. TaDiRAHA: <http://tadirah.dariah.eu/vocab/>

Broader Term: Technique > related Goal-Method

Narrower terms: Brainstorming (in an activity and not a method!)



BackBone Thesaurus (BBT)



The Art And Architecture Thesaurus (AAT Example)

Note: The Functions hierarchy contains descriptors for activities that are conducted in order to accomplish specific purposes, as well as methodologies associated with specific areas of endeavor. It includes descriptors for activities relating to the manipulation of data, the collecting of objects, human communication, economics, business, law, and government, as well as other professional activities. Relation to Other Hierarchies: Descriptors describing branches of learning, (e.g., history) and areas of specialization, (e.g., law), are found in the Disciplines hierarchy. Descriptors for operations and processes performed on or with objects and materials (e.g., polishing), are found in the Processes and Techniques hierarchy. Descriptors denoting occasions and happenings of a social, cultural, religious, or personal nature, (e.g., exhibitions), are found in the Events hierarchy.

But:

this Note enumerates some cases (particulars) we are dealing with functions but does not say what are the functions, which are their essential properties!!!