SIMPLE Work Package 2

Linguistic Specifications

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Introduction

Semantics is the crucial and critical issue of the next years. Every application having to process information, in the ever growing importance of the so-called 'content industry', calls for systems which go beyond the syntactic level to understand the 'meaning'. The same is true of any - non statistical - multilingual application.

Many theoretical approaches are tackling different aspects of semantics, but in general they still have to be tested (i.) with really large-size implementations, and (ii.) with respect to their actual usefulness and usability in real-world systems.SIMPLE aims at addressing directly point (i.) above, while providing the necessary platform to allow future projects to address point (ii.).

Also when we consider the **multilingual aspect** - with its problems and challenges - which is the real problem in Europe, again semantics is at stake. We cannot hope to solve the multilingual aspect without some solution to the semantic aspects (unless we use only statistical techniques). For the addition of a multilingual layer (multilingual links) to available language resources (LR) it is essential to have a harmonized set of semantic lexicons tackling in a uniform way the core of what is needed for NLP, i.e. semantic typing of heads and arguments.

SIMPLE positions itself inside a strategic policy which aims at providing a core set of language resources for the EU languages.

The SIMPLE project , which can be considered as a **follow up to PAROLE**, aims in fact at adding a semantic layer to a subset of the existing morphological and syntactic layers.

The semantic lexicons (covering about 10,000 word meanings, 7,000 for nouns, 2,000 for verbs and 1,000 for adjectives) are being built in a **harmonized** way for all the 12 languages covered by PAROLE.

The main types of information to be encoded for nouns, verbs, and adjectives are: domain information, the semantic type of the head (with a structured semantic type), and the semantic type of the arguments of predicates (to be defined at different levels of granularity).

The semantic lexicons will be **corpus-based**, so that each language can exploit the harmonized and representative corpora built within PAROLE. This will make the semantic encoding aware of actual corpus distinctions and not only of potential, abstract generalizations based on linguist/lexicographer introspection, which can sometimes be misleading.

The SIMPLE project represents - at our knowledge - the first attempt to tackle encoding of semantic (argument) frames on a large scale, i.e. for so many languages and with rather wide coverage. Even though it is a real lexicon building project, it must also be seen as having challenging **research aspects** and will provide a framework for testing and evaluating the maturity of the current state-of-the-art in the realm of lexical semantics grounded on, and connected to, a syntactic foundation.

The availability of rather large, uniformly structured lexical resources in so many EU languages will offer the users the benefits of **a standardized base**. According to the subsidiarity concept, which is at the basis of many EU initiatives, the process started at the EU level will be continued at the national level. This is already happening for a number of languages. The PAROLE

Lexicons and Corpora will be enlarged at the national level in the framework of a number of National Projects for the following languages: Danish, Dutch, Greek, Italian, Portuguese, Swedish. These national initiatives show that the goal of the LRs EC projects, aiming at providing a core set of resources to be extended with national support, is starting to be satisfied.

The fact that all these LRs will be based on the existing models and standards defined at the European level will create a really **large infrastructure of harmonized LR** throughout all Europe. This achievement is of major importance in a multilingual country like Europe, where all the difficulties connected with the task of LRs building are multiplied by the language factor. This would have been absolutely impossible without the fundamental role played by the EC LRs and standards projects.

The SIMPLE lexicons can be at the basis of any future European initiative for multilingual lexical resources aimed at NLP and LE applications.

In the specification phase we have taken into account **requirements of NLP applications**, also as stated in the EAGLES report of the Lexicon Semantics WG (Sanfilippo *et al.* (1998)) (parsing, generation, word sense disambiguation, Information Retrieval, etc.), e.g. for the decision on the basic notions to be encoded. This is of utmost importance given the objectives of the PAROLE/SIMPLE lexicons.

As for PAROLE, the SIMPLE Lexicon, based on the results of EAGLES and GENELEX, must be declarative, and as far as possible " application independent". Only in this way, they will be able to evolve easily, for example, to incorporate other levels of information (more application or domain dependent) or to become multilingual. This approach - which answers the requisites of genericity, explicitness, and variability of granularity - will guarantee a large scale **reusability**. The model - with a high level of precision in the description - is in fact designed to ensure that application dependent models of data and applicative dictionaries can be derived from this repository of information, by mapping the application model from the generic one.

A dichotomy at stake is the one between genericity of a LR vs. usefulness for applications. It is important to avoid the expensive duplication of efforts connected to the practice of building new specific LR for each different application. This is only possible by designing and building a common repository of general lexical information which can be customized and tuned for different applications, with a large economy of scale. There exists a large core of information that can be shared by many applicative uses, and this leads to the concept of "**generic**" LRs, which is at the basis of the PAROLE/SIMPLE projects.

The exchange format for the lexicons is **SGML**: all the semantic lexicons share the **same DTD** (as for the morphological and syntactic layers).

Moreover, the use of a common set of **lexicon management tools** is a guarantee that all lexicons fully conform to the model. The use of these tools is a precondition of an **industrial level of quality** for the volume of data (in so many languages) that SIMPLE has to deliver.

All the lexicons will be **publicly available**, and distributed through ELRA.

In the current specification phase of the project, the formal representation of the 'conceptual core' of the lexicons is being designed, and the core structured set of meaning-types to be used as a common starting point and a shared device to build the harmonized language specific semantic lexicons is being built (cf. chapters 2 and 3).

The development of these guidelines has been faced with a number of difficult issues because of the lack of well-established methodological principles in lexical semantics. Hence, most of the effort has been devoted to clarifying how the existing resources and the latest research in lexical semantics could be merged to define a general architecture for encoding lexical meaning as it is revealed through language.

For these reasons, the guidelines for the semantic encoding involve a richer account of lexical information then assumed in the Technical Annex. In particular, the task of expressing selection restrictions appropriately cannot be carried out independently of a coherent structuring of the semantic information of the lexical items being selected. Similarly, the need for expressing multiple senses of lexical items in a way that captures systematic polysemy also requires the development of an overall system of coherent relations.

Drawing from the experience and research in the last decade or so it has been clear that the encoding of a computational lexicon cannot uniquely rely on a direct mapping from a paper or machine readable dictionary. Rather the formal and the lexicographic traditions must be merged in order to achieve a structuring of the data that meets the NLP requirements outlined in the Technical Annex.

The specification phase of SIMPLE has not only focused on preparing the top ontology of semantic types and the set of formal tools for the analysis of lexical items. Rather, much effort has aimed at the design of clusters of structured semantic information which could guide lexicographers through the encoding phase, by assuring a high degree of consistency. The result of this work is the set of templates which have been provided together with these guidelines. These templates will facilitate the procedure of encoding, and at the same time will guarantee a uniform amount of information encoded in word senses among different languages.

The structure of these guidelines corresponds to the following needs:

- Explaining and motivating the theoretical framework which has been elaborated for SIMPLE;
- Illustrating the various semantic tools and semantic components (e.g. top ontology, features, semantic relations, etc.)which will be used to represent word senses;
- Illustrating the notion of template, and providing as much information as possible for their practical usage in the encoding phase.

This version of the guidelines contains the detailed model for nouns, and the templates for a subset of semantic types, mostly concerning concrete nouns. Additions concerning the encoding of verbs and adjectives will be provided according to the timetable in the Addendum to the Technical Annex.

Selection of the entries/senses

The main criterion for the selection of the senses to be encoded in SIMPLE is the frequency of occurrence in available PAROLE text corpora. The fact that these corpora share a common

design with reference to text types and genres for all the languages ensures some uniformity in vocabulary (sense) selection. The other obvious criterion is the presence of the entry in the PAROLE lexicon.

In order to achieve sure overlapping of a subset of the senses for all the 12 languages – very important for future multilingual linking - it was decided to reuse the so called "base concepts" of EuroWordNet (after some 'cleaning') as a common set of senses to be encoded for all the languages (see Appendix G). This also ensures uniformity of coverage in extension – i.e. with reference to different semantic classes in the lexicons – for all the languages. This set of rather generic (i.e. high level in a taxonomy) senses will constitute the common core from which to start the encoding phase, and to which more specific senses extracted from text corpora will be linked. For these senses a multilingual link between all the SIMPLE languages is therefore already automatically given through their link to the English base concepts. This set has been also used to check coverage of the set of templates/semantic classes defined over the lexicon.

This set of common senses will also allow easier cross-language comparison and evaluation of encoding among languages at a defined check point during the project.

It was also decided that, in general, the SIMPLE lexicons will try to cover the main senses related to a chosen lexical entry. This will allow treatment of polysemy (regular or not).

The Problem of 'closure of the lexicon'

It is clear that having to encode 'only'10,000 senses, with each of them pointing through all the relations provided by SIMPLE (for which see below chapter 4) at other senses, it is impossible to aim at a 'closed' lexicon. We have considered this aspect and decided to allow 'non-closed' links to dummy senses. This decision is in line with considering the SIMPLE lexicons as basic core lexicons to be extended to real-size lexicons at the national level.

Chapter 1

The SIMPLE Model

1.1.1. Multilingual aspect

The development of the SIMPLE model has taken into account the ultimate goal of simultaneously building 12 lexicons in a harmonized way, in order to establish the basis for a future multilingual linking. This requires a common vocabulary, a common model as well as a common methodology for building the lexicon.

The task is that of identifying common elements across languages (universal lexical principles). These include: (i.)a common core of **semantic types** that guarantee uniformity and consistency of the representations; (ii.) **relations between semantic units**; (iii.) **semantic features**; (iv.) **domain features**.

1.1.2. Size, flexibility and openness of the lexicon towards future extensions geared at particular applications

Part of the goal of SIMPLE is to make future extensions possible, by adding further or more specific information, and to tune each lexicon to specific applications. To this end, it is necessary to develop explicit mechanisms for:

1. constructing lexical structures on principled grounds;
2. establishing the granularity of the semantic representations for all lexical items;
3. making the encoding process feasible at present, and transparent to future extensions of SIMPLE.

The general philosophy that has guided the design of the SIMPLE architecture is to develop a unified system based on a uniform strategy (i.) for encoding different parts of speech (i.e. nouns, verbs and adjectives), and (ii.) for developing a coherent system of representations to express selectional restrictions, as required in the Technical Annex (TA).

There is no unique solution to achieve the goals specified in the TA. However, part of the

task of carrying out the specifications of the SIMPLE model have involved unpacking the consequences of the two goals mentioned above.

1.2.1. Assigning the Semantic Typing of Word Senses

The notion of semantic type is traditionally a rather vague one. It could either be taken to be an atomic entity, or alternatively to correspond to a cluster of structured information. Given the need to harmonize the lexicons for the different languages, the first alternative has not appeared to be viable.

The specification phase has therefore worked under the starting assumption that a semantic type is taken to be a cluster of structured semantic information. The underlying model that has supported the development of the set of top types which constitute the Core Ontology for SIMPLE is the *Generative Lexicon* (Pustejovsky, 1991, Pustejovsky and Boguraev, 1993, Calzolari, 1991, Pustejovsky, 1995, Busa, 1996, Pustejovsky, 1998).

One of the most important target of SIMPLE is the specification of selectional restrictions for predicative semantic units. This task involves assigning a semantic marker to the arguments selected by a given verb, adjective or predicative noun. The crucial problem to meet this task is to provide a coherent organization of the *types* of entities which are selected by a given sense of a word. Consider the examples below, where verbs select for entities of different semantic types, which must themselves be coherently structured:

Swim	→	**living entity**
Drill	→	**aperture - hole**
Nominate	→	**role of an individual**
Chapter	→	**semiotic artifact**
Marry	→	**human**
Echo	→	**sound**
Gather	→	**group**
Happen	→	**event**
Fire	→	**employer**

The leading assumption behind the development of the specifications can be summarized as follows: *each word sense corresponds to a given semantic type. Each semantic type is actually a cluster of structured information. Semantic types differ in terms of how much information they carry. In other words, word senses differ in their degree of complexity, which is explicitly part of their semantic type*.

The specifications have been crucially concerned with defining the vocabulary and the rules that are involved in the construction of semantic types. These issues are addressed in light of their relevance for making the task of building simultaneously the lexicons for twelve different languages feasible, for providing guidance to practical lexicographic work while ensuring consistency of the resulting representations, for addressing the properties of an interlingua, and for providing a framework for lexical semantics which is actually testable.

Since the encoding of the semantic information is carried out in different sites working within 12 languages, it is imperative to ensure a high degree of uniformity in the semantic representations and to make the following decisions in a non ad-hoc fashion:

a. **which** information should be encoded;
b. **how** is semantic information encoded;
c. **what** is the level of granularity of the semantic information in the lexical representations.

The SIMPLE model addresses these issues by providing a guiding schematic structure, called *template* (this is discussed in detail in chapter 4). SIMPLE templates are an interface tool between the semantic type system (presented in chapter 3) and the lexicon for a given language.

In what follows we distinguish between different entities which are part of the overall SIMPLE model and which are discussed in the subsequent chapters:

1. **(Semantic) Type** - corresponds to the semantic type which is assigned to lexical items. Each type involves structured information. Semantic types will also be used to express selectional restrictions on the arguments of predicative expressions.

2. **Template** - a schematic structure which the lexicographer uses to encode a given lexical item. The template expresses all the semantic type, plus additional information, e.g. domain, semantic class, gloss, predicative representation, argument structure, polysemous classes, etc. Templates are intended to guide, harmonize, and facilitate the lexicographic work. A set of top templates have been prepared during the specification phase, while more specific ones will be eventually elaborated by the different partners according to the need of encoding more specific concepts in a given language. The present guidelines are also intended to provide a way to harmonize the eventual creation of more specific templates, in order to enhance the general consistency of the lexicon.

3. **SemU** - Following the terminology of the GENELEX Model, word senses are encoded as *Semantic Units* or *SemUs*. Each SemU is assigned a semantic type plus other sorts of information which are intended to identify a word sense, and to discriminate it from the other senses of the same lexical item. SemUs are language specific. SemUs which identify the same sense in different languages will be assigned the same semantic type. So for instance, the SemUs for <dog> (Eng.), <hund> (Ger.) and <cane> (It.) will all receive the semantic type **[Animal]**. The information which forms the content of the SemUs in SIMPLE is therefore intended to provide the basis for future multilingual links between the different lexicons.

The survey of the EAGLES' Lexical Semantics Group has provided important guidance with respect to the lexical semantics frameworks available for defining the basic architecture.

The lexical semantics frameworks are the following:

- *Nouns* - the Generative Lexicon (cf. Pustejovsky, 1995), WordNet (cf., Miller and Fellbaum, 1991), EuroWordNet (cf. Vossen *et al.* 1998).
- *Verbs* - Beth Levin's Semantic Classes (cf., Levin, 1993), Jackendoff's Conceptual Structure (cf., Jackendoff, 1993), DELIS (cf. Monachini *et al.*, 1994), FrameNet (Lowe *et al.*, 1997), WordNet, the Generative Lexicon for certain classes.
- *Adjectives* - Dixon's classification (cf., Dixon, 1991), the Generative Lexicon for certain classes.

Other inputs for the specification work have also been provided by:

- LexiQuest' implementation of the GENELEX Model.
- The Generative Lexicon
- Results from EuroWordNet.
- EAGLES recommendations
- Results from previous and current European Projects: ESPRIT BRA-AQUILEX, LRE-DELIS, LE-SPARKLE

In particular, SIMPLE represents an important attempt to tackle encoding of lexical semantics information of different part of speech, and the first one on such a large scale for so many languages. As already mentioned, this presents challenging research aspects which have been addressed separately in different projects, whose results and experience SIMPLE tries to incorporate and harmonize.

The SIMPLE model includes a Core Ontology, comprising a set of language independent semantic types. The set of top semantic types are built according to a mechanism of type construction which takes into account critical linguistic facts, as explained in chapter 2.

Chapter 2

The Core Lexicon for SIMPLE

In this chapter we first present the linguistic motivations for the model and then outline the general principles of the Generative Lexicon (henceforth GL).

One of the basic tenets that we have adopted (following the GL model) is that word senses differ in terms of their internal complexity. This assumption is motivated by observing the linguistic behavior of words in a number of different grammatical constructions. Of course, different types of phenomena are indicative of meaning components of different sorts.

2.1.1. Adjective-Noun Constructions

The first piece of linguistic evidence that words have internal constitution is given by adjective-noun constructions. Consider the following set of examples:

(1) a. a good chair = good to sit on
b. a good apple = good to eat
c. *a good tree = good to ???
d. *a good explosion = good to ??

(2) a. a competent architect
b. *a competent chair
c. ?a competent teenager

□3) a. an old tree
b. an old architect
c. my old chair

In the examples above, the interpretation of the adjectives with different nouns changes (at least in normal contexts). In the cases where the adjective is not allowed with certain nouns (e.g. (1c), (2b-c)), the behavior cannot be directly attributed to the fact that adjectives may prototypically select for physical object, event, or human. There is something deeper going on, which in (1a) depends on whether the noun allows to reconstruct an event reading directly. Similarly, the adjective *competent* selects for nouns denoting humans that also perform a characterizing event (an ability, a profession, for instance). Finally, *old* has more than one interpretation with *architect* and *chair*, and only one interpretation with *tree*. For instance, (3c) can either mean that the chair has been mine since long time, or that the chair is not new. On the other hand, (3a) can only mean that the tree is not young.

2.1.2. Prepositional Phrases

The following two sentences with different prepositions receive different interpretations:

(4) a. John is by his desk
b. John is at his desk

(4a) means that the individual is located near the desk; (4b) has the reading that the individual is actually carrying out some activity (i.e. working). Again the preposition is sensitive to the underlying semantic of the noun.

2.1.3. Denominal Verbs

Productive derivational processes such as the formation of denominal verbs provide additional evidence for describing noun semantics as involving a rich set of semantic relations. Consider the following examples:

(5) a. John boxed the wine.
b. John appletalked the files.
c. Mary archived the files.

The interpretation of the derived verb is systematically determined by the typical use that people make of boxes, appletalk and archives. For instance, *to box the wine* means to put the wine into boxes, while *to appletalk the files* means to transfer the files with appletalk.

2.1.4. Verbs

Verb semantics can also be viewed in terms of different degrees of complexity. It is well known that verbs may be distinguished according to whether they encode causation for instance. In this case they involve a behavior which is quite different from other verbs without the same underlying structure. Verbs can also be polysemous in that they may surface with different forms which are however related:

(6) a. John rented a house to Mary.
b. John rented a house from Mary.

(7) a. John broke the cup.
b. The cup broke.

The way in which verb semantics is represented should provide a basis for accounting for these types of alternations.

2.1.5. Adjectives

Finally, adjectives also differ in terms of their complexity:

(8) a. a tall boy
b. *a boy tall from eating a lot.

(9) a. an angry boy
b. a boy angry because of the news.

Again, *tall* and *angry* seems differ in ways which are similar to the verbal forms described above. For instance, the data in (8) and (9) can be explained by saying that adjectives like *angry*, which express temporary properties, contain an inherent reference to the factor that brings this state about.

In summary, lexical items belonging to any category can be distinguished with respect to their complexity. Consider how the lexical items below, which have been chosen at random, carry different types of information:

	Nouns	**Verbs**	**Adjectives**
No-functionality	*dog, father, pedestrian*	*exist, give*	*tall, red*
Functionality	*pet, chair, architect, newspaper*	*persuade, send*	*edible*
Relational	*father, neighbour*	*kill, give, persuade, rent*	*easy, difficult*
Temporary Properties	*laundry, pedestrian*	*lend*	*drunk*
Systematic Polysemy	*Newspaper*	*rent*	*sad, clever*

As shown in the table above, the same word meaning can be classified along different dimensions, some of which are built into the semantic type of a given sense.

Conventional approaches to lexicon and knowledge base design rely on a strategy of designing an upper model of concepts, based on subsumption relations. Semantic types are usually organized in hierarchies which often allow for multiple inheritance (cf. for instance ACQUILEX in Calzolari (1991))

As shown in Pustejovsky (1998), the degree of complexity of the lexical items, discussed in the previous section, can be captured in terms of the following distinctions between semantic types:

Simple types - They can be characterized only in terms of *monodimensional* basic taxonomic

relations (e.g, *dog, exist, red*).

Unified types - They involve *orthogonal sorts of information*, and require to be organized in a multidimensional way (e.g., *pet, chair, father, pedestrian, persuade, give, kill, easy*).

Complex types - Types which identify regular polysemous classes (e.g., *newspaper, rent, clever*).

In chapter 3 we present in greater detail how these different types of lexical complexity have been implemented in SIMPLE. The GL framework has provided the basic principles and vocabulary to represent some aspects of the semantic complexity of lexical items.

Given the assumption (also shared by other approaches like ACQUILEX (Calzolari 1991), DELIS (Monachini *et al.* 1994), etc.) that multiple dimensions of meaning are necessary to start characterizing lexical units at the semantic level, the *Qualia Structure* has been adopted as one of the crucial organizing principles for the representation of lexical meaning. In fact, it is able to provide the basic vocabulary to express different/orthogonal aspects of word-meaning. The general aim is to move beyond a one-dimensional hierarchy capturing the standard relations of hyponymy and hyperonymy.

Qualia Structure involves four different roles, that roughly answer different questions concerning the properties of a lexical item X:

- **Formal Role -** it provides the information that distinguishes an entity within a larger set.
- **Constitutive role** - it expresses a variety of relations concerning the internal constitution of an entity
- **Telic role** - it concerns the typical function of an entity, i.e. what the entity is for.
- **Agentive role** - it concerns the origin of an entity, or its coming into being.

Qualia-based information can be specified for all the parts of speech, although *prima facie* it seems to be more directly suitable for the characterization of certain types of nominals. It has been one of the tasks of the specification phase in SIMPLE to extend the original interpretation of each Quale in an appropriate and consistent way, in order to use the Qualia Structure as a general representation tool for the analysis of the different parts of speech.

The four Qualia roles do not lie on the same dimension, but rather they represent multiple dimensions of word meaning. Consider the noun *pudding*, for instance:

FORMAL	CONSTITUTIVE	TELIC	AGENTIVE
substance	ingredients	eat	make

Pudding

These aspects of meaning are crucial in the codification process also because of their linguistic effects. The following examples show how different verbs actually target different aspects of the meaning of pudding:

(10) a. John refused the *pudding* (e.g. refused to eat - *telic*)
b. That's an easy *pudding* (e.g. easy to make - *agentive*)
c. There is *pudding* on the floor (e.g. substance - *formal*)
d. The *pudding* came out well (e.g. has been made well - *agentive*)
e. That was a nice bread *pudding* (e.g. made-of/ingredient - *constitutive*)

2.4.1. Qualia Structure as a Semantic Vocabulary

Qualia structure is a representational tool for expressing part of the componential aspect of word meaning, which:

- captures different degrees of complexity between lexical items
- provides a set of inferences available by default (e.g. *John refused the pudding => refused to eat*)

Qualia structure in SIMPLE has been used as the basic syntax for constructing word meanings (cf. Pustejovsky, 1998). Each Qualia role can thus be viewed as an independent element or dimension of the vocabulary for semantic description.

With this understanding of the role of the Qualia structure, it is possible to ask a set of questions that from a theoretical perspective are at the core of lexical semantics research, and from a practical perspective allow to achieve systematic encoding on a broad scale. The questions are as follows:

i. what is the structure of semantic types?
ii. what are the mechanisms for building new semantic types?
iii. how does inheritance take place in natural language?

Although SIMPLE cannot aim at giving an answer to these interrogatives, they provide the general background and perspective that inspires the specification work.

The possible values for the Qualia roles have been extended in SIMPLE in order to express fine grained distinctions between the large variety of semantic types. To this end we have added the notion of *extended Qualia stucture*, which is described in the next section.

2.4.2. Extended Qualia Structure

The GENELEX model imposes a number of constraints for the representation of the componential aspect of word meaning. In order to meet these requirements, Qualia roles in SIMPLE have been implemented as relations between SemUs (*R_SemU* in the GENELEX DTD) and, in a more restrict number of cases, as valued features (*WeightValSemFeature*). This has required developing a representational strategy that would allow lexicographers to represent/encode the richness of semantic relations in natural language, while maintaining the basic structural properties of the semantic type given in terms of Qualia structure.

Each of the four Qualia roles is represented as a relation, which is in turn the top of a hierarchy of other more specific relations, representing more fine-grained subtypes of information of a given Quale. These hierarchies of relations within the four Qualia have been called *extended Qualia set*:

1. For each of the four Qualia roles we have specified an *extended Qualia set*, namely subtypes of a given Qualia role which are consistent with its interpretation.

2. For each element in the extended Qualia set we have distinguished the type of its contribution to the process of type construction. More specifically, we have distinguished cases in which a Qualia relation *defines* a type, form the cases in which a Qualia relation simply specify some additional information for a type. For the distinction between type-defining and additional semantic information, cf. chapter 4.

This strategy has allowed us to capture fine-grained semantic aspects of word senses, even in semantic domains which are usually recalcitrant to semantic analysis. Moreover, the main task of SIMPLE, i.e. building multipurpose lexical resources, makes it necessary to encode various and different aspects of word meaning, which can be targeted by different types of NLP applications. The wealth of represented information thus calls for specific organizing principles, which in the case of SIMPLE are provided by the Qualia roles.

Qualia roles also allow to capture the similarities between semantic aspects of words belonging to very different conceptual areas (as well as more fine-grained differences between words belonging to close semantic types). As an illustration of the linguistic reasons for introducing the extended Qualia Structure, compare the nouns *fish* and *swimmer*. A swimmer is clearly an individual whose typical function is that of "swimming" (in the examples below, the terms between angles are SemUs. For a detailed descriptions of the Qualia relations adopted in SIMPLE, cf. Appendix A):

swimmer
FORMAL: *Isa*(<swimmer>, <person>)
TELIC: *Is_the_activity_of*(<swimmer>, <swim>)

However, in the process of encoding the semantics of the lexical item *fish* , one may want to encode the information that one of the typical activities of fish is to swim, although we need to tease apart how the same event-type plays a role in characterizing the type of these lexical items. In doing so, it is necessary to take into account their different linguistic behavior. Modified by different adjectives the two nouns behave quite differently, as shown below:

(11) a. an old swimmer
i. a person who is old and who swims
ii. a person who has been swimming for a long time.

b. an old fish
   i. a fish which is old
   ii. #a fish which has been swimming for a long time.

The information that a fish typically swims is not properly part of its telic dimension, i.e. it does not concern its inherent purpose. Rather, this information is somehow related to the way in which a fish is "constitutionally built". In the latter case, the property of swimming does not add telic information to the type, but specifies fish according to a constitutive/physical dimension. For this reason, the information that a fish typically swims is expressed in the constitutive Quale, by means of the relation *Constitutive_activity*:

fish
FORMAL: *Isa*(<fish>, <animal>)
CONSTITUTIVE: *Constitutive_activity*(<fish>, <swim>)

Similar things can be said for the information of agentive type. Consider, in fact, *honey* and *car*, which could be given the Qualia-based description informally notated as shown:

honey
FORMAL: *Isa*(<honey>, <substance>)
CONSTITUTIVE: *Produced_by*(<honey>, <bee>)

car
FORMAL: *Isa*(<car>, <vehicle>)
AGENTIVE: *Created_by*(<car>, <make>)

In fact, these lexical items show different linguistic behavior with respect to the information concerning their coming into being or production:

(12) a. I finished the car (i.e. *to make the car*)
   b. *? The bee finished the honey (?? *to produce the honey*)

The mode of coming into being of natural kinds such as honey seems to have different linguistic import from that of entities that are artifactual (i.e. man-made). The agentive relation *Created_by* has been used to describe artifactual entities, while the constitutive relation *Produced_by* is used to describe natural production, for instance to express the fact that being produced by bees is part of the constitution of honey.

In the next chapter, we describe how the Qualia relations can be combined to give rise to semantic types of different degrees of complexity as captured in the SIMPLE Ontology.

Adjectives have not been studied as extensively as have nouns and verbs in traditional lexical semantics and yet they are semantically as complex - if not more so. For example, one problem specific to adjectives is that a particular adjective can ``emphasize a different property of a noun in a different context'' (Raskin et al. 1995: 21). The terms *plasticity* (Marx, 1983) and *non-compositionality* (Lahav, 1989) are used to refer to this phenomenon, i.e. the capacity of adjectives

to change meaning by highlighting a particular meaning component of a noun. In this section we discuss various descriptive classification schemes that have been employed to describe adjectives and from these motivate the representation of adjectives proposed in SIMPLE, and which will be illustrated in chapters 3 and 4. One of the goals here is to clarify and relate the terminology different authors have used in their descriptions of adjectives.

While our principal goal is to address the semantics of adjectives, classification schemes for adjectives frequently refer to the morphological and syntactic properties of adjectives, as well as to their semantic properties, and indeed subtle interactions between morphological, syntactic and semantic behaviour of adjectives can be observed. At the highest level our discussion is therefore structured around distinguishing morphological, syntactic and semantic classifications for adjectives.

2.5.1. Morphological Issues

There are at least two morphological features of adjectives that are of relevance.

1. **Inflection** - Some adjectives can be inflected, reflecting the degree or intensity with which they hold, e.g. *tall, taller, tallest*. However, not all adjectives which can be intensified inflect (*beautiful*), nor do all adjectives permit of intensification (*atomic*). The topic of gradability is discussed further below; for now we observe only that the potential to be inflected implies gradability, though not the converse. However, this capability is enough to warrant recording, since it has semantic relevance.

2. **Derivation** - Adjectives may be derived from nouns (*denominal*), e.g. *atomic*, from verbs (*deverbal*), e.g. *readable*, or they may be *non-derived*. Denominals may be further distinguished according to whether they are derived from common nouns, e.g. *atomic* or from proper nouns, e.g. *American*.

2.5.2. Syntactic Issues

The position that an adjective can occupy in a phrase or sentence is also a clue to its semantic behaviour. The key distinction that is usually made here is that of classifying the syntactic function of adjectives as either *attributive-only, predicative-only or attributive-and-predicative* (Quirk *et al.*, 1985: 402).

An adjective is functioning attributively when it occurs before the noun it modifies, as in (13), and predicatively when it occurs as a subject complement following a noun in subject position and attached to it by a copula, as in (14), or as an object complement when postmodifying a noun in object position, as in (15):

(13) the beautiful girl
(14) The girl is beautiful.
(15) He found her beautiful.

Notice that in these cases the same adjective (*beautiful*) may function in each capacity - such adjectives are *attributive-and-predicative*. However, some adjectives may be used exclusively

attributively. For example consider (16) and (17):

(16) the chemical engineer
(17) * The engineer is chemical.

Further, other adjectives may only appear predicatively:

(18) He was loathe to admit it.
(19) * the loathe man

Since attributive-only adjectives cannot be nominalized and predicative adjectives can, as is illustrated by (20) and (21) respectively, nominalization can provide another straightforward test for finding out what type of adjective one is dealing with:

(20) * the polarness of the bear
(21) the politeness of the student

2.5.3. Semantic Issues

There are many semantic subtleties associated with adjectives. These have been addressed by multiple authors using different terminology and with differing perspectives. We start here by considering accounts by Chierchia and McConnell-Ginet (1990) and Quirk, Greenbaum, Leech and Svartvik (1985). These accounts enable us to identify a number of semantic classifying features for adjectives. We then continue by looking at certain other semantic features that it may be helpful to record for adjectives.

2.5.3.1. Chierchia and McConnell-Ginet

Looking at the logical behaviour of adjectives, Chierchia and McConnell-Ginet (1990: 371) divides adjectives into three types, namely *intersective*, *subsective* and *nonpredicating* adjectives (see also Arnold 1989). This distinction is part of the EAGLES recommendations for the semantic typology of adjectives. To avoid confusing the semantic term 'nonpredicating adjective' with the syntactic notion of predicative adjective, we will use the term *intensional* to refer to nonpredicating adjectives. Both intersective and subsective adjectives can be captured by the opposite term *extensional*.

Intersective adjectives are those for which the set of things denoted by the adjective-noun compound is the intersection of the set of things denoted the adjective and the set of things denoted by the noun. This leads to particular entailment behaviour. So, in the case of the intersective adjective *red*, we see that (22a) entails (22b) and (22c):

(22) a. The car is a red Volkswagen.
b. The car is red.
c. The car is a Volkswagen.

In contrast to intersective adjectives, *subsective* adjectives do not denote a set of things which can be identified independently of the noun they modify, for their meaning is in some sense `relative' to the thing they modify. And this leads to different entailment behaviour. For example, if we look at

example (23), we see that (23a) entails (23c) but not (23b). The expression (23b) is only true in relation to the particular noun it is modifying:

(23) a. It is a really big spider.
b. It is really big.
c. It is a spider.

Intersective adjectives are like subsective adjectives: they both can be used predicatively, they both express properties, and in combining with a noun they both refer to a subset of that noun. However, the properties expressed by intersective adjectives, also referred to as absolutes in EAGLES, have a more absolute truth-value, i.e. they are less dependent on context than the subsective adjectives which in EAGLES are referred to as relatives.

The third adjectival type distinguished by Chierchia and McConnell-Ginet differs from the intersective and subsective adjectives in that *intensional* adjectives do not serve to select a subset of the things denoted by the noun they modify. Formally, Chierchia and McConnell-Ginet propose that intensional adjectives should be seen as denoting functions from properties to properties. For example, *former* in (24a) maps the property of being a catholic to the property of being a former catholic:

(24) a. Victor is a former Catholic.
b. * Victor is a former.
c. Victor is a Catholic.
d. Victor was a Catholic.

Because of the adjective's intensional status, (24a) entails neither (24b) nor (24c) though it does entail (24d).

2.5.3.2. Quirk, Greenbaum, Leech and Svartvik

In A Comprehensive Grammar of the English Language, Quirk *et al.* distinguish three dimensions to semantically subclassify adjectives: *stative/dynamic*, *gradable/non-gradable* and *inherent/non-inherent*.

Stative/dynamic - Where nouns encode temporally stable entities and verbs express temporally unstable entities, adjectives occupy an intermediate position on the time-stability scale (Givon 1984: 52). Because in English most adjectives are derived from nouns, they are primarily stative in meaning, i.e. they attribute stable properties to the referents of the nouns they are modifying. This is true, for example, for *tall* and *old*. However, other adjectives can refer to transitory conditions of behaviour or activity. Particularly adjectives that denote qualities that can be restricted temporally by the possessor, such as *naughty* and *vicious*, are capable of being dynamic. Syntactically, stative and dynamic adjectives differ from each other in several ways (Quirk *et al.* 1985: 434). For example, in contrast to dynamic adjectives, their stative counterparts cannot be combined with the progressive tense of *to be*, as is shown in (25a) and (25b) respectively:

(25) a. She was being playful.
b. * He was being skinny.

Also, static adjectives cannot be used with the imperative, whereas dynamic can:

(26) a. Be serious.
b. * Be skinny.

It seems that the same distinction is sometimes being referred to by the terms *individual-level predicate* and *stage-level predicate*, where the former stands for the stative meaning and the latter captures the dynamic variant.

Gradable/non-gradable - Gradability is another property that is seen as very crucial in the description of adjectives. In English, gradation is rarely lexicalized. Examples of lexicalized gradation, taken from Miller (1998: 53) are found below:

QUALITY: *superb great good mediocre bad awful atrocious*

SIZE: *astronomical huge large* (no neutral term) *small tiny infinitesimal*

More often, gradation is accomplished by means of (a) adverbs of degree, such as *very*, or by (b) morphological rules for the comparative and superlative degrees. According to Quirk *et al.*, all dynamic adjectives are gradable, and most stative ones are. They explicitly mention technical denominal adjectives (e.g. *atomic*) and adjectives denoting provenance (e.g. *British*) as nongradable stative adjectives. According to Levi (1978: 19), all intensional adjectives are not gradable. However, it is rather difficult to find an adjective that, under all circumstances, is truly non-gradable.

Inherent/Non-inherent - Quirk *et al.* (1985: 435) distinguish between inherent and non-inherent adjectives. *Inherent* adjectives are said to "characterize the referent of the noun directly". Key examples they give to illustrate this distinction are:

(27) a. my old friend
b. that old man

In (27a) *old* characterises the friendship, not the referent of the noun *friend* - hence it is *non-inherent*. However, in (27b) *old* characterises the referent of *man* and is therefore *inherent*. This distinction is subtly different from earlier ones. Quirk *et al.* first mention the inherent/non-inherent semantic distinction in the context of the syntactic distinction between attributive and predicative use. So, while *old* can be used predicatively with the same sense as in (27b) (*that man is old*) it cannot be used predicatively with the same sense as in (27a) (*my friend is old*). However, it is not the case that non-inherent adjectives cannot be used in predicative constructions:

(28) That student is new.

Furthermore, the inherent/non-inherent distinction does not map neatly onto the intersective/subsective/intensional distinction. Inherent adjectives may be either intersective (e.g. *red*) or subsective (e.g. *large mouse*) since they describe a property that inheres in the object denoted by the noun, though the scale according to which the property value is selected may vary according to the object type being modified. Non-inherent adjectives are certainly not intersective, but they are also not subsective in the sense that 'relatives' like *large* or *small* are. For unlike subsectives which characterise the referent of the noun according to scale appropriate to that object's type, non-inherents do not characterise the referent *qua* its 'natural kind' but rather characterise the role in which the referent is cast by virtue of the common noun chosen to describe it. Thus, in (27a) it is not the person referred to by *friend* who is old but the friendship, referenced by the role label *friend* which is used to describe the referent. Similar remarks could be made about,

e.g. *a perfect mother*, *an ideal partner*, *a good knife*, and so on. Finally, non-inherent adjectives are not intensional in that the entailment patterns predicted for canonical examples of intensionals such as *former Catholic* do not apply here: my old friend is indeed a friend, while former Catholics are not Catholics. Given the difficulties in the inherent/non-inherent distinction, we have decided not to include it in the SIMPLE model for adjectives.

Chapter 3

The SIMPLE Ontology

As described in chapter 1, the specifications have distinguished between three components of the SIMPLE model:

- **The set of SemUs**, which constitute the lexicon for a given language.
- **The Ontology** (i.e. the Semantic Type System), which provides the Conceptual Core which is shared by all the lexicons.
- **The Template**, which provides the interface between Ontology and lexicons, and which is meant to guarantee uniformity and systematicity of the encoding process.

In this chapter we present in greater detail the structure of the basic system of types.

In SIMPLE, the semantic type system is subdivided in three layers:

- ***The Core Ontology*** - it is formed by those types which have been identified as the central and common ones for the construction of the different lexicons. The Core Ontology has been elaborated according to the following criteria:

  1. Their central position in the organization of the lexicon;
  2. The fact that they are widely acknowledged in the linguistic and NLP literature as core notions for the semantic characterization of words;
  3. The low level of granularity of the semantic description they provide, which also ensures their multilingual usability. Therefore, the types in the Core Ontology represent the highest nodes in the hierarchy.

- ***Recommended Ontology*** - this is formed by more specific types (lower nodes in the hierarchy), which provide a more granular organization of the word-senses. Lexicographers are free to choose whether to encode a given SemU by assigning it a type from the Core Ontology or by using a more specific type taken from the Recommended Ontology.

- ***Language Specific Types*** - more detailed types may be created in order to organize a lexicon for language-, domain- or application-specific needs. These types are not provided in the specification phase, and can be eventually added if their elaboration is consistent with the organization of the rest of the SIMPLE model.

The semantic type system is largely based on the Generative Lexicon framework, where the different degrees of complexity of semantic types are captured by means of the content of the Qualia structure. The distinctions between semantic type can be expressed in terms of a distinction

drawn in Pustejovsky (1998), where types are distinguished between *simple* and *unified* (actually, Pustejovsky also identifies a third kind of semantic types, i.e. *complex types*, which are used for words belonging to regular polysemous classes). The specification phase has adapted this basic distinction to the specific needs of the SIMPLE project. In particular, a set of guidelines to construct semantic types of different degrees of complexity has been provided.

The specification of the top ontology of SIMPLE has proceeded in both a top-down and a bottom-up fashion. Working top-down has involved employing a set of theoretical assumptions that are grounded on a formal model of lexical semantics; bottom-up work has involved refining and extending the model in light of the specific issues raised by the data.

Having assumed semantic types which vary in their internal complexity, we understand complexity in two ways. One refers to the internal semantic constitution of a lexical item, namely how many dimensions of meaning are associated with it, such that we can talk about that lexical item from multiple perspectives. Consider the word *chair*, which allows for a rich set of expressions having to do with different components of its meaning: we can talk about its material constitution, e.g., a *wooden-chair* (constitutive dimension), its property relative to its function, e.g., a *comfortable chair* (telic dimension), and its aspect of coming into being, e.g., an *unfinished chair* (agentive dimension). The same does not hold for a noun such as *sky*, for instance, which is a natural kind entity where some of the Qualia roles can be viewed as unspecified. In fact, we cannot talk about an *unfinished sky* (unless, of course, we are talking about a representation of it in a painting), or a *comfortable sky*. Thus, we say that a semantic type such as the one to which *chair* refers to is **unified**, and that to which *sky* refers to is **simple**.

In broad strokes, unified types are those which are intrinsically identified for the functional and telic information they contain. Consider for instance artifacts. They are built for a particular purpose. Simple and Unified types thus represent two different layers of complexity of semantic types. The former are those that are simply identified in terms of subtyping relation, while the latter are identified by explicitly reference to other orthogonal dimensions, i.e. the agentive and the telic one, as essential aspects of their meaning.

The other way of talking about the complexity of a lexical item is in terms of how many different senses (e.g. semantic types) it incorporates. This is the case of *regularly polysemous lexical items* with multiple meanings, e.g. *cotton, rabbit, newpaper, university*:

(1)	a.	Cotton grows in Southern regions	(**plant**)
	b.	This sweater is made of cotton	(**substance**)
(2)	a.	My rabbit Louise is very lively	(**animal**)
	b.	There is rabbit for dinner	(**food-substance**)
(3)	a.	John spilled coffee all over the newspaper	(**physical object**)
	b.	The newspaper fired John	(**institution**)
(4)	a.	The university announced a plan to build new departments	(**institution**)
	b.	I will wait for you by the university	(**building**)

Of course, each sense in the alternation classes above may vary in its internal complexity along the same lines that distinguish *sky* and *chair*.

3.1.1. Simple Types

The type of a lexical item is simple if the item is defined in terms of a taxonomic relation to

another entity in a hierarchy.

They correspond to basic categories which can be defined in terms of a flat taxonomy only. Therefore, they are organized uniquely in terms of hyponymic relations.

As explained in the next chapter, the templates provided in the specification phase contain a field **Template_Supertype** to represent the hierarchical organization of the semantic types.

3.1.2. Unified Types

Semantic types are usually identified by their position in a hierarchical structure. In standard taxonomies, semantic types are all structurally equivalent. However, this assumption has well-known shortcomings, as also underlined in Guarino (1998). Take for instance the following pairs of types: **[Animal]**, **[Living_entity]**; and **[Profession]**, **[Human]**. The first element of each pair is a subtype of the second element. However, while this monodimensional relation provide an exhaustive characterization in the case of a type like **[Animal]**, for a type like **[Profession]** it is not enough. In other words, the type **[Profession]** is not exhaustively described by the subtype relation with the type **[Human]**. Take in fact nouns referring to professions like *lawyer*, *doctor*, *soldier*. For instance, notice that they are all humans, but one can cease to be a doctor or a soldier without ceasing to be a human. In other words, these nouns inherently refer to a functional dimension of human beings, which is added to the purely ontological dimension of their being human. One is no longer a lawyer, unless he is endowed with the functions and roles which are typical for this profession. This means that the type **[Profession]** needs extra coordinates, which refer to the functional dimension it incorporates.

Unified types are multidimensional types, i.e. they are types where the agentive and/or telic information inherently characterize the essence of that type. In other words, unified types need multiple coordinates to be identified. These coordinates include the supertype they are related to, plus the agentive and/or telic dimensions which enter into their type-constitution. These multiple coordinates have been formally represented in SIMPLE by means of the notion of **Unification_path**, as described in chapter 4. This means that the general hierarchy of semantic types actually includes types of different complexity. While some types are simple, i.e. monodimensional, others are so to speak 'multilayered types', in the sense that they are inherently defined by the agentive and/or telic dimension they include.

Another example is given by a type like **[Vehicle]**. This type is inherently defined by its referring to artifactual entities, which are built with a certain function, i.e. transportation. Although vehicles are actually kinds of concrete objects, nevertheless this relation cannot be exhaustive for their characterization, because vehicles are intrinsically defined by their being kinds of artifact, and especially by their function.

The crucial property of unified types is that every unified type is *grounded* on a simple type. They are built by adding to a given simple type (*which represents the supertype of the unified type*) an agentive and/or telic layer, which thus enter into the inherent characterization of that type.

One of the advantages of having an ontology that also includes multidimensional types, is that it can be the starting point for the definition of a system of types organized through the principles of *Orthogonal Inheritance* (Pustejovsky and Boguraev 1993, Pustejovsky, 1995). Orthogonal Inheritance is a way to overcome the limitations of conventional inheritance mechanisms which define semantic relations completely in terms of the IS-A relation and resort to features when this is

not sufficient. Orthogonal inheritance essentially enriches the conventional inheritance models by defining semantic relations on multiple dimensions which are given minimally by Qualia structure. As such, it models the observation that word meaning is structured according to different dimensions given by Qualia structure:

(5) a. apple is-formal phys_obj
b. apple is-telic food
c. cake is-formal phys_obj
d. cake is-telic food
e. cake is-agentive artifact

These are components of meaning that coexist in a concept.

Orthogonal dimensions thus provide the base to create new types out of simple types and Qualia relations. In the following schematic representation, the hierarchy of types on the left includes simple and unified types. The latter are created out of a simple type with the adding of some inherently characterizing agentive and/or telic information, represented in terms of Qualia relations. Notice that each unified type has a subtype relation with the simple type it is derived from (the subtype relation is marked with an arrow, while simple lines represent the orthogonal dimensions provided by the agentive and telic information):

Simple Types

Abstract **Event** **Concrete** **Agentive** **Telic**

Human

Cognitive_fact **Artifact** **Profession**

An alternative way to view the above hierarchy is presented below, which closely mirrors the information that is presented in the template (cf. chapter 4):

SemU:	<artifact>
Template_Type:	**[Artifact]**
Unification Path:	**[Concrete_entity | Agentive | Telic]**
Formal:	*Isa* (<artifact>,<entity>)
Agentive:	*Created by* (<artifact>, <make>)

SemU:	<doctor>
Template_Type:	**[Profession]**
Unification Path:	**[Human | Telic]**
Formal:	*Isa* (<doctor>, <person>)
Telic:	*Is the activity of* (<doctor>, <heal>)

A unified type can be in turn the top of a hierarchy of types that are simply organized in a taxonomical way. Assuming that the type **Vehicle** has already been generated as a **unified type**, the hierarchy of possible subtypes of vehicles is shown below:

Vehicle

Two_wheels_vehicle Sea_vehicle Engine_vehicle

Sailing_vehicle ……

3.1.3. The ontology of events

An *event SemU* is a semantic unit referring to an event, independently of the syntactic category of the lexical item expressing it. In SIMPLE, verbs and event nouns (e.g. nomina actionis) are taken to express event SemUs. The Core Ontology includes the type **[Event]**, which on turns dominates a whole hierarchy of types to be used to classify different sorts of event SemUs. The main consequence of this assumption is that in SIMPLE the same types are used for the encoding of verbs and nouns denoting events. In other terms, the type system is independent on the the syntactic category with which a semantic unit is linguistically realized. This choice is motivated by the need of capturing the similarities between verbs and event nouns, in order to provide a satisfactory representation of different types of nominalization, while enhancing the consistency of the encoding of SemUs belonging to different parts of speech. Under this perspective, both the verb *arrive* and the noun *arrival* express a SemU belonging to the same semantic type, i.e. an event of directed motion.

The ontology for event SemUs incorporates results from WordNet, EuroWordNet and Levin Classes. The attempt is to find a number of event classes which is richer than that of WordNet (with a total of 15 classes) and less detailed than Levin (total of 234 classes). The following criteria have been adopted:

1. Distinguishing between different event types (i.e. state, process, transition);
2. Defining a set of simple types based on the need to account for the base concepts for verbs (total: 187) and for event nouns;
3. Identifying the type of arguments;
4. Distinguishing among predicates with different arity;
5. Distinguishing whether the type is simple or unified.

The major top-nodes of the ontology of event are as follows:

Event

Phenomenon Aspectual State Act Psychological_event Change Cause_change

A basic dichotomy in the set of semantic types exists between *causative types* and *non-causative types*. The former are always unified, and are characterized by the agentive relation *Agentive_cause* (cf. appendix A). This distinction is particularly important to analyze causative-inchoative alternations. With respect to this issue, event nouns represent a particular case, since it is often difficult to determine whether an event noun is causative or non-causative. As an example, consider the relation in Italian between the verb *affondare* 'sink' and the event noun *affondamento* 'sinking'. The verb has transitive and intransitive variants, since it is an instance of the causative-inchoative alternation, but *affondamento* is actually underspecified with respect to the causative or inchoative reading. Only in a specific syntactic context it is possible to determine whether the noun has a causative or and inchoative reading. In order to tackle this issue, when an event noun derives form a verb which undergoes the causative-inchoative alternation, and is underspecified with respect to the causative or inchoative reading, as a general convention it is assigned the causative type. For instance, the event noun *affondamento* will receive the type **[Cause_change_of_state]**.

In SIMPLE, the type **[State]** dominates a number of other semantic types, which are associated with stative predicates. They are all simple types. These subtypes are distinguished with respect to different parameters, such as the arity of the predicate (i.e. **[Relational_state]**) or the type of the stative relation they express (e.g. **[Stative_location]**, **[Stative_possession]**, etc.).

The type **[Act]** dominates both simple types and unified types. The former are mostly distinguished in terms of the arity of the predicate (e.g. **[Relational_act]**). Unified types are formed both with agentive information (e.g. **[Cooperative_activity]**) and with telic information (e.g. **[Purpose_act]**). Some subtypes of **[Act]** also express a causative relation, and are therefore unified (e.g. **[Cause_act]**). One major subtype is given by **[Speech_Act]**, which on turn subdivides into different types corresponding to the major classes of illocutionary events.

SemUs expressing cognitive or psychological events of various sorts instantiate the different subtypes dominated by the type **[Psychological_event]**. The subtypes of **[Psychological_event]** are either simple (e.g. **[Cognitive_event]**) or unified (e.g. **[Caused_experience_event]**). The two types **[Experience_event]** and **[Caused_experience_event]** correspond to the well-known dichotomy between *fear*-verbs and *frighten* verbs. Both types include event formed by an experiencer and a stimulus, but the former type is instantiated by psychological SemUs whose subject is the experiencer, while the latter type is instantiated by psychological SemUs in which the subject is the stimulus causing the psychological experience.

[Change] dominates whole hierarchy of semantic types which refer to events expressing a change of some sort. They are all unified types and can be either causative or non-causative. The different types of change events are distinguished in terms of the result brought about or caused by the change, (e.g. **[Change_of_location]**, **[Change_of_value]**, **[Change_of_state]**, etc.). The result is represented through the constitutive relation *Resulting_state* (cf. appendix A). Moreover, **[Cause_change]** dominates the semantic types that refer to causative events of change.

3.1.4. The ontology of adjectives

The starting poin for the SIMPLEW ontology of adjectival SemUs is the distinction between *extensional* and *intensional* adjectives. On the other hand, although the information corcerning the intersective or subsective nature of adjectives can be specified in the SemUs (cf. chapter 5), this opposition is not represented at the level of the ontology. There are two reasons for doing so. Firstly, it is not always straightforward to decide whether an adjective is intersective or subsective. Secondly, the further subdivision of extensional adjectives into, for example, temporal property adjectives would have to be duplicated to cater both for intersective and subsective adjectives. Nevertheless, this major distinction into intersective, subsective and intensional adjectives is central

as it gives useful information about possible inferences that can be drawn on the basis of membership of either one of these classes. For instance, imagine a question answering system that is asked the question "Who was US president in 1959?". Examining news articles dated 1959 such a system might encounter the phrases Ämerican president, Dwight Eisenhower, ..." and "Former president, Harry Truman, ...". The first allows the correct inference that Eisenhower is the president at the time (assuming appropriate tense and aspect of the finite verb following); the second does not permit such an inference. Knowing which is permissible requires knowing that "former" is an intensional and Ämerican" an extensional adjective. Or again, imagine a coreference resolution algorithm attempting to unify referring expressions in a text as part of the process of discourse interpretation. Intersective adjectives dealing with the same meaning component (e.g. `colour`) are very unlikely to modify expressions which refer to the same entity - e.g. *red car* and *blue vehicle* most likely refer to separate entities. However, subsective adjectives do not permit this form of inference - *large mouse* and *small creature* may indeed pick out the same object, and a coreference mechanism must be sensitive to this distinction.

3.1.4.1. Intensional adjectives

The intensional adjectives are further subdivided into 6 semantically motivated groups. The first five subtypes are again taken from EAGLES, the sixth class added on the basis of Quirk *et al.* (1985). Examining these subgroups shows that intensional adjectives do not form a semantically homogenous group. However, adjectives like *former* and *possible* in constructions like *former president* and *possible candidate* cannot be interpreted as sets of entities that are *former* or *possible*, as would be the case with extensional adjectives like *red*. In this way, intensional adjectives manipulate the temporal or modal parameter that is relevant for the interpretation of the nouns they combine with. The subclasses of intensional adjectives are as follows:

- **temporal** - *present tenant*
- **modal** - *possible husband*
- **emotive** - *poor man*
- **manner** - *beautiful dancer*
- **object-related** - *criminal lawyer*
- **emphasizer** - *outright lie*

Temporal adjectives indicate that the entity referred to by the modified noun does not yet, or no longer, belong to the ontological class lexicalized by the noun in question. For example, the phrase *the former president* does not denote the individual that is both a president and former, but it denotes the individual that was president in a preceding term. In this way adjectives belonging to this group manipulate the temporal parameter that is relevant for the interpretation of the nouns they combine with. This group contains only a limited number of adjectives.

Modals adjectives express some kind of predication over the ontological status of the nouns they combine with. They reflect the speaker's judgement of the likelihood of the proposition it expresses being true. Quirk *et al.* (1985: 219ff) identify two main types of modality for verbs: *intrinsic*, which involves some kind of human control of events and *extrinsic*, which does not primarily involve human control of events. These two main types are not complementary, there is a gradient between them depending on the level of human involvement. Each of these two main types cross-classifies with 3 main semantic classes that predicate the semantic content of modals:

- permission - possibility
- obligation - necessity

- volition - prediction (a gradient between wanting/predicting something to happen)

Intrinsic combines with permission, obligation, or volition, where the human involved has influence over the modality, and *extrinsic* with possibility, necessity or prediction, where the likelihood of instantiation lies outside the human control. These classifications can also be applied to adjectives. Quite often it can be observed that the adjective has an intrinsic and extrinsic use instantiated as its senses, or that both readings are difficult to separate and have been merged in one sense distinction. For example, *admissible* has a sense with the definition *that can be allowed or considered*. This is clearly ambiguous between the extrinsic notion of ability and the intrinsic notion of permission.

This classification of modal adjectives is represented with the feature *Modality_type*, whose possible values are:

Epistemic - used for expressing a prediction about the actualisation of the semantic class represented by the noun (e.g. *certain victor*; *the future queen*).

Deontic - expresses an element of necessity (e.g. *essential*) or obligation (e.g. *obligatory*).

Possible - indicates that the actualisation of the noun category in the real world is possible (e.g. *likely*), capable of being actualised (e.g. *believable*) or permitted (e.g. *admissible*).

Modal adjectives are also characterized by an optional *Modality_feature*, whose values are *intrinsic/extrinsic*. The combination of Modality_type and Modality_feature yields the six poles that constitute the three semantic modal scales (see above).

Emotive adjectives express a strong emotional attitude towards the object denoted by the noun. They are *stative*, *nongradable* and *cannot be used predicatively* without a change in meaning. Some adjectives exist as nonpredicating intensional emotives in one sense, for example *poor* in *poor man*, and occur as predicating adjectives in another sense, such as in *poor area*.

Manner adjectives modify the event associated with the noun rather than the noun itself. The event does not necessarily have to be related morphologically to the nominal. They are *stative*, *nongradable* and *cannot be used predicatively* without a change in meaning.

Object-related adjectives are in most cases morphologically derived from nouns and sometimes semantically related to nouns without a morphological link. They are generally thought to be *stative*, *nongradable* and *attributive* only. They are always characterized by a semantically underspecified *Related_to* relation. The default value of the *Related_to* target is the base noun. However, in some cases another noun might be more suitable as in the case of *criminal* , or when there exists a *Related_to* relation between morphologically unrelated words such as *stellar* and *star*. It should be noted that some object-related adjectives exist both as intensional in one sense, for example *criminal* in *criminal law*, as well as an extensional in another sense, such as in *criminal shopkeeper*.

Emphasizer adjectives have a general heightening effect that highlights the prominence of the category membership described by the noun. Examples are *great victory* and *true scholar*. They are *stative*, *nongradable* and are generally *attributive only*. This group also includes adjectives which are termed *amplifiers* (Quirk *et al.* 1985: 429), when they are noninherent such as *a complete fool* and *a firm friend*. It should be noted that several emphasizers have semantic counterparts in the form that can be used both attributively and predicatively, as *real* in *real flowers* versus *real hero*.

3.1.4.2. Extensional adjectives

Extensional adjectives can be subdivided in two ways. Firstly, they are either intersective or subsective. Furthermore, we have distinguished six basic types of extensional adjectives. Each of these types is associated with a separate template and with a given subset of meaning components (cf. chapter 4). The most appropriate meaning component must be selected to further capture the meaning of the adjective. The leading criterion underlying the six basic extensional template types is to guarantee the maximum degree of consistency with the ontology types for noun expressing *properties*. This is a crucial condition in order to capture cross-categorial semantic similarities between adjectives and deadjectival nouns. The subclasses of extensional adjectives are as follows:

- **psychological property** - *crazy thoughts*
- **social property** - *catholic priest*
- **physical property** - *soft skin*
- **temporal property** - *sudden outburst*
- **intensifying property** - *heavy rain*
- **relational property** - *similar shape*

The issue of regular polysemy has been faced in SIMPLE by selecting a set of well-known regular polysemous classes (cf. Appendix F). Regular polysemy has been assumed to create a link between different senses of the same word. Roughly speaking, the idea is that *while simply ambiguous readings of a word can be represented as totally unrelated SemUs, on the other hand polysemous senses can be encoded as interlinked SemUs*. We regard this as an attempt to mark in the SIMPLE lexicons cases of regular polysemy. In practice, each SemU also comes with an information slot (**Complex**), whose value is the polysemous class (if any) to which the SemU belongs (for more details cf. chapter 4).

In Pustejovsky (1995) and (1998), regular polysemous classes correspond to *complex types*. This allows for an underspecified semantic typing of words, as an alternative solution to the more traditional sense enumeration strategy, which surely falls short to distinguish between true ambiguity and polysemy. The solution adopted in SIMPLE intends to be a first and provisional step which can lead to the building of a full type system which allows for complex types as well. The regular polysemous classes adopted in SIMPLE can thus be the starting point for the future development of underspecified semantic types.

Chapter 4

The SIMPLE Template

One of the core elements in SIMPLE is the notion of *template*. It has been introduced to satisfy two different needs:

- making the process of lexicographic encoding easier;
- enhancing the general consistency of the lexicon, by providing structured sets of information which is associated with the semantic type of a SemU;
- the information in the template is structured so as to mirror the properties of the corresponding semantic type.

These three aspects are equally important in view of the specific issues raised by semantic encoding, and the multilingual character of the project. The templates are intended to allow lexicographers to encode similar SemUs with the same amount and type of information, both in a given language, and across different languages. The template represents the interface between the semantic type system (the Ontology) and the actual encoding of the lexicon in a given language.

The template is a cluster of underspecified information which guides the lexicographers in the process of encoding a SemU. Templates provide information of three sorts:

1. **Minimally required information;**
2. **Recommended information**;
3. **Optional information**.

Minimally required information - this represents the information which is indicated in the SIMPLE Technical Annex, as the minimum amount of information to be encoded for each SemU. *This information is intended to allow lexicographers to discriminate between different senses of a word.* Among the different types of information which make up templates, the following represents the minimally required layer:

- Template Type
- Domain information
- Semantic class
- Glossa
- Predicative Representation
- Selectional Restrictions
- Link to the SynU

Recommended information - although not explicitly indicated in the SIMPLE Technical Annex,

the encoding of this type of information is recommended. The reason is that - as explained below and in the previous chapter - it provides the explicit representation of the structure of the semantic type which is expressed by the template type. As such it represents relevant and crucial information to identify the semantic content of a SemU, to determine the set of inferences that are associated with each word in the language, to help in discriminating different senses of a word, and to represent regular polysemy:

- Type hierarchy information (i.e. **Template_Supertype** and **Unification_path**, see below)
- Qualia Structure
- Polysemous class
- Derivation
- Event type (for event SemUs)

Fully optional information - this represents extra-information which can be added to SemUs, and for which no specific indication is currently provided in this paper:

- Collocations from the corpus
- Synonymy

SemUs in SIMPLE should contain enough information to allow the discrimination between different word senses. Therefore, whenever the minimal required layer is not enough to achieve this task, it is strongly recommended that a SemU also contains the information pertaining to the other layers (e.g. features, relations between SemUs in the Qualia structure, etc) that is regarded as relevant to get at a proper characterization of the sense.

Each template has been structured and organized in order to:

1. Provide an array of information which will become part of the content of a SemU which instantiates a certain template;
2. Provide a set of alternative choices out of which lexicographers will be able to choose the appropriate information to describe the semantic content of a sense;
3. Allow lexicographers to eventually add other information, which they regard as being relevant for the description of a word sense;
4. Provide consistency criteria for the choices made by the lexicographers during the encoding phase.

Given a sense of a word, building the SemU for that sense consists in a process of instantiation of a suitable template. This process is roughly composed by the following phases:

1. Choosing the template which corresponds to the semantic type to be assigned to that SemU. This choice mostly depends on whether the information contained in a template is appropriate to characterize the semantic content of the SemU, as well as to distinguish it from other senses of the same lexical unit;
2. Choosing among the alternative options in the templates, or filling the information which in the template is left to be specified;
3. Eventually adding information which is relevant to identify the SemU, and which is not part of the template. To this concern, SIMPLE also organizes semantic information so that the eventual specification of further information can be done without altering the general consistency of the model.

As a general rule, the semantic encoding of a SemU should contain enough information to

distinguish it from other SemUs of the same word. This of course raises a problem concerning the granularity of the representation. In fact, the type of information and representational tools that SIMPLE contains unavoidably limits the possible degree of granularity of lexical analysis. On the other hand, there are obviously sense distinctions that will necessary remain beyond this boundary.

As specified in SIMPLE Technical Annex (p. 40), in order to establish the senses to be encoded "each project partner should rely on existing medium-size repository of monolingual lexical information (be it a machine readable dictionary, a lexical database, etc,) where sense distinctions are already established." Whenever two senses of a word cannot be discriminated in any of the dimensions provided in SIMPLE (i.e. semantic type, semantic class, predicative representation, Qualia structure, domain), lexicographers are recommended to cluster these senses in one SemU. As an alternative possibility, lexicographers may distinguish the two senses in terms of a lexicographic gloss, as an informal comment or reminder intended as a unique characterization of a word sense. This identification may then become the starting point for a more fine-grained analysis in a subsequent phase.

The SIMPLE specifications also includes the elaboration of a set of templates (cf. Appendix H) to cover the different areas of the lexicon. Each template is identified by a *type*, which *also reflects the semantic typing of the SemUs that instantiate the templates*.

The following is the schematic representation of a template:

SemU:	*Identifier of a SemU*
SynU:	*Identifier of the SynU to which the SemU is linked*
BC Number:	*Number of the corresponding Base Concept in EuroWordNet*
Template_Type:	*Semantic type of the SemU*
Template_Supertype:	*Semantic type which dominates the Template_Type of the SemU in the type-hierarchy*
Unification_path:	*Unification history of a template (for unified top-types)*
Domain:	*Domain information from LexiQuest domain list*
Semantic Class:	*One of the classes provided by LexiQuest*
Gloss:	*Lexicographic definition*
Event Type:	*Event sort (for event SemUs only)*
Predicative Representation:	*Predicate associated with the SemU, and its argument structure*
Selectional Restr.:	*Selectional restrictions on the arguments*
Derivation:	*Derivational relations between SemUs*
Formal:	*Formal relation between SemUs*
Agentive:	*Agentive relations between SemUs*
Constitutive:	• *Constitutive relations between SemUs* • *Constitutive semantic features*
Telic:	*Telic relations between SemUs*
Synonymy:	*Synonyms of the SemU*
Collocates:	*Collocate information*
Complex:	*Polysemous class of the SemU*

In the following sections, we will describe in details the way each slot in the template is filled. A general convention is adopted so that each type of information is marked with one of the following labels:

REQUIRED for information which is included in the minimal requirements specified in the Technical Annex

RECOMMENDED for information which is recommended to be encoded, although it is outside the minimal requirements of the Technical Annex

OPTIONAL for information which, although it has surely a high linguistic relevance, is completely optional as far as the semantic encoding in SIMPLE is concerned

In what follows, "<word_1>" is used to refer to the SemU for one of the senses of *word*; "**[Type]**" refers to a semantic type.

4.2.1. Template_Type (REQUIRED)

The value of the **Template_Type** is an element in the list in Appendix C. This information satisfies two different needs:

- represents the semantic type of a SemU, thus assigning it to a specific position in the hierarchy of semantic types;
- it represents the identifier of a template.

To encode the SemU <lion>, "a type of feline", lexicographers may choose either to instantiate the template whose type is **[Animal]**, which is an element of the Core Ontology, or to instantiate the template in the Recommended Ontology whose type is **[Earth_Animal]**, and which is a subtype of **[Animal]**. Provided that the two templates are one the subtype of the other, either choice does not alter the consistency of the lexicon, and only affects the granularity of the description assigned to **SEMU**.

Assigning a SemU to a semantic type amounts to choose and instantiate a template with the appropriate **Template_Type**. For the distinction between simple and unified types, and for the analysis of the hierarchy of semantic types, cf. §. 3. For instance, the encoding of the SemU <car>, e.g. "4-wheeled motor vehicle", involves instantiating the **Template_type** called **[Vehicle]**, where **[Vehicle]** is a semantic type in the Ontology. Encoding the SemU <own>, e.g. "have ownership or possession", involves instantiating the **Template_type** called **[Stative_possession]**.

SGML Representation

The **Template_Type** corresponds to a SGML `WeightValSemFeature` object. The value of its weight is always `PROTOTYPICAL`:

```
<SemU
      id="ID"
      naming="car"
      comment="4-wheeled motor vehicle"
      weightvalsemfeaturel=" WVSFTemplateVehiclePROT
      …>
```

```
      <WeightValSemFeature
              id="WVSFTemplateVehiclePROT"
              weight="PROTOTYPICAL"
              comment="Template Type: TemplateVehicle"
              valsemfeature="VSFTemplateVehicle"
```

4.2.2. Template_Supertype (RECOMMENDED)

This information reflects the position of the SemU in the hierarchy of semantic types. It formalizes the notion of subtype between semantic types. *It is encoded only for simple types and for unified types which are subtypes of other unified types*. On the other hand, the coordinates identifying the position of a unified top-types are provided by the **Unification_Path** (see below).

The value of the **Template_Supertype** is an element in the list in Appendix C, and is fixed for a given template. *The value of the **Template_Supertype** is strictly determined by the value of the **Template_Type***. If a template has as value for the **Template_Type** a semantic type **[Type_1]**, then the value of the **Template_Supertype** is the semantic type **[Type_2]** which immediately dominates **[Type_1]** in the hierarchy of semantic types.

For instance, suppose one wants to encode the sense for *tiger* equivalent to "a type of feline". The corresponding SemU will contain the following information:

SemU:	<tiger>
Template_Type:	**[Animal]**
Template_Supertype:	**[Living_entity]**

This means that the SemU <tiger> has as semantic type **[Animal]**, which is a subtype of **[Living_entity]**. Instead, for the SemU <*own*> in the sense of "have ownership or possession" the following information is encoded:

SemU:	<own>
Template_Type:	**[Stative_possession]**
Template_Supertype:	**[Relational_state]**

This means that the SemU <own> has as semantic type **[Stative_possession]**, which is a subtype of **[Relational_state]**.

SGML Representation

The **Template_Supertype** corresponds to a SGML `WeightValSemFeature` object. The value of its weight is always `PROTOTYPICAL`:

```
<SemU
      id="ID"
      naming="own"
      comment="have ownership or possession"
      weightvalsemfeaturel=" WVSFTemplateSuperTypeRelationalStatePROT
      …>

      <WeightValSemFeature
              id="WVSFTemplateSuperTypeRelationalStatePROT"
```

```
            weight="PROTOTYPICAL"
            comment="Super Type: WVSFTemplateSuperTypeRelationalStatePROT"
            valsemfeature="VSFTemplateSuperTypeRelationalState">
```

4.2.3. Unification_path (RECOMMENDED)

This kind of information is present only in *unified top-types* (i.e. unified types which are not subtypes of another unified type).

The value of the **Unification_path** is related to the notion of unified types (for details, cf. §. 3). This information is assigned to the SemUs which instantiate a template. The value of the **Unification_path** is represented by one of the following possible structures (***Simple_type*** and ***Unified_type*** respectively stand for any simple type and any unified type):

1. **[*Simple_type* | Agentive]** - this is the value of the **Unification_path** for the unified types which derive from ***Simple_type*** plus the addition of some agentive information in the agentive quale;

2. **[*Simple_type* | Telic]** - this is the value of the **Unification_path** for the unified types which derive from ***Simple_type*** plus the addition of some telic relation in the telic quale;

3. **[*Simple_type* | Agentive | Telic]** - this is the value of the **Unification_path** for the unified types which derive from ***Simple_type*** plus the addition of some agentive relation in the agentive quale, and of some telic relation in the telic quale;

4. **[*Simple_type* | $Unified\_type_{Agentive}$]** - this is the value of the **Unification_path** for the unified types which derive from ***Simple_type***, plus the addition of some agentive information which is type-defining for ***Unified_type*** (for the notion of type-defining information, see below);

5. **[*Simple_type* | $Cause_{Agentive}$]** - this is the value of the **Unification_path** for the unified types which derive from ***Simple_type*** plus the addition of some causative agentive information in the agentive quale. This value is associated to the semantic types corresponding to *causative events*. E.g.:

Template_Type:	**[Cause_act]** *//group, gather, flash**,** spill//*
Unification Path:	**[Act | $Cause_{Agentive}$]**

6. **[*Simple_type* | $Cause_{Agentive}$ | Telic]** - this is the value of the **Unification_path** for the unified types which derive from ***Simple_type*** plus the addition of some causative agentive relation in the agentive quale, and of some telic relation in the Telic quale. This value is associated to the semantic types corresponding to *causative events*.

7. **[*Simple_type* | $Unified\_type_{Telic}$]** - this is the value of the **Unification_path** for the unified types which derive from ***Simple_type***, plus the addition of some telic information which is type-defining for ***Unified_type***;

8. **[*Simple_type* | $Unified\_type1_{Agentive}$ | $Unified\_type2_{Telic}$]** - this is the value of the **Unification_path** for the unified types which derive from ***Simple_type***, plus the addition of some agentive information which is type-defining for ***Unified_type1*** and some telic information which is type-defining for ***Unified_type2***;

The value of the **Unification_path** represents the the orthogonal organization of semantic types. In standard monodimensional organizations of semantic type systems, the position of a given type is *always and only* given by its superordinate element in the hierarchy. On the other hand, in the perspective of an orthogonal organization of the semantic types (like the one proposed in SIMPLE), a type is *possibly* identified by more than one "coordinates" in the type hierarchy. Top unified types derive from the simple ones with the addition of agentive and/or telic information. Thus, they need a set of multiple coordinates for their collocation in the type hierarchy, which are given by the **Unification_Path**. In other terms, the **Unification_path** shows the different semantic dimensions which have been added to a simple type to generate a unified one.

The first element of the Unification_Path always represents the superordinate simple type of that unified type. The other elements of the **Unification_Path** specify whether a SemU instantiating a given semantic type must also contain agentive or telic information, or both. For instance, the unified type **[Vehicle]** is associated with the following **Unification_path**:

Template_Type:	**[Vehicle]**
Unification Path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**

This means that a vehicle is a *subtype of concrete entity*, and also contains the agentive information that is type-defining for the type **[Artifact],** and some telic information. The unified type **[Profession]** has the following **Unification_path**:

Template_Type:	**[Profession]**
Unification Path:	**[Human | Telic]**

This means that a noun which have the type **[Profession]**, like for instance *lawyer*, refers to humans, and also specifies telic information concerning these individuals. Finally, the unified type **[Purpose_act]** is associated with the following **Unification_path**:

Template_Type:	**[Purpose_act]**
Unification Path:	**[Relational_act | telic]**

An instance of this type is the SemU <follow>, "follow in or as in pursuit", which is then represented as the unification of a relational activity and the purpose of getting something (telic information).

SGML Representation

The **Unification_path** corresponds to a SGML `WeightValSemFeature` object. The value of its weight is always `PROTOTYPICAL`:

```
<SemU
      id="ID"
      naming="follow"
      comment="follow in or as in pursuit"
      weightvalsemfeaturel="WVSFUnificationPathRelationalAct-TelicPROT
      …>

      <WeightValSemFeature
              id="WVSFUnificationPathRelationalAct-TelicPROT"
```

```
            weight="PROTOTYPICAL"
            comment="Unification Path: WVSFUnificationPathRelationalAct-
                     TelicPROT"
            valsemfeature="VSFUnificationPathRelationalAct-Telic">
```

4.2.4. Domain (REQUIRED)

The value of this slot must be filled with one or more elements taken the list of domains in Appendix D. The recommended criteria for the encoding of domain information are the following ones:

- Choose one or more domains which correspond to the topic of texts in which the SemU usually appears, or is most likely to appear. For instance:

SemU:	<lancet>
Domain:	medicine

SemU:	<excommunicate>
Domain:	religion

- Always prefer the most specific suitable domain in the domain hierarchy. For instance, consider the SemU <eagle> as a type of bird. The value of **Domain** should be *Ornithology*, which is to be preferred to the less specific *Zoology*.

- If no suitable domain can be found in the list because the word belongs to the general vocabulary, fill **Domain** with the value *General*:

SemU:	<man>
Domain:	General

In some cases, templates already provide a list of possible **Domain** values, which may guide the lexicographer to find the suitable ones. However, the lexicographer is completely free to fill **Domain** with a value which is outside the list proposed in the template.

SGML Representation

The **Domain** corresponds to a SGML `WeightValSemFeature` object:

```
<SemU
      id="ID"
      naming="excommunicate"
      comment="…"
      weightvalsemfeaturel="TSVP_Religion_TS_domaine_D
      …>
```

4.2.5. Semantic Class (REQUIRED)

The purpose of this slot is to provide a mapping with LexiQuest's ontology. The values are

thus taken from *LexiQuest's list of Semantic Classes* (see Appendix E). This has the advantage of making the model sufficiently flexible to be interfaced with and customized to a more traditional monodimensional ontology, like LexiQuest's one. Some templates come with a fixed value for the **Semantic Class**, which is therefore assigned to every SemU which is encoded with that template:

Template_Type:	**[Opening]**
Semantic Class:	Location

In this case, the SemU <window> in the reading "open space in a wall or in a window" has the following structure:

SemU:	<window>
Template_Type:	**[Opening]**
Semantic Class:	Location

In other cases, a semantic type in SIMPLE actually corresponds to more than one of LexiQuest's semantic classes. These values are provided in the template as alternative choices:

Template_Type:	**[Animal]**
Semantic Class:	Animal, Amphibian, Fish, Insect, Bird, Mollusc, Mammal, Reptile

To codify a certain SemU by instantiating the template **[Animal]**, lexicographers should choose one of the values in the above list and assign them as shown below:

SemU:	<seal>
Template_Type:	**[Animal]**
Semantic Class:	Mammal

SemU:	<eagle>
Template_Type:	**[Animal]**
Semantic Class:	Bird

In SIMPLE the backbone for the organization of SemUs is the type system of the Core Ontology. In some cases, there is no direct correspondence between a type in the SIMPLE ontology and a semantic class. To overcome this problem, it is possible to combine a semantic class with one of the LexiQuest features provided in Appendix E. For instance, while in SIMPLE there is a type **[Part]**, no corresponding node in the hierarchy of semantic classes exist. For instance, to encode the SemU <element> the feature PART can be used, in combination with a semantic class:

SemU:	<element>
Template_Type:	**[Part]**
Semantic Class:	Entity Part

As also specified in Appendix E, it is important to remember that *there are separate lists of semantic classes for nouns and for verbs*. This means that even if in SIMPLE a verb and a derived nominal are assigned the same **Template_Type**, they are to be assigned different semantic classes:

SemU:	<arrive>
Template_Type:	**[Change_of_location]**
Semantic Class:	Motion

SemU:	<arrival>
Template_Type:	**[Change_of_location]**
Semantic Class:	Event

SGML Representation

The **Semantic Class** corresponds to a SGML `WeightValSemFeature` object:

```
<SemU
      id="ID"
      naming="own"
      comment="…"
      weightvalsemfeaturel="TSVP_Possession_TS_classificateur_de_verb_C
      …>
```

The objects corresponding to noun semantic classes are identified by labels containing the string `classificateur_de_nom`, while the objects corresponding to verb classes are identified by labels containing the string `classificateur_de_verb`.

4.2.6. Gloss (REQUIRED)

This slot is actually empty in the templates provided, and has to be specified by lexicographers with a suitable definition for the SemU, taken for example from a medium size dictionary:

SemU:	<lawyer>
Template_Type:	**[Profession]**
Glossa:	*A person who is specialized to advise people about the law and to represent them in court*

SGML Representation

The **Gloss** can be encoded as CDATA in the `freedefinition` attribute of the `Semu` objects:

```
<SemU
      id="ID"
      naming="lawyer"
      comment="…"
      freedefinition="A person who is specialized to
      advise people about the law and to represent
      them in court"
      …>
```

4.2.7. Event Type (RECOMMENDED)

The Event Type is encoded only for event SemUs. This slot corresponds to that part of semantic information that in the linguistic literature is usually referred to as *Aktionsart*. The

relevance of this type of information is given by the fact that the individuation of the event type is often a crucial step towards identifying the semantic type of an event SemU. For instance, the template types **[State]** and its subtypes are univocally associated with the **Event Type** *state*, while the template type **[Act]** and its subtypes are univocally associated with the **Event Type** *process*. Therefore, although in some cases there is no 1-to-1 correspondence between **Template_Type** and **Event Type**, the value of the latter can provide important clues to identify the potential semantic type of a SemU.

We assume the following distinction between events:

state (e.g., *stay, own, have*)
process (e.g., *run, speak*)
transition (e.g., *arrive, buy, sell*)

States and processes are unbound or atelic events, while transitions are bounded or telic.

Formally the **Event Type** corresponds to the following feature:

Event_type {state, process, transition}

SemU:	<walk>
Template_Type:	**[move]**
Event Type:	process

Although in some cases the distinction between event types can be fuzzy and difficult to establish, there are some linguistic texts which in most cases can guide the identification of the appropriate event type for a SemU (cf. Bach 1986, Vendler 1976, Dowty 1979, Bertinetto, 1986, Parsons 1990, Pustejovsky 1991):

- *Test for states*
  States typically cannot occur or are quite marginal with the progressive form and the imperative:

(1) a. ?* The walls are surrounding the city.
b. ?* John is believing in God.

(2) a. ?* Believe that John is ill!
b. ?* Have a book!

- *Tests for processes*
  Processes differ from states because of their possibility to occur with the progressive form and the imperative. Moreover, they differ from transitions because they are not telic. A typical test for non-telicity is the incompatibility with *in*-time adverbials (*in an hour*, *in 5 minutes*, etc), and the compatibility with *for*-time adverbials (*for an hour*, *for 5 minutes*):

(3) a. John slept for 1 hour. *Process*
b. * John slept in 1 hour.

- *Tests for transitions*
  Transitions, like processes, can occur with the progressive form and the imperative, but they differ from the latter because they are telic. A typical test for telicity is the compatibility with *in*-adverbials:

(4) a. The train arrived in 5 minutes. *Transitions*

b. The ice melt in 10 minutes.

The behavior of transitions with *for*-adverbials is more complex. When they occur felicitously with this kind of adverbials, they usually acquire either an iterative interpretation, or the adverbial measures the lasting of the resulting state of the event:

(5) John left for 1 year (= John's being away lasted for 1 year, before he came back)

These tests must be applied with extreme care. In fact, it is well-known that the Aktionsart of an event SemU is influenced by many factors. For instance, in some cases the verb+complements complex may satisfy the above tests in a different way wrt the verb alone. Actually, the presence of a complement of a verb and the type of complement noun phrase can modify the event type expressed by the verb phrase. For instance, while a verb like *read* satisfies the tests for processes when it appears without complements, it satisfies the tests for transitions when it appears with a count noun phrase as its direct object:

(6) a. John read for 2 hours.
b. ?* John read in 2 hours.
c. John read a book in 2 hours.
d. ?* John read books in two hours.

Similarly, while the verb *push* behaves like a process when it appears only with the direct object, if a locative PP is added, it is turned into a transitions:

(7) a. ?* John pushed the cart in 2 hours.
b. John pushed the cart to the station in 2 hours.

Notwithstanding these variations, the event type in SIMPLE is always intended to abstract from the possible effects determined by complements or adjuncts of an event SemU. For instance, in the case of *read* or *push* the **Event Type** should have as value *process*.

When the event type of a SemU cannot be determined in a clear way, the feature **Event Type** may receive more than one value:

SemU:	<think>
Template_Type:	**[Judgement]**
Event Type:	state, process

SGML Representation

The **Event Type** corresponds to a SGML `WeightValSemFeature` object. The value of its weight is always `PROTOTYPICAL`. The value of the feature `EventType` are `State`, `Process` and `Transition`:

```
<SemU
      id="ID"
      naming="follow"
      comment="follow in or as in pursuit"
      weightvalsemfeaturel="WVSFEventTypeProcessPROT
      …>

      <WeightValSemFeature
```

```
            id="WVSFEventTypeProcessPROT"
            weight="PROTOTYPICAL"
            comment="Event Type: Process"
            valsemfeature="VSFEventTypeProcess">
```

4.2.8. Predicative Representation (REQUIRED)

This slot contains information concerning the argument structure of a SemU. The predicative representation has a crucial role in establishing the connection between the syntactic and the semantic layer.

The content of the predicative representation includes the following type of information:

i. predicate and list of its arguments;
ii. the type of link between the SemU and the predicate;

4.2.8.1. The predicate

The predicate is a *lexicalized predicate*. Lexicalized predicates are language specific predicates, which correspond to the SemU being encoded. *No list of language independent primitive predicates is provided*, although lexicographers may possibly define language specific 'abstract' predicates to be shared by homogeneous classes of SemUs. In what follows, lexicalized predicates are marked in small capital letters. As a general convention, we assume that the name of a predicate is prefixed by the string 'pred' (e.g. pred_WALK):

SemU:	<walk>
Template_Type:	**[move]**
Predicative Representation:	pred_WALK (<arg0>)

SemU:	<camminare> //walk//
Template_Type:	**[move]**
Predicative Representation:	pred_CAMMINARE (<arg0>)

Different SemUs (possibly of words belonging to different parts or speech and/or to different semantic types) may share the same predicate in the predicative representation. For instance, the verb *destroy* and the nouns *destruction* and *destroyer* all share the pred_DESTROY. Similarly, the verb *employ*, and the nouns *employment*, *employer* and *employee* share the pred_EMPLOY. These SemUs however differ for the type of link they have with this predicate.

Although it is not strictly required by the model, we strongly recommend a 'lexical driven' approach to predicate formation, that is to say, to define a separate predicate for each SemU of a word. This solution has the advantage of reducing the complexity of the linking with syntax. Consider for instance the verb *run*, with the two SemUs <run_1> "move at a fast speed" and <run_2> "operate a device". These SemUs will be respectively associated with the predicates pred_RUN1 with one argument and pred_RUN2 with two arguments. This fact has a crucial role for the correct representation of the relation between verbs and deverbal nouns too. In fact, it can be the case that the sense of a certain event denoting noun ($SemU_1$) corresponds to a specific sense of the verb from which it derives ($SemU_2$). Thus, the predicative representation of $SemU_1$ must be filled

with the same predicate appearing in the predicative representation of $SemU_2$.

As an example, take the Italian verb *comprendere*, which has at least the $SemU_1$ corresponding to the sense "understand something", and the $SemU_2$ corresponding to the sense "include something". These two senses will be associated with two different predicates pred_COMPRENDERE1 and pred_COMPRENDERE2, each on turn associated with different arguments and selectional restrctions. The derived nominal *comprensione*, however, does not have a SemU corresponding to the sense_2 of *comprendere,* because it means "understanding of something or someone": therefore it has to be link to pred_COMPRENDERE1.

SGML Representation

Each predicative SemU is linked to one and only one `Predicate` via the embedded object `PredicativeRepresentation`. One `Predicate` is linked to one or more SemUs.

```
<PredicativeRepresentation
     typeoflink              <!-- an element of a list -->
     accesspath              Number
     includedargument        <!-- an element of a list -->
     predicate               IDREF>
```

The attribute `typeoflink` describes whether a SemU has a master relation with a predicate or not, i.e. whether it is the privileged and most neutral lexicalization of that predicate. The possible values for `typeoflink`:

`MASTER`	(for verbs, relational nouns, representations, amounts, nouns with support verbs, etc.)
`VerbNominalization, EventNominalization, ProcessNominalization, StateNominalization`	(for *nomina actionis*; e.g. *destruction*)
`AgentNominalization`	(for *nomina agentis*; e.g. *destroyer*)
`PatientNominalization`	(for object nominalizations; e.g. *employee*)
`AdjectiveNominalization`	(for deadjectival nouns; e.g. *patience*)

The attribute `includedargument` is used to express whether the SemU lexically absorbs one of the arguments of the predicate. The absorbed argument is thus not linked to the syntax. The attribute `accesspath` specifies which argument is absorbed. Notice that the following conditions hold:

- If `typeoflink=AgentNominalization` then `accesspath=0` and `includedarg=INCLUDED`
- If `type_of_link=PatientNominalization` then `accesspath=1` and `includedarg=INCLUDED`
- Else `accesspath` and `includedarg` are to be omitted.

Predicates are described in terms of the number and kind of arguments involved. Predicates and Arguments are 'lexical driven' so, each predicative entry has its 'own' `Predicate` and each `Predicate` has its 'own' `Arguments`.

```
<Predicate
     id="PREDwalk1"
     naming="walk"
```

```
      example="John walks"
      type="LEXICAL"
      multilingual="NO"
      argumentl="ARG0PREDWalk1 >
```

Therefore the complete predicative representation of the SemU <walk> is encoded as follows:

```
<SemU
       id="walk1
      …
      <PredicativeRepresentation
            typeoflink="MASTER"
            predicate="PREDwalk1"></SemU>

<Predicate
      id="PREDwalk1"
      naming="walk"
      example="John walks"
      type="LEXICAL"
      multilingual="NO"
      argumentl="ARG0PREDWalk1">
```

4.2.8.2. The arguments

The list of the arguments refers to the semantic arguments of a predicate. They may be differently realized at the syntactic level, and possibly not be realized. It is essential to remember that arguments do not need to be linked to syntactic position, and vice versa. *So it is perfectly possible for a semantic argument to remain unlinked to any syntactic position, and it is perfectly possible for a syntactic position to remain unlinked to any argument*. Therefore, the choice of the number of arguments for a predicate has to be determined on purely semantic grounds.

A related issue is set by the encoding of event SemUs which enter into *syntactic alternations*, such as the causative-inchoative alternation (*sink*), the dative alternation (*give*), the locative alternation (*swarm*), etc. (cf. Levin 1993). Syntactic alternations may concern not only the syntactic category of a complement, but also their syntactic order, and the number itself of arguments. The causative-inchoative alternations is an instance of the latter case, since the causative side of the alternation is a transitive verb, while the inchoative side is an intransitive one (cf. *John sank the ship* vs. *The ship sank*).

The case of syntactic alternations like the dative or locative ones can be tackled at the level of the correspondence between arguments and syntactic positions.

SGML Representation

Consider the case of dative alternation:

(8) a. John gave a book to Mary.
b. John gave Mary a book.

The syntactic descriptions corresponding to the above sentences are associated with two different SynUs. $SynU_1$ corresponding to the NP NP PP version (8a) and $SynU_2$, corresponding to the NP NP NP variant in (8b). We can represent this alternation by assuming that the SemU <give> is

associated with the predicate pred_GIVE(Arg0, Arg1, Arg2), and that it is associated with the two SynUs. The difference then lies in the selected correspondence between SemU and SynU. For instance the SemU can be associated with $SynU_1$ by an *isomorphic* correspondence, where Arg0 is linked to Pos0, Arg1 to Pos1 and Arg2 to Pos2. On the other hand, the same SemU will be linked to $SynU_2$ by a *crossed* correspondence, in which Arg0 is linked to Pos0, Arg1 to Pos2 and Arg2 to Pos1 (cf. GENELEX 1994).

```
<SynU
      id="SynU_give1"
      description="Descr_dative">
      <CorrespSynUSemU
                targetsemu=USEM_give
                correspondence="ISOtrivalent"> </SynU>

<SynU
      id="SynU_give1"
      description="Descr_double_object"
      <CorrespSynUSemU
                targetsenu=USEM_give
                correspondence="CROSSEDtrivalent1"> </SynU>
```

However, notice that if the two descriptions are represented within a single SynU, it may be necessary to use the attribute *description*, in order to point the particular description within a complex SynU:

```
<!ATTLIST CorrespSynUSemU
          targetsemu              IDREF                    #REQUIRED
          correspondence          IDREF                    #IMPLIED
          description             IDREF                    #IMPLIED>
```

The same attribute is to be used to deal with the case in which a certain word has more than one description within the same SynU, and each description has to be linked to a different SemU of the word.

The causative-inchoative alternation is represented in SIMPLE, by assigning to each alternant a different SemU (e.g. <sink1>: **[Change_of_state]**; <sink2>: **[Cause_change_of_state]**). Given the 'lexical driven' approach adopted for predicate definition, two predicates are defined, each associated with a different SemU. For instance, the inchoative SemU <sink1> is associated to pred_SINK1 (Arg0), and the causative SemU <sink2> is associated to pred_SINK2 (Arg0, Arg1). A similar approach is also recommended for all the other types of alternations whose members can be assigned to different SemUs, as for instance the medium alternation.

4.2.9. Selectional Restrictions (REQUIRED)

This slot contains information concerning the selectional restriction/preferences on the arguments of predicates. Arguments contribute towards determining the organization of the ontology. In other words, it is often the case that differences in the typing of predicates is given by the selectional properties:

a. existence of living entities (*live, thrive*)
b. existence of location (*tower*)
c. existence of material entity/substance (*stagnare*)

For NLP tasks, certain predicates may be excellent identifiers of the semantic type of surrounding complements. For instance, in a sentence such as *John was named President*, if we do not know that *John* is **[Human]**, we can infer its semantic type from the selectional preferences associated with the verb.

The selectional restrictions of an argument can be specified in terms of the following types of information:

1. *semantic type*, taken from the list of semantic types that form the Ontology:

   <arg0>: **[Living_entity]**

2. *SemU*. For instance, the SemU <diagonalize> has the **Predicative Representation** with two arguments, and the second is restricted to matrices:

SemU:	<diagonalize>
Predicative Representation:	predicate_DIAGONALIZE (<arg0>, <arg1>)
Selectional Restrictions:	<arg1>: <matrix>

3. *Feature* (e.g. constitutive features, domain features, LexiQuest's distinctive features, etc.)
4. *Semantic class*
5. *Any combination of these*.

It is well-known that determining the selectional restrictions of the arguments is often a very difficult task. Every hierarchy of semantic types, whatever is the level of granularity in the semantic analysis it can reach, is doomed to fail in many cases to give a proper account of argument selection, and obviously even the set of SemUs, types and features in SIMPLE makes no exception to this general claim. It is therefore important to follow some general criteria:

a. selectional restrictions should rather be intended as *selectional preferences*, i.e. the arguments which are preferably selected by a predicate. This criterion has been widely adopted in the construction of the SIMPLE templates (in other cases, the selectional restrictions of an argument have been described in terms of a very underspecified semantic type, in order to subsume all (or most of) the possible entities which can be assigned to that argument. However, the risk of this solution is the loss of informativeness);

b. It is necessary to abstract (when possible) from phenomena like coercion, sense extension, metaphorical interpretations and the like.

c. It might be useful to complete the information of selectional restrictions with collocation information, the latter to be expressed in the **Collocates** slot (see below). This may be particularly important especially if the information concerning argument selection is derived from corpora, or is intended to mirror actual usage. This is surely a crucial aspect in order for the SIMPLE lexica to be used in concrete NLP applications. It is then possible to mark the core or prototypical cases in the **Selectional Restrictions** of the arguments, and to mark some more particular and harder cases through collocation relations.

4.2.9.1. Status of the Arguments

From a semantic perspective, arguments differ in terms of their status, such that it is possible that an argument that is not expressed in the syntax, still plays a crucial role in the inferences that are available with a given event-denoting expression. For instance, the verb *ski*, has an unexpressed argument which makes reference to the instrument which is used, i.e. *skis*. This also critically relates to how arguments are linked to the syntax.

Pustejovsky (1995) distinguishes between three types of argument:

- **true arguments** - these arguments are obligatorily realized as positions in the syntactic description of the SynU to which the SemU is linked:

  (9) a. John devoured the sandwich.
  b. *John devoured.

  In the provided templates, true arguments have been marked in the following way:

SemU:	<devour> //verb//
Predicative Representation:	pred_DEVOUR (<arg0>, <arg1>) *Master* = yes
Selectional Restrictions:	<arg0> = **[Human]** <arg1> = **[Food]**

- **default arguments -** these arguments are logically part of a predicate, but do not need to be obligatorily realized syntactically;

  (10) a John built a house out of wood.
  b. John built a house.

  In the provided templates, default arguments have been marked in the following way:

SemU:	<build> //verb//
Predicative Representation:	pred_BUILD(<arg0>, <arg1>,<arg2>) *Master* = yes
Selectional Restrictions:	<arg0> = **[Human]** <arg1> = **[Artifact]** <arg2>:default = **[Substance]**

- **shadow arguments** - these arguments are semantically incorporated in the meaning of a lexical item and they can only overtly appear by means of a subtype, otherwise the resulting expression is semantically odd;

  (11) a. John shelved the books on the top shelf.
  b. #John shelved the books on the shelf.

  In the provided templates, shadow arguments have been marked in the following way:

SemU:	<to shelve> //verb//
Predicative Representation:	pred_SHELVE (<arg0>, <arg1>,<arg2>) *Master* = no

Selectional Restrictions:	<arg0> = **[Human]** <arg1> = **[Artifact]** <arg2>:shadow = **<shelf>**

Notice that shadow arguments are always expressed as SemUs.

SGML Representation

A strictly 'lexical driven' approach to argument creation is recommended, i.e. define as many 'predicate driven' `Argument` objects as needed for a predicate. For each `Argument`, the lexicographer has to supply information concerning:

- Semantic Role (to be selected from a closed list; see below)
- and, optionally, information of selectional restrictions

The list of recommended semantic roles includes:

- **Role_Kinship:**
  for kinship nouns only*: father.*
- **Role_HeadQuantified**
  for quantifier Nouns only: *piece*
- **Role_ProtoAgent**
  for the subject of 'causative' verbs: *sink*
- **Role_ProtoPatient**
  for the direct object and strongly bound prepositional complements*: eat potatoes, talk about*
- **Role_2Participant**
  indirect object of trivalent verbs.
- **Role_Location**
  Be on the table
- **Role_Direction**
  weakly bound prepositional complements
- **Role_Origin**
  weakly bound prepositional complements
- **Role_SOA_ARG**
  verbal complements: *want to go*
- **Role_Underspecified**
- **Role_Adjunct**
  for Semantic Arguments which are not reflected in Syntax)

```
<Argument
 id="ARG0PREDthink1"
 comment="The first argument of the predicate think"
 semanticrolel="Role_ProtoAgent"
 informargl="ArgHuman">
```

`InformArg` specifies the semantic information that restricts the argument plus the status of this information. In the `InformArg` it is possible to restrict the value of the argument to a specific `SemU`, or to a `WeightValuedSemanticFeature`. The status

defines whether the specified information is obligatory or default:

```
<InformArg
 id                 ID
 comment            CDATA
 status             CHECK | DEFAULTCHECK
 semu               <!-- the ID of a SemU -->
 weightvalsemfeaturel    <!-- a list of WFSF objects --> >
```

Remember that in SIMPLE ***Template_Type****,* ***TemplateSupertype****,* ***Unification_Path****,* ***Domain****,* ***Semantic Class****, LexiQuest's distinctive features, constitutive features (cf. Appendix A) correspond to* `WeightValSemFeature` *objects. This means that all these types of information may be used to define* `InformArg` *objects, to express selectional restrictions on the arguments*.

In Genelex model, lists of selectional restriction info can be expressed in two ways:

1. as lists of `InformArg` objects in `Argument` objects
2. as lists of features in `InformArg` objects.

Selectional restrictions described at the level of `InformArg` include:

- lexicalised `InformArg`: objects defined in terms of a relevant SemU (ex. *bark(dog)*). They are lexical based and language particular.

- ontological `InformArg`: objects described in terms of **Template_Type** and Semantic Class features

- notion `InformArg`: in SIMPLE a core set of relevant *semantic notions* for selectional restrictions matters has been defined. This first set includes: HUMAN, AGENTIVE, ANIMAL, EDIBLE, SEMIOTIC, TIME, LOCATIVE, EVENT, PHENOMENON, COLLECTIVE, ABSTRACT, MASS. This list is not meant to be exhaustive, since the development of the various lexicons is expected to select new (possibly language-specific) notions, which might reveal to have a crucial role for the specification of selectional restrictions.

These notions (`InformArg`, in SIMPLE model) are defined in terms of features (`Weightvalsemfeaturel(ist)`). The number and kind of features used to define these notions is 'lexicon' dependant. Thus, for instance, in the Catalan and Spanish lexicons, all Human, Institution and HumanGroup typed words bear the ('redundant') feature PLUS_HUMAN. This allows us to define `InformArg` HUMAN with only one feature. This, however, may not be the case for other lexicons. Definitions will be provided for such notions so that each partner can define them according to the needs of their lexicon. E.g.:

HUMAN: whenever we require an 'intelligent' entity (subjects of: *write, compose, decode, think, invoice*, ...), 'soul' entity (*hope, pray, wish, adore, love, hate,...charity, pity, frienship*,) 'skilful' (*skilful, decorate, paint, compose, elaborate*...) ...

AGENTIVE: for 'ProtoAgent' arguments (usually subjects) *brake, through, do*, etc.

ANIMATE: includes animals and humans. Words denoting 'biological' activities, faculties, states.. (*sleep, look, eat, drink, die, run, breath, ... vision, sight, deafness, digestion,*),

EDIBLE: for everything which can be eaten, cooked,...; includes things like: *soup, cake, sandwich, bean, apple,*

SEMIOTIC: for everything occurring as object of *write, read, understand, decode, edit, underline* ..; includes things like *book, article, passage, paragraf, word, law, bible, novel, poem, message, volum, newspaper, title, letter*,

Selectional Restrictions are instead defined at the level of `Argument` whenever the selectional restriction can be expressed in terms of a combination of ontological `InformArgs` and such combination is not productive.

In the case of true arguments, the attribute `status` has to be assigned the value `CHECK`. For instance,

```
<Argument
   id="Arg1PREDDevour"
   comment= "The second argument of pred_devour"
   semanticrolel="Role_ProtoPatient"
   informargl= "IA_FOOD>

<InformArg
   id="IA_FOOD
   status= CHECK
   weightvalsemfeaturel= "WVSFTemplateFoodPROT>
```

In the correspondence with the syntax, it is then necessary to choose a correspondence in which both the first and the second argument are linked to a position in a syntactic description:

```
<Correspondence
      id="ISObivalent"
      naming="isobivalent"
      comment="isomorphic mapping for bivalent predicates"
      correspargposl="ARG0P0 ARG1P1">
```

When an argument has a default status, it is recommended that the attribute `status` is assigned the value `DEFAULTCHECK`. This means that if the argument is syntactically realized, it must satisfy the selectional restriction indicated in the `InformArg`, which is default semantic information when the argument is not overtly syntactically realized. Thus, the case of the default argument of *build* can be encoded as follows:

```
<Argument
   id="Arg2PREDBuild"
   comment= "The third default argument of PREDbuild"
   semanticrolel="Role_Adjunct"
   informargl= "IA_SUBSTANCE_DEFAULT>

<InformArg
   id="IA_SUBSTANCE_DEFAULT
   status= DEFAULTCHECK
   weightvalsemfeaturel="WVSFTemplateSubstancePROT>
```

Finally, in order to specify that an argument is shadow, it is necessary to assign the value `DEFAULTCHECK` to the attribute `status` within the object `InformArg` of the argument. Moreover, the SemU corresponding to the incorporated word-sense has to be specified in the attribute `semu` within `InformArg`:

```
<Argument
   id="Arg2Shelve"
   comment= "The third shadow argument of pred_shelve"
   semanticrolel="Role_2Participant"
   informargl= "IA_USEM_Shelf_DEFAULT>

<InformArg
id="IA_USEM_Shelf_DEFAULT
   status= DEFAULT
   Semu= "SemU_Shelf">
```

Notice that `Argument` may point to a list of `InformArg` objects, and that on turn `InformArg` may point to a list of `WeightValSemFeature` objects:

```
<Argument
   id="PREDvoteARG0"
   semanticrolel="RoleProtoAgent"
   informargl="IArgHuman IArgInstitution">

<InformArg
   id="IArgHuman_and_Institution"
   comment="Human and Institution"
   status="CHECK"
   weightvalsemfeaturel=
   "WVSFTemplateHumanPROT
   WVSFTemplateInstitutionPROT">
```

In both cases, the members are to be read in 'and'. However, an important caveat must be considered:

```
<InformArg
   id="IArgComplex"
   comment="Complex selection"
   status="CHECK"
   weightvalsemfeaturel="WVSFTemplateHumanPROT WVSFSexFemalePROT">
```

This `InformArg` specifies that the argument can be occupied by everything that is human and by everything whose sex is female. It CANNOT be read as constraining

the argument to the intersection of these two sets (i.e. to women).
The GENELEX model does not allow to express logical operators others than ′and′ in selectional restrictions (e.g. restricting an argument to elements that are *not* of a certain type). Therefore, if it is necessary to specify negation or disjunction in selectional restrictions, a possible solution is to create sorts of "dummy" `InformArg`, like in the following example, where negation appears in the label of the object, while being logically 'inert':

```
<InformArg
    id="IArgNOT_HUMAN"
    comment="Everything which is not human"
    status="CHECK">
```

4.2.10. Derivation Relation (RECOMMENDED)

This slot contains information concerning (possibly morphologically marked) derivations between SemUs. For instance, in the case of the SemU <intelligence> the lexicographer may want to specify that it relates to the adjectival SemU <intelligent>.

It is strictly recommended that, if the valued attribute `typeoflink` has been specified in the predicative representation, an appropriate relation is also specified in the **Derivation** slot, whenever it is possible. In fact, although in some cases the two things may be redundant, they actually represent two different types of information. The `typeoflink` valued attribute refers to the predicative layer, and it expresses the fact that more SemUs may share the same predicate. On the other hand, the information in the derivation explicitly relates two SemUs, belonging to different parts of speech.

As a general recommendation, derivation relations should be encoded as follows:

a. Denominal relations between a verb and a noun, and deadjectival relations between a verbal and an adjective are encoded in the SemU of the verb.
b. Nominalization relations between a noun (*nomen actionis, nomen agentis*, etc.) and a verb, and between a noun and an adjective are encoded in the SemU of the noun.

As an example, take the case in Italian of *martello* (N, 'hammer'), *martellare* (V, 'to hammer') e *martellata* (N, 'hammer blow'):

SemU:	<martello> //N, hammer//
Derivation:	Nil

SemU:	<martellare> //V, to hammer//
Derivation:	*DenominalVerbNoun*(<martellare>, <martello>)

SemU:	<martellata> //N, hammer blow//
Derivation:	*EventNounVerb*(<martellata>, <martellare>)

The list of derivational relations can be found in Appendix B.

SGML Representation

Derivation relations translate into `RWeightValSemU` embedded objects. Derivation relations are required to be pondered as `PROTOTYPICAL`:

```
<SemU
      id="SEMUdestruction"
      naming="destruction"
      comment="......."
            …>
     <RWeightValSemU
            weight="PROTOTYPICAL"
            ...
            target="SEMUdestroy1"
            semr="SREventNounVerb"> </SemU>
```

4.2.11. The Qualia Structure (RECOMMENDED)

General remarks

The Qualia Structure of a template includes the formal, agentive, constitutive and telic roles. The values of these slots are provided by relations between SemUs or by features (cf. Appendix A).

Each template comes with a proposed set of relations and features that are recommended to be included in the semantic information of the SemU that instantiates that template. Qualia information actually captures different sorts of information, which range from encyclopedic world-knowledge to more strictly linguistic information. In some cases, certain Qualia information enter into the definition itself of a given semantic type, i.e. it characterizes its intrinsic essence and nature.

Although we are aware that the border of this distinction is doomed to remain fuzzy, we believe that it is possible to sort out the Qualia Information in at least two classes:

- **Type-defining information** - this is information which intrinsically defines a semantic type as it is. In other words, a SemU which receives a certain type is also assumed to contain a certain kind of information. Or vice versa, a SemU would not be assigned a certain type **[Type_1]**, unless its semantic content includes the information which is type-defining for **[Type_1]**. For instance, artifactual semantic types like **[Vehicle]** and **[Instrument]** are intrinsically defined by some agentive information, which specifies that they are human-created entities, and by some telic information. The latter refers to their inherent purpose for which they are created. More specifically, the information that an artifact is used for transportation is type-defining for the type **[Vehicle]**, because nothing is a vehicle unless it is used for transportation.

  Similarly, nouns like *lawyer*, *doctor*, *prosecutor*, etc. are of type **[Profession]**. What they share is the fact that they inherently contain a reference to some sort of typical activity, which defines the noun. This information is thus type-defining for nouns of semantic type **[Profession]**. On the other hand, nouns like *side*, *part*, *hand*, *façade*, are inherently parts, and should be assigned to the type **[Part]**. This type is defined by the constitutive relation *Is_a_part_of*, exactly because these nouns are identified in terms of the fact that they are parts of some entity. In other words, the constitutive information *Is_a_part_of* is type-defining for the type **[Part]**.

- **Additional information** - this information specifies further semantic components of SemU, rather than entering into the characterization of its semantic type. For instance, the SemU <car> has semantic type **[Vehicle]**: however, lexicographers may also specify, as additional information, that it has an engine or has wheels and a steering wheel. Similarly, the SemU <lion> has semantic type **[Animal]**, but it is possible to specify, as additional information, that lions have a mane, or that they live in the savanna.

Templates always specify the type-defining information of a given semantic type. Moreover, they involve some additional information, which is marked with the comment "//optional//". Lexicographers who choose to encode SemU by using a template with type **[Type_1]** should encode all the type-defining Qualia information which the template contain. Lexicographers are also free to add any additional information, which they may regard as relevant for the definition of SemU, provided that a Quale is filled with relations or features of the proper type.

The type-defining information inserted in the proposed templates has been sorted out mostly on the basis of its linguistic importance, and also according to its relevance to define and characterize the concept expressed by a given semantic type.

It is important to notice that relations and features are not type-defining or additional *per se*, but always with respect to a given type. That is to say, the notion of type-defining information is only relative to a certain type. Given a type **[Type_1]**, the proposed Qualia information is that which seems most suitable to define **[Type_1]**. However, at a later stage some of the additional information may become relevant to define more fine-grained types. For instance, the information that a car has an engine is additional information with respect to the type **[Vehicle]**. At a later stage, it might be possible to define a new type, e.g. **[Engine_Vehice]**, where that same information becomes now type-defining.

This is consistent with the general philosophy adopted in SIMPLE, i.e. providing a set of general types which are defined by a certain amount of information, and leave it to the lexicographers to determine whether extra information should be added. This is at the core of the open system which SIMPLE aims at achieving: new types may be defined at a later stage or in a different phase of the project. The definition of the semantic content of the SemUs in terms of the information represented in the Qualia Structure thus makes SIMPLE a *dynamic system*.

The content of the Qualia roles

The content of the Qualia roles is given by:

- two-place relations between SemUs (*R_SemU* in the GENELEX DTD);
- features.

As a general methodological criterion, we have given preference to the first two options. Therefore, some meaning components that in traditional approaches are defined in terms of features, in SIMPLE are represented by relations between SemUs. This allows SIMPLE to partially overcome well-known problems of feature-based lexical representations.

For instance, in traditional systems it is common to find features like +/- COLLECTIVE, +/- PART, +/-HUMAN, +/- ANIMAL, and the semantic analysis of lexical items is usually given by forming bundles of appropriate features, as in the following examples:

hand	HUMAN, PART
Paw	ANIMAL, PART

Committee HUMAN, GROUP
Flock ANIMAL, GROUP

Notice however that in these representations the features ANIMAL and HUMAN have very different roles: in the case of *hand* and *paw*, they mean that they are part of a human or of an animal entity. In the case of *committee* and *flock* they mean that these entities are constituted by animals or human beings. These basic facts cannot be made explicit in a feature-based representation because features are not interpreted.

The solution adopted in SIMPLE is to represent meaning components mostly as semantic relations between SemUs. This allow us to capture relevant aspects of SemUs, as well as to distribute them along the four Qualia roles, so to mark and distinguish their different contribution to the overall constitution of a SemU. For instance, the relation *Is_a_part_of* is used to capture meronymic relations, and the relation *Has_as_member* to mark the collective dimension of an entity. Therefore, the relevant aspects of the items above are now represented in the following way:

Hand **Constitutive**: *Is_a_part_of* (<hand>, <body>)
Paw **Constitutive**: *Is_a_part_of* (<paw>, <animal>)
Committee **Constitutive**: *Has_as_member* (<committee>, <person>)
Flock **Constitutive**: *Has_as_member* (<flock>, <animal>)

Semantic components have been represented in terms of features, only when *they express attributes of entities with a closed set of values*, e.g. *Sex*, *Age*, *Dimension*, etc. On the other hand, those semantic components referring to attributes with a possibly open list of values, have been expressed as relations between SemUs.

The structure of relations between SemUs

Relations between SemUs are two-place relations connecting SemUs in the language of the specific lexicon which is being built:

Relation (<$SemU_1$>, <$SemU_2$>)

where $SemU_1$ is the *source*, i.e. the sense being defined, and $SemU_2$ the *target*. The target should be identified preferably:

- by using linguistic tests; and/or
- by choosing the prototypical entity which can satisfy a certain Qualia relation. Priority should be given to choose a SemU which either has already been encoded, or is part of the set of the 'prospective' SemUs to be encoded in SIMPLE, and possibly within the PAROLE Lexicon.

The target of each relation is a SemU belonging to the same language as the souce:

Has_as_part (<body>, <head>) (*Eng.*)
Has_as_part (<corpo>, <testa>) (*It.*)

Relations can be iterated. If there is more than one possible value for the target that the lexicographer wants to encode, the relation must be iterated for each of these values:

Has_as_part (<body>, <leg>)
Has_as_part (<body, <head>)

In the templates provided by the Specification Group, in some cases the target appears with a SemU in English, which marks the value of the relation which identifies the type of that template:

Template_Type:	**[Vehicle]**
Telic:	*Used_for* (<SemU>, <move>)

In this case, the target represents a prototypical value proposed by the Specification Group, which during the encoding process the lexicographer may choose to appropriately translate into the specific language of the lexicon to be built.

Templates also contain instance of relations which are expressed in the following way:

Relation (<$SemU_1$>, <$SemU_2$>: [Type_1])

This means that the lexicographer should specify the target of the relation with a SemU of the appropriate type **[Type_1]**

The target of a relation between SemUs can also be a multiword expression, whenever it is impossible to find a single SemU as the appropriate value.

SGML Representation

The relations that fill the qualia slots translate into `RWeightValSemU` embedded objects. Type-defining qualia relations are pondered `PROTOTYPICAL`, while additional (i.e. optional) qualia relations are pondered `ESSENTIAL`:

```
<SemU
      id="SEMUcar"
      naming="car"
      comment="......."
            …>
     <RWeightValSemU
           weight="PROTOTYPICAL"
           target="SEMUvehicle1"
           semr="SRIsa"> </SemU>
```

4.2.11 Synonymy (Optional)

Notwithstanding the inherent difficulties of this notion, synonymy has surely a central role in lexical semantics and in lexicography. The slot **Synonymy** can thus be used to specify a list of synonyms of a SemU.

This slot is to be filled with one or more instances of the following relation between SemUs:

Name	ERLI's Name	Description	Example
Synonym	Nono0_Appli_II	<SemU2> is a linguistic synonym of <SemU1>	*Synonym* (<tool>, <instrument>)

Since relations between SemUs are always binary, if a SemU has more than one synonyms to be specified, the relation must be iterated:

SemU:	<automobile> //car//
Synonymy:	*Synonym* (<automobile>, <macchina>) *Synonym* (<automobile>, <auto>)

SGML Representation

Synonymy information translate into `RWeightValSemU` embedded objects:

```
<SemU
      id="SEMUmacchina1"
      naming="car"
      comment="......."
            …>
     <RWeightValSemU
            weight="ESSENTIAL"
            target="SEMUautomobile"
            semr="SRSynonym"> </SemU>
```

4.2.12. Collocates (OPTIONAL)

This slot is intended to contain collocational information of the encoded SemU derived from corpora. It is fully optional.

Collocational information may be specified by using one or more of relations between SemUs such as the following:

Name	Description	Example
Pref_objNV	<SemU1> is a noun and is the typical object of the verb in <SemU2>	*Pref_obj* (<rule>, <break>)
Pref_subjNV	<SemU1> is a noun and is the typical subject of the verb in <SemU2>	*Pref_subj* (<flower>, <bloom>)
Pref_adjNA	<SemU2> is an adjective which typically occurs with the noun <SemU1>	*Pref_adj* (<butter>, <rancid>)
Pref_objVN	<SemU1> is a verb and has the noun in <SemU2> as its typical object	*Pref_obj* (<break>, <rule>)
Pref_subjVN	<SemU1> is a verb and has the noun in <SemU2> as its typical subject	*Pref_subj* (<bloom>, <flower>)
Pref_adjAN	<SemU1> is an adjective and typically modifies the noun in <SemU2>	*Pref_adj* (<rancid>, <butter>)

4.2.13. Complex (RECOMMENDED)

This slot is used to mark the regular polysemous class to which a SemU belongs. In SIMPLE a set of polysemous classes have been proposed (cf. Appendix F), as an attempt to partially account for the phenomenon of regular polysemy. Lexical polysemy is a pervasive phenomenon in the lexicon. The classes have been selected according to the following criteria:

- they are instances of well-known polysemous classes in the literature;
- they have emerged and have been detected during the phase of preparation of the templates, with the collaboration and feedback of all the partners.

A polysemous class is marked as a pair of semantic types:

[Type_1] [Type_2]

The value of the slot **Complex** in the templates is filled by one or more of the polysemous classes in Appendix F. Templates are provided with the slot **Complex** filled with the polysemous class (or classes) which is *most typically related with the SemUs which instantiate that template*. It is however intended that the polysemy relation concerns SemUs.

If a SemU of a lexical item *L* has as semantic type **[Type_1]**, and as value of **Complex [Type_1] [Type_2]**, this means that there is another SemU of *L* which has **[Type_2]** as semantic type. In other terms, if a lexical item has two SemUs which have the same value in **Complex**, this means that these SemUs belong to the same polysemous class and *that they are connected through a relation of regular polysemy*, i.e. they are regular polysemous senses of the same word. It is thus possible to distinguish those SemUs which represent independent senses of a word, from those senses which are related through a regular polysemy.

Thus regular polysemy is represented as a link between SemUs belonging to two different semantic types. For instance, the name *school* has at least two SemUs, <school1>, meaning "building which is used for educative purposes", and <school2>, meaning "educational institution". This is a polysemous word, and its senses belong to the alternation class *building-institution*. The value of the **Complex** slot is therefore filled in the following way:

SemU:	<school1>
Template_Type:	**[Building]**
Complex:	**[Building] [Institution]**

SemU:	<school2>
Template_Type:	**[Institution]**
Complex:	**[Institution] [Building]**

Differently, take the Italian word *cane*: it has two SemUs, <cane1>, meaning "a type of mammal", i.e. dog, and <cane2> meaning "part of a gun", which are not related by any type of regular polysemy. Therefore, the resulting SemUs are represented as follows:

SemU:	<cane1>
Template_Type:	**[Animal]**
Complex:	<Nil>

SemU:	<cane2>
Template_Type:	**[Part]**
Complex:	<Nil>

Since these SemUs do not belong to any polysemous class, the **Complex** remains empty.

SGML Representation

Polysemous classes translate into `RWeightValSemU` embedded objects:

```
<SemU
      id="SEMUschool1_building"
      naming="school building"
      comment="......."
            …>
     <RWeightValSemU
            weight="ESSENTIAL"
            target="SEMUschool2_institution"
            semr="SRPolysemyBuilding-Institution"</SemU>
```

SIMPLE presupposes that all wordclasses sharing particular meaning components will exhibit similar behaviour. On examining adjectival behaviour in detail, it seems to be the case that, though similarities exist, adjectives belonging to the same semantic class may differ from each other in numerous ways. The semantic criterion 'gradability', for example, cuts across all adjectives (Raskin *et al.* 1995). At the top level, two templates have been identified for extensional and intensional adjectives.

The intensional adjectives are further subdivided into 6 types, described in §. 3.1.4.1, and contain some default values. These semantically motivated classes generally exhibit consistent behaviour, but can at present not be guaranteed not to include members that display slightly diverging behaviour. Therefore, the template profiles should not be regarded as rigid and unalterable units of semantic representation. Actually, templates are more like prototypical representations. When a particular adjective does not completely fit the bill (a) slot values are overridden, or (b) the lexicographer goes up to a more underspecified template. Following the ontology, we have also designed 6 templates for the extensional adjectives (cf. §. 3.1.4.2). Subsequently, they are further subdividable on the basis of the assignment of meaning components in the constitutive slot (the complete list can be found in Appendix A). Following this, the adjective *boiling* in *She was running boiling hot water into the tub* (Collins 1987: page 148) would be classified as a physical property adjective, whose meaning is captured more precisely by the meaning component `temperature`. As there seems to be an almost infinite number of distinguishable meaning components and as it is not immediately obvious that more idiosyncratic behaviour can be captured in such a way, we have not developed individual templates for all these semantic dimensions. Meaning components are also used for intensional adjectives, particularly for temporals and modals.

4.3.1. Slots and Fillers in the Adjectival Templates

Below you find the schematic representation of a template for the encoding of adjective SemUs. All template slots are marked with one of the following labels:

REQUIRED - Information which is included in the minimal requirements specified in the

RECOMMENDED - Information which is recommended to be encoded, although it is outside the minimal requirements of the Technical Annex

OPTIONAL - Information which, although it has a high linguistic relevance, is optional as far as the semantic encoding in SIMPLE is concerned

Slot name	Slot Description
SemU	*Identifier of a SemU*
Synu	*Identifier of the SynU to which the SemU is linked*
BC Number	*Number of the corresponding Base Concept in EuroWordNet*
Template Type	*Semantic type of the SemU*
Template Supertype	*Semantic type which dominates the TemplateType of the SemU in the type-hierarchy*
Unification Path	*Unification history of a template*
Inter-/Subsective	*only in extensional templates*
Domain	*Domain information from LexiQuest domain list*
Semantic Class	*One of the classes used by LexiQuest*
Gloss	*Lexicographic definition*
Derivation	*Derivational relations between SemUs*
Syntactic Type	*Attributive and/or Predicative use*
Predicative Representation	*Information about the argument structure of the SemU*
Selectional Restrictions	*Selectional restrictions on the arguments*
Formal	*Formal relations between SemUs*
Constitutive	*Constitutive relations between SemUs and constitutive semantic features*
Telic	*Telic relations between SemUs*
Agentive	*Agentive relations between SemUs*
Synonymy	*Synonyms of the Semu*
Collocates	*Collocate information*
Complexity Type	*Polysemy information*

Given the specificity of adjective semantics, the structure of the template is slightly different with respect to the one for nouns and verbs. In the following sections we will discuss the slots that (a) are specific to the adjectival templates, or (b) contain values that need mentioning or explaining.

4.3.2. Template Type and Template Supertype

The value of the **Template_Type** is an element in the ontology for adjectives in Appendix C. As is true for all parts of speech, **Template_Type** and **Template_Supertype** are ontologically fixed. In other words, the value in the **Template_Supertype** slot is fully determined by the value in the **Template_Type** slot. For example, the adjective *former* is assigned the value **[Temporal]** as **Template_Type**. Therefore, the **Template_Supertype** can only be **[Intensional]**. The **Template_Type** information is **REQUIRED**, while **Template_Supertype** assignment is **RECOMMENDED**, though assignment can easily be handled automatically.

4.3.3. Inter-/Subsective

This slot offers the lexicographer the possibility to implement the basic division of extensional adjectives into intersective and subsective ones. It is only part of the extensional templates. Values are: *Intersective*, *Subsective* and *Underspecified*. Filling in this slot is **RECOMMENDED**.

4.3.4. Semantic Class

The purpose of this slot is to provide a mapping with LexiQuest's Semantic Classes for adjectives. However, there are only three values available, namely *geo*, *colour* and *period*. These Semantic Classes are contained in the list of meaning components, under *nationality*, *colour* and *temporal property*. If an adjective belongs to either one of these Semantic Classes, **Semantic Class** assignment is **REQUIRED**. In all other cases, use of the meaning components in the Constitutive Role slot will make up for the lack of detailed semantic classes.

4.3.5. Derivation

The Derivation slot contains information about derivation relations between SemUs. Derivation relations to be encoded in the adjectival templates are:

- denominal adjectives - *criminal lawyer*
- deverbal adjectives - *readable thesis*

It is used for morphological derivations where the meaning of both SemUs is the same. However, if either they are not morphologically linked or they carry different meanings, this information should be entered in the Constitutive Role. SIMPLE uses the LexiQuest derivational relations between SemUs as slot fillers. A list of relations between adjectives and nouns, and adjectives and verbs are found in Appendix B. Entering derivational information is **RECOMMENDED**.

4.3.6. Synonymy

The Synonymy slot can be used to specify:

- a list of synonyms of a SemU (LexiQuest's CONTR_POS_DE relation)
- a list of near-synonyms of a SemU (LexiQuest's AJAJ2_APPLI_II relation)

Adding this information is **OPTIONAL**.

4.3.7. Complexity Types

Several regular polysemic patterns have been identified. For example, all adjectives that are assigned the meaning component *nationality* can also be used in a sense expressing something like *style*. This distinction is found in the following example:

(12) a. British beef - British reserve
b. French language - French cuisine

c. Roman Empire - Roman nose

The example below illustrates how temperature adjectives (meaning component: *temperature*) can be used to evaluate behaviour (meaning component: *attitude_evaluation*, *behaviour*):

(13) a. lukewarm air - lukewarm support
b. hot day - hot temper
c. icy water - icy look

Lexicographers should use the meaning components or template types to capture regular polysemous patterns. However, when the lexicographer fails to identify these patterns, we suggest finding regularities in a bottom-up fashion after the templates have been filled out. This could, for example, be done through:

a. matching patterns of meaning component assignment
b. matching patterns of template assignment
c. matching recurrent selectional restriction patterns

Adding this information is **RECOMMENDED**.

4.3.8. Qualia Structure

It has been noted that Qualia are well-designed and useful for nouns, but look more artificial for other lexical categories (Saint-Dizier 1998: 1143). Actually, Qualia Structure seems a rather artificial way to capture adjectival meaning. Where it is sometimes possible to locate an adjective's hypernym (*formal role*) and it is mostly easy to divide up the meaning of an adjective into its constituent meaning components (*constitutive role*), it is almost always impossible to instantiate the agentive or telic role for an adjective on its own. This is because both agentive and telic role reflect semantic dimensions of the noun phrase and not of the adjective in isolation. For example, *criminal lawyer* can be assigned telic information such that it is a lawyer that specialises in criminal law. but this telic information is triggered by the adjective-noun combination. Qualia structure information is **RECOMMENDED**, except for the *Meaning_component* assignment in the constitutive role, which is **REQUIRED**.

4.3.8.1. Formal Role

Whereas the semantic organization of nouns is structured around hyponymic relations, the basic semantic relation among descriptive adjectives in WordNet is **antonymy** (Miller 1998). Antonymy is a relation between word senses. The antonym of *hard* meaning "requiring great physical or mental effort" is *easy*. However, if *hard* is defined as "not yielding to pressure or easily penetrated" its antonym is *soft*. Generally, three types of antonymy are distinguished. The first group consists of **complementary antonyms** (Lyons 1968: 460), such as *dead/alive* and *succeed/fail*. A particular conceptual domain is divided into two mutually exclusive compartments (Cruse 1986: 198). There is no possibility of a third term denoting a concept between them. Words are complementaries, when it is awkward to deny both terms in one sentence, as is shown in (14a). Non-complementary opposites do not yield this type of anomaly (see (14b)):

(14) a. ? The light was neither on nor off.
b. The milk was neither hot nor cold.

Also, in the case of complementary antonyms, if one term is not valid, its opposite has to be true (*NOT dead = alive*). A final indication is the phenomenon that gradability is either impossible or questionable, as in *?extremely true* and *?a little open*. This type of antonymy is captured by the *AntonymComp* relation, which is to be filled with a SemU (cf. Appendix A).

The second group are most commonly referred to as **gradable antonyms** (Raskin *et al.* 1987: 116), but also as polar oppositions or simply antonyms (Cruse, 1986: 204). They distinguish themselves from the complementary antonyms in that terms of a pair do not strictly bisect a domain. There potentially exists a whole range of values between both ends of a particular scale. Thus, denying both terms in one sentence does not create a paradoxical utterance, as is illustrated by (14b). Furthermore, they are generally fully gradable, e.g. *extremely short* and *very light*. The relation *AntonymGrad*, a SemU for its filler, is used for this antonymic type (cf. Appendix A).

The third type, **multiple oppositions** (Bartning 1976: 112) is not always accepted as an instantiation of antonymy. However, as it adds information where there would otherwise be an empty slot, we have decided to include it. An example of multiple opposition is *Dutch/English/French/German/etc. flag*. This is represented by the *AntonymMult* relation (cf. Appendix A).

4.3.8.2. Constitutive Role

In the Constitutive Role slot the meaning components of adjectives are represented as features. The list of meaning components (see Appendix A) borrows heavily from Hundsnurcher and Splett (1982), but has also taken into account Dixon's adjectival taxonomy (Dixon 1991) and the MikroKosmos scales (Raskin, 1995). Based on Lyons (1977), MikroKosmos distinguishes scales of two kinds: the **continuous scale** (generally corresponding to gradable antonyms) and the **discrete scale** (corresponding generally to complementary and multiple antonymy). To fully capture their meaning, some continuous scale adjectives need a value. For example, if we compare the adjectives *beautiful* and *ugly* in *beautiful hair* and *ugly bloke*, they both are assigned the meaning component *evaluation*. Adding *plus* and *minus* helps us to distinguish them. In the case of discrete scalars adding a meaning component value is not possible. The adjective *orthodox* in *orthodox party* is assigned the meaning component *society*, but its semantics does not express any place on a scale. In this case we would assign the value *underspecified*, expressing that the distinction is not appropriate in this case because the adjective in question is a 'discrete scalar'. Besides *plus*, *minus* and *underspecified* we use the value *neutral* to express that a particular adjective finds itself in the middle of the scale, for example *lukewarm water*. Two other issues are mentioned in connection with scales, namely **markedness** versus **unmarkedness** and **asymmetry** (Raskin 1995: 19), but neither of these phenomena has been implemented in the adjectival templates.

In the following table, we use the highly polysemous adjective *blue* to illustrate the assignment of meaning components. We find 11 senses listed for *blue* in WordNet 1.6. The WordNet sense numbers are given in the first column. The second column contains the synset members (i.e. synonyms) of that particular sense of *blue*. The WordNet gloss is given in the third column. Most importantly, the meaning component(s) we think are appropriate are listed in the fourth column, expressed through the feature value pair *Meaning_component (meaning component,location on scale)*. To fit the value for location on scale in the table we have used abbreviations. Because of the finegrainedness of WordNet sense distinctions, some of the senses listed below are captured by the same meaning component. Overlap of meaning component(s) can theoretically be used as an indicator for a possible clustering of senses (Peters *et al.* 1998). In this

way, senses 1, 3, 9 and 10 can be clustered on the basis of the meaning component *colour*, which is also true for senses 4 and 11 which share the meaning component *feeling*. Looking at senses 5 and 8, however, we find that though both have been assigned the meaning component *moral*, their actual meanings are opposites. Clustering here does not necessarily entail identity of meaning but expresses similarity at the higher level notion of *moral evaluation*.

Sno	Synset Members	Gloss	Meaning Component
1	bluish, blueish, light-blue, dark-blue	having a color similar to that of a clear unclouded sky	*Meaning_component* (colour,u)
2		(used to signify the Union forces in the Civil War (who wore blue uniforms)	*Meaning_component* (social,u)
3		(wearing blue; *the painting is called `the blue boy'; the blue team*)	*Meaning_component* (colour,u)
4	depressed, dispirited, down(predicate), downcast, downhearted, low, low-spirited	(low in spirits; feeling discouraged and downhearted)	*Meaning_component* (feeling,min)
5	blasphemous, profane	characterized by profanity or cursing	*Meaning_component* (moral,min)
6	gamy, gamey, juicy, naughty, racy, risque, spicy	suggestive of sexual impropriety	*Meaning_component* (evaluation,u) *Meaning_component* (society,u)
7	aristocratic, aristocratical, blue-blooded, gentle, patrician	belonging to or characteristic of the nobility or aristocracy	*Meaning_component* (society,u)
8	puritan, puritanic, puritanical	morally rigorous and strict	*Meaning_component* (moral,u)
9	bluish, blueish	tinged with blue or purple from cold or contusion	*Meaning_component* (colour,u) *Meaning_component* (bodily sensation,u)
10		characterized by or marked with a bluish color	*Meaning_component* (colour,u)
11	dark, depressing, disconsolate, dismal, dispiriting, gloomy, grim	causing dejection	*Meaning_component* (feeling,min)

The stative-dynamic distinction is expressed by means of the *Duration* feature in the Constitutive Role that can take on the values *persistent*, *temporary* and *underspecified*. The *Reality* feature whose values are *abstract* and *concrete* express whether the meaning of the adjective is

concrete (i.e. literal) or abstract (i.e. figurative).

4.3.9. Other Types of Information

The **Inter-/Subsective** slot only appears in the templates for extensional adjectives. It can be used to express whether an adjectival SemU is *subsective* or *intersective*. This slot is filled by the two features *Intersective* and *Subsective*.

The **Syntactic_type** slot is instead used to express whether a sense of an adjective appears only in the attributive use, in the predicative, or both. Correspondingly, the values of the feature *SyntacticType* are *attr*, *pred* and *attrpred*.

The information in these slots is **RECOMMENDED**.

SGML Representation

Inter-/Subsective and **Syntactic_type** correspond to a SGML `WeightValSemFeature object.`

Appendix A

Qualia Relations and Features

The values of the Qualia roles of SemU are filled with:

- relations between SemU and other SemUs which specify the target of these relations;
- features.

Relations are organized into a hierarchical structure according to a subtype relation:

Top

Formal *Constitutive* *Telic* *Agentive*

The set of the proposed relations to represent Qualia information contains both relations which have been already made available in GENELEX, and others which have been newly introduced for the specific needs of SIMPLE. The criterion for the introduction of these new relations has been essentially 'bottom-up', that is to say because of their relevance to describe different aspects of the semantic content of SemUs.

In what follows, we use the general convention that $SemU_1$ marks the source SemU (i.e. the SemU which is being encoded), and $SemU_2$ marks the target SemU.

The highest relations in the hierarchy are actually used as formal nodes in the hierarchy, rather then for the characterization of any semantic type. Although they are usually not applied in the template description, they can be used in those cases in which it is necessary to have a very underspecified relation of a given type.

SGML Representation

Relations correspond to `Rsem` objects in SGML:

```
<RsemU
id="SRIsapartof"
naming="Isapartof"
example="Isapartof (<head>, <boy>)"
comment="Usem1 is a part of Usem2"
invsemr="SRHasaspart"
isal="SRConstitutive"
type="PARADIGMATIC"symmetry="SYMMETRIC">
```

The attribute `isal` is used to represent the position of the relation within the general hierarchy, i.e. to determine its Qualia function. The type of Qualia relations is `PARADIGMATIC`.

Name	ERLI's Name	Description	Example	Isal
Formal		Formal node in the hierarchy		Top
Isa	Specifique_ Generique	<SemU2> is the hyperonym of <SemU1>. The value of this relation can be given, for example, by a EuroWordNet hyperonym or by a dictionary superordinate;	*Isa* (<yacht>, <boat>)	*Formal*
Antonym_comp		<SemU2> is the complementary antonym of <SemU1>	*AntonymComp* (<dead>, <alive>)	*Formal*
Antonym_grad		<SemU2> is the gradable antonym of <SemU1>	*AntonymGrad* (<hot>, <cold>)	*Formal*
Antonym_mult		<SemU2> is one of the multiple antonyms of <SemU1>	*AntonymMult* (<German>, <Dutch>)	*Formal*

Comments:

The *Isa* relation is used to specify the hyperonym of a SemU, in order to capture closest hierarchical relations than those represented by the semantic type. For instance, given the SemU <lion>, although it will be assigned the semantic type **[Animal]** (or eventually **[Earth_animal]**), one may desire to specify that a lion is a feline. This information will be then added in the Formal role in terms of the *Isa* relation:

SemU:	**<**lion>
Template_Type:	**[Animal]**
Semantic Class:	Mammal
Formal:	*Isa* (<lion>, <feline>)

The types that define the general ontology are intended to capture large generalizations, which therefore remain at a low level of granularity. The *Isa* relation in the Formal role will allow the lexicographer to reach a deeper level of classification of the SemUs, within a certain semantic type.

As another example, take the SemU <aircarrier>. It will be assigned the type **[Vehicle]**, while in the Formal role it is possible to specify that it is a ship:

SemU:	**<**aircarrier>
Template_Type:	**[Vehicle]**
Formal:	*Isa* (<aircarrier>, <ship>)

In the templates, the value of the Formal role is specified as in the following example:

Template_Type:	**[Vehicle]**
Formal:	*Isa* (<SemU>, <object> or hyperonym)

This means that <object> is to be regarded only as a default target for the *Isa* relation in the SemUs that instantiate that templates; alternatively, a more specific hyperonym can be used as the target of the *Isa* relation. The value of this hyperonym can be typically either the hyperonym of the SemU in EuroWordNet, or the hyperonym of the SemU as specified by a dictionary. As far as the latter option is concerned, it is necessary to take into account - and avoid - the well-known problem of the

circularity of the dictionary definitions, which in fact are often expressed not in terms of hyperonymy relations, but rather of synonymy.

The relations of antonymy have been defined for adjectives, but they can possibly be extended also to be used with other parts of speech.

Name	ERLI's Name	Description	Example	Isal
Constitutive		Formal node in the hierarchy		Top
Is_a_member_of	Nono7_appli_II	<SemU1> is a member or element of <SemU2>. <SemU1> is typically a shaped, countable entity, and <SemU2> is typically a collective entity, i.e. a set of individuals	*Is_a_member_of* (<senator>, <senate>)	*Constitutive*
Has_as_member	Nono7_appli_de_II	<SemU1>, which corresponds to a collective entity or a set of entities, has <SemU2> as its (proto)-typical member or element	*Has_as_member* (<flock>, <bird>)	*Constitutive*
Is_a_part_of	Partie_tout	<SemU1> is a part of <SemU2>	*Is_a_part_of* (<head>, <body>)	*Constitutive*
Has_as_part	Tout_partie	<SemU1> has prototypically <SemU2> as one of its parts	*Has_as_part* (<airplane>, <wing>)	*Constitutive*
Location		Formal Node in the hierarchy		*Constitutive*
Property		Formal node in the hierarchy		*Constitutive*
Instrument		<SemU1> is an event SemU and <SemU2> is the typical instrument, vehicle or device which is used to perform this event.	*Instrument* (<ski>, <ski>)	*Constitutive*
Relates		<SemU1> denotes a relation, and <SemU2> denotes the typical entities that are related by it	*Relates* (<kinship>, <person>)	*Constitutive*
Resulting_state		<SemU1> is a transition and <SemU2> is the resulting state of the transition	*Resulting_state* (<die>, <dead>)	*Constitutive*
Is_a_follower_of		<SemU1> is an individual who is a follower, a supporter, an adept of a certain religion, doctrine, school of thought or credo in <SemU2>	*Is_a_follower_of* (<marxist>, <marxism>)	*Is_a_member*
Made_of		<SemU2>is typically a substance or stuff out of	*Made_of* (<bread>, <flour>);	*Is_a_part_of*

		which <SemU1> is made. Alternatively, <SemU2> is an element which enters into the composition of <SemU1>	*Made_of* (<water>, <oxigen>)	
Is_in	Nono8_appli_II	<SemU1> is typically located in <SemU2>.	*Is_in* (<oasis>, <desert>)	*Location*
Lives_in		<SemU1> is a living entity which typically lives in <SemU2>.	*Lives_in* (<Italian> <Italy>)	*Location*
Has_as_colour		<SemU2> is the typical colour of <SemU1>	*Has_as_colour* (<lemon>, <yellow>)	*Property*
Constitutive_activity		<SemU2> is the typical activity of <SemU1>, which is a natural kind entity and the subject of the event expressed by <SemU2>	*Constitutive_activity* (<bird>, <fly>)	*Property*
Produces		<SemU2> is a natural entity that is typically produced by <SemU1>, which is also a natural kind entity	*Produces* (<bird>, <egg>)	*Property*
Produced_by		<SemU1> is an entity that is typically produced by <SemU2> as the result of a natural process, intrinsically correlated with the nature of <SemU2>.	*Produced_by* (<honey>, <bee>)	*Property*
Property_of		<SemU2> is an adjective which refers to the property, quality or attribute expressed by <SemU1>	*Property_of* (<intelligence>, <intelligent>)	*Property*
Concerns		<SemU1> is a phenomenon, event or situation that typically concerns of affects <SemU2>	*Concerns* (<hepatitis>, <liver>)	*Property*
Contains		<SemU2> is an object which is typically contained in <SemU1>	*Contains* (<book, information>)	*Property*
Quantifies		<SemU1> expresses a quantity of <SemU2>	*Quantifies* (<bottle>, <liquid>)	*Property*
Measured_by		<SemU1> is a property which is measured by <SemU2>, a unit of mesure	*Measured_by* (<temperature>, <degree>)	*Property*
Related_to		<SemU1> is related in some unspecified way to <SemU2>	*Related_to* (<second>, <two>)	*Property*
Successor_of		<SemU1> is the element following <Sem2> in a series	*Successor_of* (<two>, <one>)	*Property*
Has_as_effect		<SemU2> is a side-effect, consequence or indirect effect of <SemU1>	*Has_as_effect* (<storm>, <thunder>	*Property*
Typical_of		<SemU1> is a disease or phenomenon that	*Typical_of* (<distemper>,	*Property*

		typically affects the entity in <SemU2>	<dog>)	
Causes		<SemU1> typically causes <SemU2> as part of its natural constitution	*Causes* (<measles>, <fever>)	*Property*

Comments:

1. The relations *Has_as_part*, *Made_of*, *Is_in*, *Has_as_colour*, *Constitutive_activity*, *Produces*, *Produced_by*, *Concerns*, *Measured_by*, *Related_to*, *Successor_of*, *Has_as_effect*, *Typical_of*, *Causes*, *Instrument*, *Relates* always concern aspects of the meaning that more properly pertain or concern world-knowledge. They are additional information and are intended to be always optional in every SemU and for every semantic type. They can be added by lexicographers if they feel that this information can be useful to characterize a SemU or to discriminate between two word senses.

2. The relation *Lives_in* is type-defining for the type **[People]**. It can be added as additional information to describe SemUs of other semantic types.

3. The relation *Is_a_part_of* is type-defining for the type **[Part]**. However It can be added as additional information to describe SemUs of other semantic types. As an example, take the SemU <head>, "part of the body". If this SemU is assigned the semantic type **[Part]**, since the the relation *Is_a_part_of* is proposed as a defining element for this type, the SemU is represented as follows:

SemU:	**<**head>
Template_Type:	**[Part]**
Constitutive:	*Is_a_part_of* (<head>, <body>)

However, the same relation *Is_a_part_of* can be used as additional information to describe SemUs belonging to other semantic types, as in the following example:

SemU:	**<**locomotive>
Template_Type:	**[Vehicle]**
Constitutive:	*Is_a_part_of* (<locomotive>, <train>)

4. The relation *Has_as_member* is type-defining for the type **[Group]** and for its subtypes (e.g. **[Human_group]**), i.e. to characterize collective nouns.

5. The relation *Is_a_member_of* is type-defining for the types **[Kinship]**, **[Role]**, and **[Social_status]**, which are used for those nouns which primarily express the role of an individual in (or the belonging of an individual to) some institution, hierarchy, etc.

6. The relation *Is_a_follower_of* is type-defining for the type **[Ideo]**, which refers to the nouns denoting the followers of come credo or school of thought.

7. The relation *Property_of* is type-defining for the type **[Quality]**, and characterizes the relation between the quality expressed by an abstract noun, and a similar adjective:

SemU:	**<**beauty>
Template_Type:	**[Quality]**

Constitutive:	*Property_of* (<beauty>, <beautiful>)

8. The relation *Contains* is intended to be optional, since it marks additional information. It can be used to specify what an entity typically contains, for instance that a book contains information, or that a barrel contains wine, etc.

9. The relation Quantifies is type-defining for **[Amount]**.

10. The relation *Resulting_State* is used to codify an event (either state or process) which is the inherent result or effect of the occurring of another event. For SemUs whose event type is a transition, the relation *Resulting_State* is used to express the resulting state of the event. For instance, the meaning of the verb *kill* entails that the result of an event of killing is that the killed individual is dead, notwithstanding the fact that the same event may also have other effects. Although in some cases this distinction might be fuzzy, it is possible to claim that the target of *Resulting_state* is an event SemU which is part of the linguistic meaning expressed by the source event SemU. Consider for instance one sense of the verb *push*: pushing something inherently causes this entity to move, and this fact can be regarded as part of the content of this SemU.

    The relation *Resulting_state* is used in the constitutive role in two cases:

    a. When the **Event Type** of the SemU is a *transition*. In this case, the target of *Resulting_state* is the resulting state of the transition;
    b. When the event SemU is *causative* (independently of its **Event Type**). In this case, the target of *Resulting_state* expresses the caused event, while the causing event is expressed in the agentive role through the relation **Agentive_cause** (see below).

    If the event SemU e_1 has more than one argument, the relation *Resulting_state* is intended to represent an event e_2 which is the result of the occurring of e_1, and which affects the argument corresponding to the object or indirect object of the lexical item expressing e_1. For instance, the constitutive role of the verb *give*, which is a transition, is as follows:

SemU:	<give>
Constitutive:	*Resulting_state* (<give>, <have>)

    That is to say, the result of an event of giving is that the argument corresponding to the indirect object of the verb *has* something. Consider also the verb *kill*:

SemU:	<kill>
Constitutive:	*Resulting_state* (<kill>, <dead>)

    The target of the relation *Resulting_state* refers to the resulting state affecting the object argument of the transitive verb *kill*.

Name	Description	Type of values	Values
Affectedness	For reporting speech acts. It refers to the impact on the source reporting the information. E.g. brag vs.	BINARY	Positive/Negative

	admit		
Age	The age of a living entity	CLOSED_LIST	Young, adult, old
Aspect	It is used with aspectual events.	CLOSED_LIST	Inchoative, Durative, Terminative
Attitude	Whether an act is cooperative or not	BINARY	For, Against
Audience	For speech acts. E.g. announce vs. confide	BINARY	Public, Private
Connotation	The connotation of a property or event	BINARY	Positive, Negative
Contact	Whether there is contact between two entities	BINARY	Yes, No
Dimension	The three spatial dimensions	CLOSED_LIST	1,2,3, Underspecified
Direction	It refers to the direction of an event or change	CLOSED_LIST	up, down, inward, outward, around, forward, backward, underspecified
Duration	It refers to the duration of the effects of an event	BINARY	Temporary, Persistent, Underspecified
Explicitness	This binary feature expresses whether the utterance explicitely specifies or characterizes its propositional content	BINARY	Explicit, Implicit
Formality	Characterize the level of formality of an event	BINARY	Formal, Informal
Habitat	The typical environment inhabited by a living entity	CLOSED_LIST	Earth, Air, Water, Underspecified
Intentionality	Whether an event is carried out intentionally or not	BINARY	Yes/No
Iterative	Whether an event or time-period can be iterated or not	BINARY	Yes, No
Legal	Whether an event is legal or not	BINARY	Yes, No
Manner	Whether an event is marked for a specific manner of execution	BINARY	Yes/No
Meronym	Whether two entities are in a part-of relation	BINARY	Yes/No
Obligation	For commissive speech acts. It refers to the degree of commitment of the speaker	BINARY	Strong/Weak
Partitive	Whether an event affect an object entirely or partially	BINARY	Yes/no
Polarity	For speech acts. Whether the speaker asserts the complement clause or its contrary	BINARY	Positive/Negative
Possible	It brings modal force to the relation in the formal. It expresses that the relation encoded therein is possible.	BINARY	Yes/No
Presupposed	Whether a cognitive event or state presupposes the truth of the complement clause	BINARY	Yes, No
Presupposition	Whether the information in the complement clause is new or not for the speaker	BINARY	New, Presupposed
Punctual	Whether an event or time is punctual or not	BINARY	Yes, No
Reality	Whether a SemU is concrete (i.e. literal) or abstract (i.e. figurative)	CLOSED_LIST	Concrete, Abstract
Reciprocal	Whether an event expresses a reciprocal action	BINARY	Yes/No
Scalar	Whether a property is gradable or not	BINARY	Yes, No
Sex	The sex of a living entity	CLOSED_LIST	Male, Female,
State	The physical state of a substance	CLOSED_LIST	Solid, Liquid, Gas,
Strength	Expresses the reliability or the strength of a speaker's cognitive state or proposition	CLOSED_LIST	High, Low, Underspecified
Temporality_type	Expresses the three major temporal divisions	CLOSED_LIST	Past, Present, Future
Voice_Quality	It is used to distinguish speech acts like cry vs. whisper	CLOSED_LIST	High, Low, Clear, Unclear

Comments:

Most of these features usually represent additional information, which however can be crucial to capture identifying semantic components of a word. For instance the feature *Sex* is essential to distinguish *man* from *woman* or *dog* from *bitch*, while the feature *Age* is essential to distinguish *child* from *man*, etc.

1. The feature *Sex* and *Age* express (possibly lexicalized) semantic information, concerning the *sex* of a living entity or its age:

SemU:	<man>
Template_Type:	**[Human]**
Constitutive:	Sex: Male

SemU:	<woman>
Template_Type:	**[Human]**
Constitutive:	Sex: Female

2. The feature *Dimension*, is type defining for templates like **[3_D_Location]**, **[Area]** and **[Building]**. It is also important to characterize the selectional restrictions of those verbs that are sensitive to the dimension of a bidimensional location.

3. The features *State_of_matter*, *Connotation*, *Iterative* and *Scalar* express additional information;

4. The feature *Habitat* is used as type-defining for the types **[Earth_animal]**, **[Water_animal]** and **[Air_Animal]**.

5. The feature *Aspect* is used with aspectual verbs to mark whether they refer to the first part of an event (e.g. *begin*; *inchoative*), to the final part or ending of an event (e.g. *stop*; *terminative*) or to the duration of an event (e.g. *keep*; *durative*).

6. The feature *Presupposed* is used to distinguish *factive* verbs (like *know*) from *non-factive* verbs (like *believe*). In fact, only the former presuppose the truth of the proposition expressed by the complement clause (cf. *John knows that Mary is ill* presupposes *Mary is ill*; *John believes that Mary is ill* does not presuppose *Mary is ill*).

7. The feature *Presupposition* can be used to mark whether the information which is expressed by the complement clause of an event SemU is new or not.

8. The feature *Meronym* can be used with those predicates expressing a part-of or member-of relation between their arguments. For instance, the verb *include* denotes a part (member)-of relation between Arg1 and Arg0, and can be thus distinguished from the verb *exclude* through the feature *Meronym*:

   Meronym = yes - Arg1 is a part-of/member-of Arg0
   Meronym = no - Arg1 is not in a part-of/member_of relation with Arg0.

3.1. Meaning Components for Adjectives

TEMPLATE TYPE	Meaning Component	Subtype	Example
PSYCHOLOGICAL PROPERTY	experience/feeling		*sad*

	psych. state		*crazy*
	cognition		*well-known*
	attitude_salience		*important*
	attitude_evaluation	moral	*righteous*
		esthetic	*beautiful*
		behaviour	*strict, friendly*
		adequacy	*sufficient*
		effort/feasability	*difficult*
		functionality	*efficient*
		precision	*accurate, vague*
		similarity	*equal*
		security	*dangerous, harmful*
		activeness	*active*
		normalcy	*typical*
		intelligence	*stupid*
		competency	*capable*
		orderliness	*chaotic*
		style	*Shakespearean*
SOCIAL PROPERTY	religion		*orthodox*
	political		*leftwing*
	military		*irregular*
	economy		*rich*
	society		*moral*
	law		*criminal*
	nationality		*Dutch*
PHYSICAL PROPERTY	body	life	*dead*
		constitution	*strong*
		illness	*healthy*
		bodily sensation	*hungry*
		gender	*female*
	perception	visual	*red*
		hearing	*soft*
		touch	*rough*
		smell	*stuffy*
		taste	*sweet*
	movement	speed	*fast*
	space	dimension	*long*
		direction	*left*
		place	*lower*
		space_distribution	*full*
		shape	*round*
	substance	consistency	*fluid*
		stability	*shaky*
		wetness	*dry*
		temperature	*hot*
		weight	*light*
		cleanliness	*dirty*
		integrity	*intact*
		quantity	*manyfold*
		material	*wooden*

TEMPORAL PROPERTY	temporal	past	*former*
		present	
		future	*later*
	temp_distribution		*rare*
	aspect	inchoative	*initial*
		durative	*long*
		punctual	*sudden*
		terminative	*last*
		iterative	*frequent*
	age		*young*
RELATIONAL PROPERTY	possession		*proprietary*
	set membership		*archetypal*
	comparison		*similar*
INTENSIFYING PROPERTY	power		*strong language*
	frequency		*heavy smoker*

Comments:

Meaning Components are Constitutive semantic features organised in a hierarchical way. The set of relevant meaning component features for each adjective depends on the assigned Template (there is a direct 'mapping' between **Template_Type** and meaning components)

SGML Representation

Meaning components correspond to a SGML `WeightValSemFeature` object, defined in the following way:

`FeatureValue`: the set of relevant values for meaning component matters correspond to 'location-on-scale' as suggested in Adjective's specification papers (*Positive*, *Negative* and *Underspecified* values).

`SemFeature`: we define as many `SemFeature` objects as Meaning Component.

`ValuedSemanticFeature`: for each `SemFeature` (i.e, meaning component, meaning component type and meaning component subtype above) we define three `ValuedSemanticFeatures` (one for each value: Positive, Negative and Underspecified).

`Weight`: Meaning Components are not specified for their weight /ponderation status (weight=WITHOUTPOND).

`ValuedSemanticFeature` are hierarchically defined by means of the `isal` list-attribute. So, for example, `WVSFOrderlinessPositive` is defined as `isal=WVSFAttitudeEvaluationPositive` which, in turn, is defined as `isal=WVSFPsychologicalFeaturePositive`. As a consequence, *OrderlinessPositive* is only understood as a *Psycological feature*.

Name	ERLI's Name	Description	Example	Isal
Telic		Formal node in the hierarchy	*Telic* (<pet>, <company>)	Top
Direct_telic		Formal node in the hierarchy		*Telic*
Indirect_telic		<SemU1> and <SemU2> are related through an underspecified indirect telic relation. <SemU1> is usually the subject or the instrument-complement of the event in <SemU2>, which represents a purpose prototypically associated with <SemU1>	*Indirect_telic* (<eye>, <see>)	*Telic*
Purpose		<SemU1> is the SemU being defined, and <SemU2> is an event corresponding to the intended purpose of <SemU1>	*Purpose* (<send>, <receive>)	*Telic*
Object_of_the_activity	Nono21_appli_II	<SemU2> is an event whose direct object is typically <SemU1>, and expresses an activity which is the typical purpose of <SemU1>.	*Object_of_the_activity* (<book>, <read>)	*Direct_telic*
Activity		Formal node in the hierarchy		*Indirect_telic*
Instrumental		Formal node in the hierarchy		*Indirect_telic*
Is_the_activity_of		<SemU2> is the characterizing activity of <SemU1>	*Is_the_activity_of* (<doctor> <heal>)	*Activity*
Is_the_ability_of		<SemU2> is a typical ability of an individual in <SemU1>	*Is_the_ability_of* (<painter>, <paint>)	*Activity*
Is_the_habit_of	Novb3	<SemU2> is the typical habit of an individual in <SemU1>	*Is_the_habit_of* (<smoker>, <smoke>)	*Activity*
Used_for	Nono9_appli_II	): <SemU2> is the typical function of <SemU1>. This relation usually applies to instruments or devices to connect them with the activity in which they are used or to their typical purpose.	*Used_for* (<crane>, <lift>)	*Instrumental*
Used_by	Nono22_appli_II	<SemU1> is typically used by <SemU2>	*Used_by* (<lancet>, <surgeon>)	*Instrumental*
Used_against	Nono12_Appli_II	<SemU1> is used typically against <SemU2>	*Used_against* (<chemiotherapy>, <cancer>)	*Instrumental*
Used_as		<SemU1> is typically used with the function which is expressed by <SemU2>	*Used_as* (<wood>, <material>)	*Instrumental*

Comments:

1. The relation *Used_for* is type-defining for the artifactual semantic type. Artifacts are in fact created for a specific purpose. It relates a noun to an event which represents a typical purpose of that noun. The target is a verb (or a deverbal noun) such that the noun in the source typically appears as its instrumental complement (and in some cases as the subject). For instance, a lifting event can be regarded as the typical purpose associated with the SemU <crane> "Instrument to

lift weights". The following sentences show that *crane* usually appears as the instrumental complement or the subject of the verb *lift*:

□i) John *lifted* the stone *with the crane*.
□ii) *The crane lifted* the stone.

Therefore, *crane* and *lift* can be related through the telic relation *Used_for*:

SemU:	<crane>
Template_Type:	**[Instrument]**
Telic:	*Used_for* (<crane>, <lift>)

The choice of the event should be made by taking a verb or deverbal noun (or by a forming a more abstract concept) which expresses a prototypical purpose of an object. When possible, this choice should be supported by appropriate linguistic tests.

2. The relation *Object_of_activity* is also used to specify the typical purpose for which an entity is made, and it also defines artifactual types. The target is a verb (or a deverbal noun) such that the noun in the source typically appears as direct object. For instance, "reading" can be regarded as the typical purpose associated with the SemU <book>. The following sentences show that *book* usually appears as the direct object of *read*:

□i) John read the book.
□ii) * John read with the book.
□iii) * The book reads.

Therefore, *book* and *read* can be related through the telic relation *Object_of_the_activity*:

SemU:	<book>
Template_Type:	**[Semiotic_artifact]**
Telic:	*Object_of_the_activity* (<book>, <read>)

The choice of the event should be made by taking a verb or deverbal noun (or by forming a more abstract concept) which expresses a prototypical purpose of an object. When possible, this choice should be supported by appropriate linguistic tests.

3. The relations *Is_the_activity_of*, *Is_the_ability_of* and *Is_the_habit_of* are type-defining for the semantic types that refer to human professions, roles and abilities (e.g. **[Profession]**, and **[Agent_of_persistent_activity]**). They usually relate a human noun with an event which represents the typical activity intrinsically associated with that noun. The target is a verb (or a deverbal noun) such that the noun in the source typically appears as its subject. For instance, healing can be regarded as the prototypical function associated with the SemU <doctor>. The following sentence shows that *doctor* is the subject of *heal*:

□i) The doctor heals the patients

Therefore, *doctor* and *heal* can be related through the telic relation *Is_the_activity_of*:

SemU:	<doctor>
Template_Type:	**[Profession]**
Telic:	*Is_the_activity_of* (<doctor>, <heal>)

The choice of the event should be made by taking a verb or deverbal noun (or a more abstract concept) which expresses a prototypical purpose of an object. When possible, this choice should be supported by appropriate linguistic tests.

4. The relations *Used_by* and *Used_against* always specify additional information. In most cases, they refer to purely encyclopedic knowledge which the lexicographer is free to add whether he regards it as relevant for word-sense distinction or to increase the granularity of the representation.

5. Relations like *Telic*, *Indirect_telic* have been introduced to represent telic information of an underspecified nature. In fact, a given event may be regarded by the lexicographer as characterizing the functional dimension of a noun, although this functional relation remains fuzzy.

6. The relation *Used_as* intends to represent the fact that certain nouns refer to entities that can be used with the role or function typically expressed by the noun which appears in the target of the relation. For instances, *wood* and *cray* are natural entities, but yet they can be used as materials, *coal* can be used as fuel, etc.

7. The target of the relation *Purpose* is an event e_1 which is the intended purpose of an event e_2, and which concerns the object or indirect object of the lexical item expressing e_2. For instance, the fact that *send* is typically associated with the intended purpose that the addressee will get the object which is sent, may be expressed through the relation *Purpose*. On the other hand, when the intended purpose concerns the subject argument, it must be expressed through the relation *Telic*:

SemU:	<work>
Telic:	*Telic* (<work>, <earn>)

WARNING!
If a template requires telic information, but it is impossible to identify a potential target SemU for one of the above relations, then the following telic feature can be used:

Name	Description	Type of values	Values
Telic	The SemU contains some underspecified telic information	CLOSED_LIST	Yes

This feature allows lexicographers to express that a given SemU contains some bit of telic information, without further specifying its content.

Name	ERLI's Name	Description	Example	Is_a_l
Agentive		Formal node in the hierarchy	*Agentive* (<student>, <study>)	Top
Result_of		<SemU1> is an entity which is the result, effect or by-product of the	*Result_of* (<loss>, <loose>)	*Agentive*

		event expressed by <SemU2>		
Agentive_prog		<SemU2> is an event which is ongoing while an individual has the property expressed by <SemU1>	*Agentive_prog* (<pedestrian>, <walk>)	*Agentive*
Artifactual_agentive		Formal node in the hierarchy		*Agentive*
Agentive_Cause		<SemU1> is a causative verb, and <SemU2> is the causing component of the event	*Agentive_Cause* (<sink>, <cause>)	*Agentive*
Agentive_Experience		<SemU1> is an experience predicate and <SemU2> is the event experienced by the individual.	*Agentive_Experienc e* (<fear>, <feel>)	*Agentive*
Caused_by		<SemU1> is a phenomenon or natural event which is produced by <SemU2>	*Caused_by* (<infection>, <bacterion>	*Agentive*
Source		<SemU2> is the source or origin of <SemU1>	*Source* (<law>, <society>)	*Agentive*
Created_by	Nono18_ap pli_II	<SemU1> is obtained, or created by a certain human process or action <SemU2>	*Created_by* (<book>, <write>)	*Artifactual_agentive*
Derived_from	Nono16_ap pli_II	<SemU1> is derived from another object <SemU2> through a certain process of alteration	*Derived_from* (<petrol>, <oil>)	*Artifactual_agentive*

Comments:

1. The relations *Created_by* and *Derived_from* are inherently type-defining for all the artifactual semantic types. The former relates an object to an event (to be expressed by a verb or a deverbal noun) which prototypically produces it, while the latter relates two objects that are connected by a process of derivation through some human process.

2. The relation *Result_of* is an underspecified agentive relation which defines those nouns which mark the result of a certain process. For instance a *loss* is whatever entity which is the result of an event of loosing, *gain* is whatever entity which is the result of an event of gaining, etc.

3. The *Agentive_prog* relation is type-defining for the type **[Agent_of_temporary_activity]**

4. The relation *Caused_by* is type-defining for **[Stimuli]** and **[Diseases]**, while is additional information for **[Phenomenon]**. It is in fact useful to identify a certain stimulus or disease in terms of its typical cause.

5. The relation *Agentive_Cause* is used with causative event SemUs (e.g. *kill*, *sink*, *write*, etc) to encode the causal active component.

6. The relation *Agentive_Experience* is used to describe the agentive role of some psychological event SemUs. It expresses a relation between a psychological event and the psychological or perceptive experience that brings it about.

WARNING!
If a template requires agentive information, but it is impossible to identify a potential target SemU for one of the above relations, then the following agentive feature can be used:

Name	Description	Type of values	Values
Agentive	The SemU contains some underspecified telic information.	CLOSED_LIST	Yes

This feature allows lexicographers to express that a given SemU contains some bit of agentive information, without further specifying its content.

Appendix B

Derivational Relations

These relations are used as values of the slot **Derivation** in the SemUs. They express cross-categorial relations, and are particularly used to express derivational relations between SemUs belonging to different parts of speech.

They are often specified along with the `typeoflink` attribute in the predicative representation, although the two types of information are formally independent. In fact, in the predicative representation the `typeoflink` valued-attribute is used to express the fact that different SemUs may share the same predicate. On the other hand, the information in the **Derivation** explicitly relates two SemUs.

- Derivation relations to be used for nouns and verbs:

Name	ERLI's Name	Description	Example
Nounadjective	Noaj2	<SemU1> is a noun which derives from the adjective in <SemU2>: *The <SemU1> of X => X is <SemU2>*	*Nounadjective* (<intelligence>, <intelligent>)
Agentverb		<SemU1> is an agentive noun, which lexicalizes the agent argument of the verb in <SemU2>	*Agentverb* (<writer>, <to write>
Patientverb	Novb10	<SemU1> is a noun which lexicalizes the patient argument of the verb in <SemU2>	*Patientverb* (<employee>, <to employ>)
Eventverb	Novb1	<SemU1> is an event nominal, and refers to the event expressed by the verb in <SemU2>	*Eventverb* (<destruction>, <to destroy>)
Stateverb	Vbno2	<SemU1> is a noun which refers to a state which either is expressed by the verb in <SemU2>, or is the result of the event expressed by the verb in <SemU2>	*Stateverb* (<hate> <to hate>
DenominalVerbNoun		<SemU1> is a noun from which the verb in <SemU2> derives	*DenominalVerbNoun* (<to butter>, <butter>)
Processverb		<SemU1> is a process nominal, and refers to the process expressed by the verb in <SemU2>	*Processverb* (<thought>, <to think>)
NounPropernoun		<SemU2> is a proper noun from which <SemU1> derives	*NounPropernoun* (<Marxism>, <Marx>)
NounNoun		<SemU> is a noun deriving from another noun <SemU2>	*NounNoun* (<Communist>, <Communism>)

- LexiQuest adjective-noun relations to be used for adjectives:

Name	Rel(adj,name)	Example
AJNO0	< adj > is derived by a < name > used as an apposition	good = > goodness
AJNO10	< adj > = something has the nature of < name >	marshy = > marsh

AJNO13	< adj > = something usually feeds on < name >	herbivorous = > grass
AJNO18	< adj > = something is disposed or divided in < name >	aligned = > line
AJNO1	< adj > = something is relative to < name >	biological = > life
AJNO2	the fact that something is < adj > = the < name > of something	patient = > patience
AJNO3	< adj > = something is of < name >	academic = > academy
AJNO4	< adj > = something has certain characteristics of < name >	
AJNO5	< adj > = there is < name > in/on/around something	amylaceus = > starch
AJNO7	< adj > = something is without < name >	unemployed = > job
AJNO8	something supports the theses of < name >	Hegelian = > Hegel
AJNO9	< adj > = something produces, causes or provokes	corrosive = > corrosion
AJNO6	< adj > = something is affected by < name >	diabetic = > diabetes
AJNO15	< adj > = something usually lives/grows in/at/on < name >	aquatic = > water
AJNO16	< adj > = something fights against or prevents < name >	antibacteric = > bacterium

- LexiQuest adjective-verb relations to be used for adjectives:

Name	Rel(adj,verb)	Example
AJVB1	< adj > = something may be < verb > -ed	edible = > eat
AJVB2	< adj > = something may < verb >	flying = > fly
AJVB3	< adj > = something can not be < verb > -ed	undrinkable = > drink
AJVB4	< adj > = something can not < verb >	blind = > see
AJVB7	< adj > = something that < verb >	sleeping = > sleep
AJVB8	< adj > = something that < verb > (reflexive)	opposing = > oppose

Appendix C

Semantic Types

Each type in the following ontology corresponds to one of the templates in Appendix H, which have the purpose to guide the encoding of the SemUs. The types which are marked with the label '*recommended*' belong to the ***Recommended Ontology***, while the others form the **Core Ontology**.

1. **TELIC** **[Top]**
2. **AGENTIVE** **[Top]**
   - 2.1. CAUSE **[Agentive]**
3. **CONSTITUTIVE** **[Top]**
   - 3.1 **PART** **[Constitutive]**
     - 3.1.1. BODY_PART **[Part]**
   - 3.2. **GROUP** **[Constitutive]**
     - 3.2.1. HUMAN_GROUP **[Group]**
   - 3.3. **AMOUNT** **[Constitutive]**
4. **ENTITY** **[Top]**
   - 4.1 CONCRETE_ENTITY **[Entity]**
     - 4.1.1 LOCATION **[Concrete_entity]**
       - 4.1.1.1. *3_D_location* **[Location]**
       - 4.1.1.2. *Geopolitical_location* **[Location]**
       - 4.1.1.3. *Area* **[Location]**
       - 4.1.1.4. *Opening* **[Location | Agentive]**
       - 4.1.1.5. *Building* **[Location | Artifact$_{Agentive}$ | Telic]**
       - 4.1.1.6. *Artifactual_area* **[Location | Artifact$_{Agentive}$ | Telic]**

         recommended
     - 4.1.2. MATERIAL **[Concrete_entity | Telic]**
     - 4.1.3. ARTIFACT **[Concrete_entity | Agentive | Telic]**
       - 4.1.3.1. *Artifactual_material* **[Concrete_entity | Artifact$_{Agentive}$ | Material$_{Telic}$]**

4.1.3.2. *Furniture* **[Concrete_entity | Artifact$_{Agentive}$ | Telic]**

4.1.3.3. *Clothing* **[Concrete_entity | Artifact$_{Agentive}$ | Telic]**

4.1.3.4. *Container* **[Concrete_entity | Artifact$_{Agentive}$| Telic]**

4.1.3.5. *Artwork* **[Concrete_entity | Artifact$_{Agentive}$]**

4.1.3.6. *Instrument* **[Concrete_entity | Artifact$_{Agentive}$ | Telic]**

4.1.3.7. Money **[Concrete_entity | Artifact$_{Agentive}$ | Telic]**

4.1.3.8. Vehicle **[Concrete_entity | Artifact$_{Agentive}$ | Telic]**

4.1.3.9. Semiotic_artifact **[Concrete_entity | Artifact$_{Agentive}$| Telic]**

4.1.4. FOOD **[Concrete_Entity| Telic]**

4.1.4.1. *Artifact_Food* **[Concrete_entity | Artifact$_{Agentive}$ | Food$_{Telic}$]**

recommended

4.1.4.2. *Flavouring* **[Concrete_entity | Food$_{Telic}$]**

recommended

4.1.5. PHYSICAL_OBJECT **[Concrete_entity]0**

4.1.6. ORGANIC_OBJECT **[Concrete_entity]**

4.1.7. LIVING_ENTITY **[Concrete_entity]**

4.1.7.1. *Animal* **[Living_entity]**

4.1.7.1.1. Earth_animal **[Animal]** *recommended*

4.1.7.1.2. Air_animal **[Animal]** *recommended*

4.1.7.1.3. Water_animal **[Animal]** *recommended*

4.1.7.2. *Human* **[Living_entity]**

4.1.7.2.1. People **[Human]**

4.1.7.2.2. Role **[Human]**

4.1.7.2.2.1 Ideo **[Role]**

4.1.7.2.2.2 Kinship **[Role]**

4.1.7.2.2.3 Social_status **[Role]**

4.1.7.2.3. Agent_of_temporary_activity **[Human | Agentive]**

4.1.7.2.4. Agent_of_persistent_activity **[Human | Telic]**

4.1.7.2.5. Profession **[Human | Telic]**

4.1.7.3. *Vegetal_entity* **[Living_entity]**

4.1.7.3.1. Plant **[Vegetal_entity]**

4.1.7.3.2. Flower **[Vegetal_entity]**

4.1.7.3.3. Fruit **[Vegetal_entity]**

4.1.7.4. Micro-organism **[Living_entity]**

4.1.8. SUBSTANCE **[Concrete_entity]**

4.1.8.1. *Natural_substance* **[Substance]**

4.1.8.2. *Substance_food* **[Substance | Food$_{Telic}$]** 🔔 *recommended*

4.1.8.3. *Drink* **[Substance | Telic]** 🔔 *recommended*

4.1.8.3.1 Artifactual_drink **[Substance | Artifact$_{Agentive}$ | Drink$_{Telic}$]** 🔔 *recommended*

4.2. **PROPERTY** **[Entity]**

4.2.1. QUALITY **[Property]**

4.2.2. PSYCH_PROPERTY **[Property]**

4.2.3. PHYSICAL_PROPERTY **[Property]**

4.2.3.1. *Physical_power* **[Physical_property]** 🔔 *recommended*

4.2.3.2. *Color* **[Physical_property]** 🔔 *recommended*

4.2.3.3. *Shape* **[Physical_property]** 🔔 *recommended*

4.2.4. SOCIAL_PROPERTY **[Property | Agentive]** 🔔 *recommended*

4.3. **ABSTRACT_ENTITY** **[Entity]**

4.3.1. DOMAIN **[Abstract_entity]**

4.3.2. TIME **[Abstract_entity]**

4.3.3. MORAL_STANDARDS **[Abstract_entity]** 🔔 *recommended*

4.3.4. COGNITIVE_FACT **[Abstract_entity | Agentive]**

4.3.5. MOVEMENT_OF_THOUGHT **[Abstract_entity | Agentive]**

4.3.6. INSTITUTION **[Abstract_entity | Agentive | Telic]**

4.3.7. CONVENTION **[Abstract_entity | Agentive]** 🔔 *recommended*

4.4. **REPRESENTATION** **[Entity | Agentive | Telic]**

4.4.1. LANGUAGE **[Representation]**

4.4.2. SIGN **[Representation]**

4.4.3. INFORMATION **[Representation]**

4.4.4. NUMBER **[Representation]** 🔔 *recommended*

4.4.5. UNIT_OF_MEASUREMENT **[Representation]**

4.5. **EVENT** **[Entity]**

4.5.1. PHENOMENON **[Event]**

4.5.1.1. *Weather_verbs* **[Phenomenon]** 🔔 *recommended*

4.5.1.2. *Disease* **[Phenomenon | Agentive]** 🔔 *recommended*

4.5.1.3. *Stimuli* **[Phenomenon | Agentive]** 🔔 *recommended*

4.5.2. ASPECTUAL **[Event]**

4.5.2.1. *Cause_aspectual* **[Aspectual | Cause$_{Agentive}$]**

4.5.3. STATE (event type=***state***) **[Event]**

4.5.3.1. *Exist* **[State]**

4.5.3.2. *Relational_state* **[State]**

4.5.3.2.1. Identificational_state **[Relational_state]** *recommended*

4.5.3.2.2. Constitutive_state **[Relational_state]** *recommended*

4.5.3.2.3. Stative_location **[Relational_state]** *recommended*

4.5.3.2.4. Stative_possession **[Relational_state]** *recommended*

4.5.4. ACT **[Event]** (event type=***process***)

4.5.4.1. *Non_relational_act* **[Act]**

4.5.4.2. *Relational_act* **[Act]**

4.5.4.2.1. Cooperative_activity **[Relational_act | Agentive]** *recommended*

4.5.4.2.2. Purpose_act **[Relational_act | Telic]** *recommended*

4.5.4.3. *Move* **[Act]**

4.5.4.3.1 Caused_motion **[Move | Cause$_{Agentive}$]**

4.5.4.4. *Cause_act* **[Act | Cause$_{Agentive}$]**

4.5.4.5. *Speech_act* **[Act]**

4.5.4.5.1. Cooperative_speech_act **[Speech_Act]** *recommended*

4.5.4.5.2. Reporting_events **[Speech_Act | Telic]** *recommended*

4.5.4.5.3. Commissives **[Speech_Act | Telic]** *recommended*

4.5.4.5.4. Directives **[Speech_Act | Telic]** *recommended*

4.5.4.5.5. Expressives **[Speech_Act | Telic]** *recommended*

4.5.4.5.6. Declaratives **[Speech_Act | Telic]** *recommended*

4.5.5. PSYCHOLOGICAL_EVENT **[Event]**

4.5.5.1. *Cognitive_event* **[Psychological_event]**

4.5.5.1.1. Judgment **[Cognitive_event | Telic]** *recommended*

4.5.5.2. *Experience_event* **[Psychological_event | Agentive]**

4.5.5.2.1. Caused_Experience_event **[Experience_event | Cause$_{Agentive}$]**

4.5.5.3. *Perception* **[Psychological_event]**

4.5.5.4. *Modal_event* **[Psychological_event | Telic]**

4.5.6. CHANGE **[Event]** (event type=***transition***)

4.5.6.1. *Relational_change* **[Change | Agentive]**

4.5.6.1.1. Constitutive_change **[Relational_change | Agentive]** *recommended*

4.5.6.1.2. Change_of_state **[Relational_change | Agentive]** *recommended*

4.5.6.1.3. Change_of_value **[Relational_change | Agentive]** *recommended*

4.5.6.2. *Change_possession* **[Change | Agentive]**

4.5.6.2.1. Transaction **[Change_possession]**

4.5.6.3. *Change_of_location* **[Change | Agentive]**

4.5.6.4. *Natural_transition* **[Change| Agentive]**

4.5.6.5. *Acquire_knoweldge* **[Change| Agentive]**

4.5.7. CAUSE_CHANGE **[Event | Cause$_{Agentive}$]**

4.5.7.1. *Cause_relational_change* **[Cause_change]**

4.5.7.1.1. Cause_constitutive_change **[Cause_Relational_change]** *recommended*

4.5.7.1.2. Cause_change_of_state **[Cause_Relational_change]** *recommended*

4.5.7.1.3. Cause_change_of_value **[Cause_Relational_change]** *recommended*

4.5.7.2. *Cause_change_location* **[Cause_Change]**

4.5.7.3. *Cause_natural_transition* **[Cause_Change]**

4.5.7.4. *Creation* **[Cause_Change]**

4.5.7.4.1. Physical_creation **[Creation]** *recommended*

4.5.7.4.2. Mental_creation **[Creation]** *recommended*

4.5.7.4.3. Symbolic_creation **[Creation]** *recommended*

4.5.7.4.4. Copy_creation **[Creation]** *recommended*

4.5.7.5. *Give_knoweldge* **[Cause_Change | Telic]**

1. **INTENSIONAL** **[Top]**

1.2. **Modal** **[Intensional]**

1.3. Temporal **[Intensional]**

1.4. Emotive **[Intensional]**

1.5. Manner **[Intensional]**

1.6. Object-related **[Intensional]**

1.7. Emphasizer **[Intensional]**

2. EXTENSIONAL **[Top]**

2.1. Physical_property **[Extensional]**

2.2. Psychological_property **[Extensional]**

2.3. Social_property **[Extensional]**

2.4. Temporal_property **[Extensional]**

2.5. Intensifying_property **[Extensional]**

2.6. Relational_property **[Extensional]**

Appendix D

Hierarchy of Domains

The following is the list of Domains, and has been provided by LexiQuest.

0. GENERAL
1. FOOD - el00011575n- Any substance that can be metabolized by an organism to give energy and build
    1.1. BUTCHERY - el00408175n - the business of a butcher
    1.2. BAKERY - el00583730n - creating bread or pastry in an oven
    1.3. CUISINE - el05626343n - the practice or manner of preparing food or the food so prepared
    1.4. ENOLOGY - el04359351n - the art of wine making
    1.5. DISTILLING
    1.6. BREWING - el00587845n - the production of malt beverages (as beer or ale) from malt and hops
    1.7. RESTAURATION
2. AGRICULTURE-FISHING-FORESTRY
    2.1. FORESTRY el04634522n the science of planting and caring for forests and the management of growing them
        2.1.1. ARBORICULTURE - el00589221n. - the cultivation of tree for the production of timber
    2.2. FISHING - el00288265n - the occupation of catching fish
        2.2.1. SEA_FISHING
        2.2.2. FRESHWATER_FISHING
    2.3. AGRICULTURE - el00588753n. the practice of cultivating the land or raising stock
        2.3.1. LIVESTOCK_FARMING
            2.3.1.1. BEEKEEPING - el00588610n - the cultivation of bees on a commercial scale for the production of honey
            2.3.1.2. CATTLE_FARMING
            2.3.1.3. PIG_FARMING
            2.3.1.4. SHEEP_FARMING
            2.3.1.5. POULTRY_FARMING
        2.3.2. ARABLE_FARMING
            2.3.2.1. VITICULTURE
            2.3.2.2. CEREAL_FARMING
            2.3.2.3. FLOWER_GROWING
            2.3.2.4. FRUIT_AND_VEGETABLES
3. BUSINESS - el00709093n. - the activity of providing goods and services involving the financial and commercial field
    3.1. MANAGEMENT - el00734610n - the act of managing something;
    3.2. COMMERCE - el00706993n - transactions having the objective of supplying commodities
    3.3. OFFICE_EQUIPMENT
    3.4. EMPLOYMENT - el00789880n - the act of giving someone a job
    3.5. MARKETING
4. SERVICE_INDUSTRY - el06018004n - an industry that provides services
    4.1. MEDIA
        4.1.1. AUDIOVISUAL - el02224345n - materials using sight or sound to present information:
        4.1.2. NEWSPAPER_PUBLISHING
        4.1.3. PUBLISHING - el00713952n - the business of publishing
        4.1.4. RADIO-TELEVISION
        4.1.5. ADVERTISING - el00713435n - the business of drawing public attention to goods and services
        4.1.6. PHOTOGRAPHY - el00408287n - the occupation of taking and printing photographs or making movies
    4.2. FINANCE - el00711940n. the commercial activity of providing funds and capital
        4.2.1. BANKING - el00713008n - engaging in the business of banking
            4.2.1.1. HOME_LOANS

4.2.2. ACCOUNTING - el00407290n - the occupation of maintaining and auditing records and preparing financial reports
4.2.3. INSURANCE
4.3. UTILITIES - el06084508n - a company that performs a public service; subject to government regulation
4.3.1. WATER
4.3.2. GAS
4.3.3. ELECTRICITY
4.4. WASTE_TREATMENT
4.5. REAL_ESTATE - el09530734n - property consisting of houses and land
4.6. PACKAGING - el00715158n - packaging as the business of packaging
4.7. HOTEL_BUSINESS
4.8. MAIL - el04736420n - the system whereby messages are transmitted via the post office
4.9. PRINTING - el00714730n - the business of printing
4.9.1. TYPOGRAPHY - el00714625n - the craft of composing type and printing from it
4.10. RETAIL - el00722842n - the selling of goods to consumers; usually in small quantities
4.11. FIREFIGHTING
5. CRAFT_INDUSTRY
5.1. HORSESHOEING
5.2. BASKETRY - el00400487n_1 - basketry i.e. the craft of basket making
5.3. BOOKBINDING - el00400568n_1 - bookbinding i.e. the craft of binding books
5.4. WHEELWRIGHTING
5.5. POTTERY - el00402143n_1 - pottery i.e. the craft of making earthenware
5.6. PYROTECHNICS - el00406546n_1 - pyrotechnics i.e. the craft of making fireworks
5.7. SHOEMAKING - el00406647n_1 - shoemaking, shoe repairing, cobbling or the shoemaker's trade
5.8. PERFUMERY
6. MANUFACTURING_INDUSTRY - el00593550n_2 - fabrication manufacture i.e.| the act of making something (a product) from raw material
6.1. FURNITURE - el02729950n - artifacts that make a room ready for occupancy
6.1.1. UPHOLSTERING
6.2. TANNING
6.3. GLASSMAKING
6.4. JEWELRY
6.5. WOODWORKING - el00400874n - the craft of a carpenter: making things out of wood
6.6. PAPERMAKING
6.7. TEXTILES
6.7.1. WOOL_INDUSTRY
6.8. CLOTHING_INDUSTRY
6.9. METALLURGY - el04661150n_1 - metallurgy i.e. the science and technology of metals
6.10. HOROLOGY - el04359093n - the art of designing and making clocks
6.11. LOCKSMITHING
6.12. PLASTICS
6.13. AUTOMOBILE_ENGINEERING
6.14. AEROSPACE_ENGINEERING
6.15. SHIP_BUILDING
6.16. MINING-GENERAL
6.17. COKING_INDUSTRY
6.18. TELECOMMUNICATIONS - el04663338n - (often plural) the branch of electrical engineering concerned with the technology of communications.
6.19. NUCLEAR_ENGINEERING - el04665204n - the branch of engineering concerned with the design and construction of nuclear poweplants
6.20. MECHANICAL_ENGINEERING - el04664799n - the branch of engineering that deals with the design and construction of mechanical devices
6.21. COMPUTING
6.21.1. AUTOMATION
6.22. ELECTRONIC_ENGINEERING
6.23. ELECTRICAL_ENGINEERING - el04663074n - the branch of engineering science that studies the uses of electricity
6.24. CERAMICS - el00598347n - the art of making and decorating pottery
6.25. SURFACE_TREATMENT
6.26. PAINTMAKING
6.27. DYEING - el00176936n - the use of dye to change the color of something permanently

6.28. OIL_INDUSTRY - el06014078n - an industry that produces and delivers oil and oil products
6.29. TOBACCO_INDUSTRY - el06018639n - an industry that manufactures and sells products containing tobacco
6.30. QUARRYING - el00592521n - the extraction of building stone or slate from an open surface quarry
6.31. SOAPMAKING
6.32. STEEL_INDUSTRY - el06018530n - the industry that makes steel and steel products
7. CONSTRUCTION - el00715519n_1 - construction building or the commercial activity involved in constructing building
7.1. BUILDING_CRAFTS
7.1.1. PLUMBING - el00401944n the occupation of a plumber (installing and repairing pipes and fixtures for water)
7.1.2. MASONRY - el00401664n - the craft of a mason
7.1.3. ROOFING - el00406753n_1 - roofing i.e. the craft of a roofer
7.1.4. PLASTERING - el00461068n - the application of plaster
7.1.5. PAPERHANGING - el00460970n - the application of wallpaper
7.1.6. HOUSE_PAINTING - el00401775n - the occupation of a house painter
7.1.7. SURVEYING - el00406027n - the practice of measuring angles and distances on the ground.
7.1.8. HEATING
7.1.9. AIR_CONDITIONING
7.1.10. TILING - el00461401n - the application of tiles to cover a surface
7.1.11. GLAZING
7.1.12. ELECTRICAL_WORK - the craft of an electrician
7.2. CIVIL_ENGINEERING - el04662902n - the branch of engineering concerned with the design and construction of every type of structure for civil usage
7.3. BUILDING - el00715519n - the commercial activity involved in constructing buildings;
8. POLITICS_AND_GOVERNMENT
8.1. TOWN_AND_COUNTRY_PLANNING
8.2. SOCIAL_ACTION - el04993435n - a policy of socioeconomic reform
8.2.1. SOCIAL_SECURITY - el00704970n - social welfare program in the U.S.; includes old-age and survivors insurance
8.3. TAXATION - el09580808n - charge against a citizen's person or property or activity for the support of government
8.4. POLITICS - el00403663n - the profession devoted to governing and to political affairs
8.5. PENAL_SYSTEM
8.6. MONARCHY
8.7. LAW_ENFORCEMENT - el00730513n - insuring obedience to the laws
8.8. INTERNATIONAL_AFFAIRS - el00717966n - affairs between nations
8.9. GOVERNMENT-ADMINISTRATION
8.10. FEUDALISM - el05976867n - the social system that developed in Europe in the 8th C
8.11. DIPLOMACY - el05348111n - negotiation between nations
9. SCIENCES - el04596663n - any domain of knowledge accumulated by systematic study
9.1. PHYSICAL_SCIENCES - el04641783n - the science of matter and energy and their interactions
9.1.1. PHYSICS - el04641783n - the science of matter and energy and their interactions
9.1.1.1. ASTRONOMY - el04642470n - the branch of physics that studies celestial bodies and the universe as a whole
9.1.1.2. ACOUSTICS - el04642333n - the study of the physical properties of sound
9.1.1.3. NUCLEAR_PHYSICS - el04645194n - the branch of physics that studies the internal structure of atomic nuclei
9.1.2. OPTICS - el04645366n - the study of the physical properties of light
9.1.3. CRYSTALLOGRAPHY - el04644425n - the branch of science that studies the formation and structure of crystals
9.1.4. CHEMISTRY - el04640400n - the branch of the natural sciences dealing with the composition of substances
9.1.4.1. ALCHEMY - el04455202n - a pseudoscientific predecessor of chemistry
9.2. LIFE_SCIENCES - el04622247n - any of the branches of natural science dealing with the structure and behavior of living entities
9.2.1. HISTOLOGY - el04637800n - the branch of biology that studies the microscopic structure of animal or plant tissues
9.2.2. ZOOLOGY - el04634808n - the branch of biology that studies animals
9.2.2.1. ICHTHYOLOGY
9.2.2.2. ENTOMOLOGY - el04635069n_1 - the branch of zoology that studies insects

9.2.2.3. ORNITHOLOGY - el04635640n_1 - the branch of zoology that studies birds
9.2.2.4. HERPETOLOGY - el04635307n_1 - the branch of zoology concerned with reptiles and amphibians
9.2.2.5. MAMMALOGY - el04635524n_1 - the branch of zoology that studies mammals
9.2.3. VIROLOGY - el04633565n - the branch of medical science that studies viruses and viral diseases
9.2.4. PHYSIOLOGY - el04639241n - the branch of the biological sciences dealing with the functioning of organism
9.2.5. PALEOBIOLOGY - el04636300n - a branch of paleontology that deals with the origin and growth and structure of living entities.
9.2.6. GENETICS - el04637179n - the branch of biology that studies heredity and variation in organisms
9.2.7. EMBRYOLOGY - el04638242n - the branch of biology that studies the formation and early development of living entities
9.2.8. CYTOLOGY - el04638099n - the branch of biology that studies the structure and function of cells
9.2.9. BOTANY - el04634158n - the branch of biology that studies plants
9.2.9.1. MYCOLOGY - el04634318n_1 - the branch of botany that studies fungi
9.2.10. BIOCHEMISTRY - el04638944n - the organic chemistry of compounds and processes occuring in organisms
9.2.11. BACTERIOLOGY - el04625527n the branch of medical science that studies bacteria in relation to diseases
9.2.12. ANATOMY - el04630824n - the branch of morphology that deals with the structure of animals
9.2.12.1. NEUROANATOMY - el04631300n_1 - the anatomy of the nervous system
9.2.13. ECOLOGY - el04639880n - the branch of biology concerned with the relations between organisms and their habitat
9.3. EARTH_SCIENCES - el04655009n - any of the sciences that deal with the earth or its parts
9.3.1. GEOGRAPHY - el04658870n - study of the earth's surface; includes people's responses to topography
9.3.1.1. HYDROLOGY - el04656784n - the branch of geology that studies water on the earth and in the atmosphere
9.3.1.2. VOLCANOLOGY - el04657568n - the branch of geology that studies volcanoes
9.3.1.3. SEISMOLOGY - el04657465n - the branch of geology that studies earthquakes
9.3.1.4. OCEANOGRAPHY - el04656959n - the branch of science dealing with physical and biological aspects of the oceans and seas
9.3.1.4.1. HYDROGRAPHY - el04657116n_1 - the science of the measurement and description and mapping of water extensions
9.3.1.5. METEOROLOGY - el04656224n - science dealing with phenomena of the atmosphere; especially weather processes
9.3.1.6. GEOLOGY - el04655198n - a science that deals with the history of the earth as recorded in rocks
9.3.1.6.1. TOPOGRAPHY - el04659234n - precise detailed study of the surface features of a region
9.3.1.6.2. PEDOLOGY
9.3.1.6.3. PETROLOGY - l04658142n - the branch of geology that studies rocks: their origin and formation and composition
9.3.1.6.4. PETROGRAPHY
9.3.1.6.5. MINERALOGY - el04657974n - the branch of geology that studies minerals: their structure and properties.
9.3.2. CARTOGRAPHY - el00593451n - the making of maps and charts
9.4. HUMAN_SCIENCES
9.4.1. PARAPSYCHOLOGY - el05415501n - phenomena that appear to contradict physical laws
9.4.2. PHRENOLOGY - el04624772n - a now abandoned study of the shape of skull as indicative of human character and intelligence
9.4.3. GEOPOLITICS - el04674002n - the study of the effects of economic geography on the powers of the state
9.4.4. DEMOGRAPHY - el04675910n - the branch of sociology that studies the characteristics of human populations
9.4.5. SOCIOLOGY - el04675569n - the study and classification of human societies
9.4.6. PSYCHOLOGY - el04665657n - the science of mental life

9.4.7. THEOLOGY - el04690672n - the rational and systematic study of religion and its influences
9.4.8. PHILOSOPHY - el04678959n - the rational investigation of questions about existence and knowledge
9.4.8.1. LOGIC - el04681442n the branch of philosophy that analyzes inference
9.4.9. MYTHOLOGY - el04673653n - the study of myths
9.4.10. LINGUISTICS - el04686584n - the scientific study of language
9.4.10.1. PHONETICS - el04687243n - the branch of acoustics concerned with speech processes including its production
9.4.11. HISTORY - el04678109n - the discipline that records and interprets past events involving human beings
9.4.11.1. ANTIQUITY - el10958168n - the historic period preceding the Middle Ages in Europe
9.4.12. ETHNOLOGY - el04672982n - the branch of anthropology that deals with the division of humankind into races
9.4.13. ECONOMICS - el04674380n - the branch of social science that deals with the production and distribution of goods and wealth.
9.4.14. ARCHAEOLOGY - el04670536n - the branch of anthropology that studies prehistoric people and their cultures
9.4.15. HERALDRY - el04470842n - the study and classification of armorial bearings and the tracing of genealogies.
9.4.16. MAGIC_AND_WITCHCRAFT
9.5. METROLOGY
9.6. MATHEMATICS - el04597590n - a science (or group of related sciences) dealing with the logic of quantity
9.6.1. GEOMETRY - el04598408n - the pure mathematics of points and lines and curves and surfaces
9.6.2. STATISTICS - el04608343n - a branch of applied mathematics concerned with the collection and interpretation of data
9.7. MICROSCOPY - el00419217n - research with the use of microscopes
10. HEALTH_AND_MEDICINE
10.1. HEALTH - el10366424n - a healthy state of well-being
10.1.1. HYGIENE - el04628105n - the science concerned with the prevention of illness and maintenance of health
10.1.2. FAMILY_PLANNING - el00546944n - limiting the number of children born
10.2. PHARMACY - el04629936n - the art and science of preparing and dispensing drugs and medicines,
10.3. MEDICINE - el04623732n - the branches of medical science that deal with non-surgical techniques
10.3.1. VETERINARY_MEDICINE - el04633367n - the branch of medicine that deals with the diagnosis and treatment of diseases
10.3.2. PEDIATRICS - el04631649n the branch of medicine concerned with the treatment of infants and children
10.3.3. OPHTHALMOLOGY-OPTOMETRY - el04629494n - the branch of medicine concerned with the eye and its diseases
10.3.4. ONCOLOGY - el04629368n - the branch of medicine concerned with the study and treatment of tumors
10.3.5. OBSTETRICS - el04629219n - the branch of medicine dealing with childbirth and care of the mother
10.3.6. NEUROLOGY - el04628765n - the branch of medicine that deals with the nervous system and its disorders
10.3.7. RADIOLOGY_AND_RADIOTHERAPY
10.3.8. PSYCHIATRY - el04630311n - the branch of medicine dealing with the diagnosis and treatment of mental disorders
10.3.9. PSYCHOANALYSIS - el00451738n - a set of techniques for exploring underlying motives and a method of treating neurosis
10.3.10. HEMATOLOGY - el04627949n - the branch of medicine that deals with diseases of the blood and blood-forming processes
10.3.11. EAR-NOSE-THROAT
10.3.12. DERMATOLOGY - el04627248n - the branch of medicine dealing with the skin and its diseases
10.3.13. DENTISTRY - el04626138n - the branch of medicine dealing with the teeth
10.3.14. SURGERY - el04632532n - the branch of medical science that treats disease or injury by operative procedures
10.3.15. CARDIOLOGY - el04626019n - the branch of medicine dealing with the heart and its

diseases
10.3.16. ANESTHESIOLOGY - el04625254n - the branch of medical science that studies and applies anesthetics
11. MILITARY - el06091847n - the military forces of a nation
11.1. INTELLIGENCE - el00631580n - the operation of gathering information about an enemy
11.2. ARMY - el06089493n - an organization of military land forces
11.2.1. FORTIFICATION - el02715844n - walls or mounds used around a stronghold to strengthen it
11.3. AIRFORCE - el06091016n - an organization of military air forces
11.4. NAVY - el06089894n - an organization of military naval forces
12. HOME_AND_GARDEN
12.1. FURNISHING
12.2. KITCHEN_EQUIMENT
12.3. SEWING - el00459123n - joining or attaching by stitches
12.4. BABY_CARE
12.5. HOME_LAUNDRY
12.6. GARDENING - el00589779n - the cultivation of plants
12.7. KNITTING - el00584054n - creating knitted wear
13. EDUCATION - el00403367n - the profession of teaching (especially at a school or college or university)
13.1. LIBRARIANSHIP
13.2. HIGHER_EDUCATION - el00569850n - education provided by a college or university
13.3. PRIMARY_AND_SECONDARY_EDUCATION
14. SPORTS_AND_LEISURE - Sports-Leisure,Car_Racing
14.1. LEISURE
14.1.1. SHOWS - el00335147n - a public entertainment or exhibition
14.1.1.1. CIRCUS - el00334700n - performance given by a traveling company of acrobats clowns and trained animal
14.1.2. GAMES - el00291567n - an amSemUent or pastime
14.1.2.1. BILLIARDS - el00320316n - any of several games played on rectangular cloth-covered table
14.1.2.2. CARDS - el00311899n - a game played with playing cards
14.1.2.3. CHESS
14.1.3. ASTROLOGY - el04455044n - a pseudoscience claiming divination by the positions of the planets and sun
14.1.4. BULLFIGHTING - el00286858n - the activity at a bullfight
14.1.5. PALMISTRY - el04454715n - telling fortunes by lines on the palm of the hand
14.1.6. PETS
14.1.7. SCOUTING
14.1.8. PHILATELY - el00656057n_1 - the collection and study of postcards and stamps
14.2. SPORT - el00274505n - an active diversion requiring physical exertion and competition
14.2.1. CLIMBING
14.2.2. ATHLETICS - el00274505n - an active diversion requiring physical exertion and competition
14.2.3. GYMNASTICS - el00275488n - a sport that involves exercises intended to display strength and balance
14.2.4. MARTIAL_ARTS - el00528555n - any of several Oriental arts of weaponless self-defense
14.2.5. SKIING - el00279192n - a sport in which participants must travel on skis
14.2.6. TENNIS - el00307617n a game played with rackets by two or four players who hit a ball back and forth
14.2.7. SOCCER - el00304700n a football game in which two teams of 11 players try to kick or head a ball in a net
14.2. SAILING_YACHTING_AND_BOATING
14.2.9. HUNTING_AND_SHOOTING
14.2.9.1. VENERY
14.2.10. EQUESTRIAN_SPORT - el00285625n - a sport that tests horsemanship
14.2.10.1. HORSE_RACING - el00285394n - the sport of racing horses
14.2.10.2. POLO - el00304385n_1 a game similar to field hockey but played on horseback
14.2.11. FENCING - el00759289n - the act or art of using a sword as in fencing
14.2.12. GOLF - el00297363n - a game played on a large open course with 9 or 18 holes
14.2.13. BOXING - el00282787n - fighting with the fists
14.2.14. AMERICAN_FOOTBALL - el00299609n - a game played by two teams of 11 players on a rectangular field 100 yards long
14.2.15. CYCLING - el00286286n - the sport of traveling on a bicycle or motorcycle

14.2.16. ARCHERY - el00283407n - the sport of shooting arrows with a bow
14.2.17. BASEBALL - el00300911n - a game played with a bat and ball between two teams of 9 players
14.2.18. BASKETBALL - el00306597n - a game played on a court by two opposing teams of 5 players
14.2.19. RUGBY - el00300322n - (British) a form of football played with an oval ball
14.2.20. CRICKET - el00303222n - a game played with a ball and bat by two teams of 11 players
14.2.21. BADMINTON - el00306283n_1| a game played on a court with light long-handled rackets
14.2.22. ANGLING - el00288350n_1 - the sport of catching fish with a rod and line and a baited hook
14.2.23. ROWING - el00282390n_1 - the act of rowing as a sport
14.2.24. CROQUET - el00298267n_1 - a game in which players hit a wooden ball through a series of hoop
14.2.25. WATER_SPORT - el00279779n_1 - sports that involve bodies of water
14.2.25.1. SWIMMING - el00279937n_1 - the act of swimming
14.2.25.2. SURFING - el00282130n_1 - the sport of riding a surfboard toward the shore
14.2.26. WRESTLING - el00283913n_1 -| the sport of hand-to-hand struggle

15. ARTS - el00598038n- the creation of beautiful or significant things
15.1. THEATER - el05256340n - the art of writing and producing plays
15.2. SCULPTURE - el00599509n - making figures or designs in three dimensions
15.3. GRAPHIC_ARTS - el02767256n - the arts of drawing or painting or printmaking
15.4. FASHION - el04436610n - the latest and most admired style in clothes and cosmetics and behavior
15.5. OPERA - el05268918n - a drama set to music; consists of singing with orchestral accompaniment
15.6. MUSIC - el05266809n - an artistic form of auditory communication incorporating instrumental or vocal
15.7. FILM - el04960631n - a form of entertainment that enacts a story by a sequence of images
15.8. DANCE - el05266564n an artistic form of nonverbal communication
15.8.1. BALLET - el00339532n_1 - a theatrical representation of a story performed through dance
15.9. CREATIVE_WRITING
15.9.1. POETICS - el04685770n - study of poetic works
15.9.2. RHETORIC - el04686080n - study of the technique and rules for using language effectively
15.9.3. VERSIFICATION - el05306946n - the writing of verse
15.10. ARCHITECTURE - el04659700n the discipline dealing with the principles of design and construction
15.10.1. CITY_PLANNING - el00595364n - determining and drawing up plans for the future physical arrangement and conditions of towns

16. RELIGION - el06023733n - institution to express belief in a divine power
16.1. CHRISTIANITY - el04717211n - the system of Christian beliefs and practices
16.1.1. ROMAN_CATHOLICISM - el04717982n - the beliefs and practices of the Catholic Church based in Rome
16.1.1.1. LITURGY - el00667300n - a rite or body of rites prescribed for public worship
16.1.2. PROTESTANTISM - el04718274n - the theological system of any of the churches of Western Christendom that separates from the Catholic Church in the 16th Century
16.1.2.1. CHURCH_OF_ENGLAND - el06027320n - the national church of England
16.1.2.2. EPISCOPAL_CHURCH - el06027678n - US church
16.1.2.3. MORMONISM - el04721701n - the doctrines and practices of the Mormon Church based on the Book of Mormon
16.1.3. ORTODOX_CHURCH - The Christian Church in East Europe, Greece and Middle East.
16.2. JUDAISM - el04722359n - the monotheistic religion of the Jews
16.3. ISLAM - el04722493n - the monotheistic religion of Muslims based on the Koran
16.4. BUDDHISM - el06035050n - the religion venerating Buddha represented by many groups especially in Asia
16.5. HINDUISM - el06033539n - the dominant religion of India

17. TRANSPORT - el00716041n - the commercial enterprise of transporting goods and materials
17.1. INLAND_WATERWAY_TRANSPORT
17.2. ROAD_TRANSPORT
17.2.1. BUS_TRANSPORT
17.2.2. CAR_TRANSPORT
17.2.3. TRUCKING - el00716600n - the activity of transporting goods by truck
17.3. RAIL_TRANSPORT
17.4. SUBWAY_TRANSPORT
17.5. AIR_TRANSPORT
17.6. SEA_TRANSPORT

18. LAW - el06243906n - the collection of rules imposed by authority;

18.1. ADMINISTRATIVE_LAW - el06244281n - the body of rules and regulations and orders and decisions created by administrations
18.2. CANON_LAW - el06244453n - the body of codified laws governing the affairs of a Christian church
18.3. CIVIL_LAW - el06244599n - the body of laws established by a state or nation for its own regulation
18.4. COMMERCIAL_LAW - el06245673n - the body of rules applied to commercial transactions
18.5. CONSTITUTIONAL_LAW
18.6. INTERNATIONAL_LAW - el06244781n - the body of laws governing relations between nations
18.7. MARITIME_LAW - el06245274n - the traditional body of rules and practices relating to commerce and navigation
18.8. CRIMINAL_LAW - el04909069n - the body of law dealing with crimes and their punishment
18.9. ROMAN_LAW - el04905731n - the legal code of ancient Rome; codified under Justinian
18.10. MILITARY_LAW

19. THEMES
19.1. HAIR
19.2. MARRIAGE
19.3. DEATH
19.4. MEETING
19.5. SMOKING
19.6. DRINK - el05910986n_3 - a liquor or brew containing alcohol as the active agent
19.7. DRUGS
19.8. SEX
19.9. FIRE
19.10. CRIME - el00490590n - an act punishable by law; usually considered an evil act
19.11. SHAVING - el00163357n - the act of removing hair with a razor
19.12. WASHING
19.13. COSMETICS
19.14. CLEANING - el00160717n - the act of making something clean

Appendix E

Hierarchy of Semantic Classes and Distinctive Features

The numbering corresponds to the backbone hierarchy, the first term is the proposed English translation, followed by the original term used by LexiQuest. A definition describes the semantic coverage of the class and some examples have been added to help the reader to get an even more accurate understanding of the meaning of each class.

1. **NOTION** – *NOTION* – top node of the class hierarchy not used as a class itself.

1.1 **ABSTRACT** – *ABSTRAIT* - word meanings too abstract to be classified in any of the subdivisions below: "liberty, truth, chance, monad…"

1.1.1 **ENTITY** - *ENTITE* - any physical or conventional entity: "driving license, venture capital, health insurance, income tax, capital punishment, address, verb, Cobol, component, account, …"

1.1.1.1 **DIRECTION** – *DIRECTION* - directions: "down, left, under, starboard, reverse, …"

1.1.1.1.1 **CARDINAL_POINT** - *POINT_CARDINAL* – designations of cardinal points: "north, north-east, west…"

1.1.1.2 **LETTER** - *LETTRE* - graphical symbol in a given language usually corresponding to a phoneme : "a, b, …".

1.1.1.3 **NUMBER** – *CHIFFRE* – any abstract entities expressing numbers or associated with mathematics : "1, two, million, factor, license plate number, remainder, reference number, mantissa, half, mean value, digit …

1.1.1.4 **SYSTEM_OF_THOUGHT** – *SYSTPENSEE*- combination of a set of ideas and principles as to form a scientific doctrine, a philosophy, a religion or political system: "socialism, babism, Catholicism, chauvinism, colonialism, dictatorship, diplomacy, fundamentalism, patriotism, …"

1.1.1.5 **MEASURE_UNIT** – *MESURE* – units used to measure any quantity : "ampere, year, bar, bit, calorie, cube, diagonal, part, pinch, temperature, scale …"

1.1.1.5.1 **TIME_PERIOD** – *TEMPS* – refers to any period or phenomenon be it natural, political or social , provided one can determine points in time corresponding to a beginning, duration or end : "antiquity, yesterday, hunting season, germination, birth, phase, holidays, …"

1.1.1.5.2 **PERIOD** – *PERIODE* – a division, decomposition or a lapse of time characterized by a phenomenon : "mourning, crisis, childhood, interlude, introduction, millenium …"

1.1.1.5.3 **MONTH** – *MOIS* divisions of a year : "january , …."

1.1.1.5.4 **DAY** – *JOUR* – any notion of time corresponding to a particular day: "Monday, Easter, date, …"

1.1.1.6 **COGNITIVE_FACT** – *MENTEFACT* – set of concepts, actions, appearances produced by a cognitive process : "opinion, project, reason, presupposition, sanction, feeling, wish, study, testimony, translation, value, suggestion, apostasy …"

1.1.1.7 **AMOUNT** – *QUANTITE* – designations of collections of objects or quantities of matter: "weight, foot, drop, byte, flood, asset, pile, loot, thousand, myriad, installment …"

1.1.1.8 **AGENCY** - *INSTANCE* – any organization, service, authority or assembly with a power to take or enforce decisions : "head quarters, public administration, army, high court, Eurovision, Gestapo, guild, soviet, House of Lords, …"

1.1.2 **PHENOMENON** – *PHENOMENE* – perceptible facts: " x-ray, photo emission, sabotage, earthquake, nuclear energy, exhibitionism, fever, fiasco, microclimate, oviparity, paganism, photon, xenophobia …"

1.1.2 .1 **ILLNESS** – *MALADIE* – any combination of pathological manifestations : "agoraphobia, lung disease, tropical disease, angiospasm, cancer, kleptomania, blister, mumps, …"

1.1.2 .2 **AFFECTION** - *AFFECTION* - physiological malfunctions which are not considered as illness or disease : "anemia, anoximia, colic pain, plasmcytosis …"

1.1.2 .3 **EVENT** – *EVENEMENT*- a unique or repeatable fact that can be located on a time axis : "audio conference, breakfast, wedding, olympic games, holiday, accident, ballet, party, Christmas…"

1.1.2 .4 **PROCESS** – *PROCESSUS* – set of phenomena organized in time, which cause a transformation of one state into another :"poly condensation, decay, intoxication, crescendo, aging, decline, exodus, expansion, …"

1.1.2 .5 **STATE** – *ETAT* –a phenomenon corresponding to stage during a process, a situation, a physical or psychological state : "microgravity, affluence, worship, hunger, fanatism, happiness, femininity, glory, …"

1.1.2 .6 **PSYCHOLOGICAL_FEATURE** – *AFFECT*- any kind of attitude, human behavior or , mood or frame of mind : "anger, exhilaration, authority, ambition, self-assurance, …"

1.1.3 **ACTIVITY** – *ACTIVITE* - any kind of activity which cannot be classified in subcategories of this class : "market study, football, rock'n'roll, camping, magnetophotography, cramming, fight, promotion, politics, …"

1.1.3.1 **OPERATION** - *OPERATION* – any action performed by humans or originated by human action : "training, wholesale, pre-heating, audit, landing, attack, detection, scheming, maintenance, …"

1.1.3.2 **OCCUPATION** – *DOMACT*- domain , specialty or discipline in which one can group operations or activities of professional, scientific, political, sport or leisure type : " ethno musicology, neuro-psychology, cider making, communication, mathematics, masonry, spiritism, …"

1.1.4 **ATTRIBUTE**-*ATTRIBUT*- characteristics of any fact or concrete object: "supra-conductivity, absurd, sourness, finished, format, smell, weight, polarity, …"

1.1.4 .1 **COLOR** – *COULEUR* – color names and color-related characteristics: " monochrome, blond, white, gilding, olive, ebony …"

1.1.4 .2 **FACULTY** – *FACULTE* – any mental or physical faculty or ability or related concept: "barking, capacity, brain, signing, stamina, gift, language, imagination, …"

1.2 **CONCRETE** - (*CONCRET*)- formal node in the hierarchy not used as a class itself.

1.2.1 **LIVING_BEING** – *VIVANT*- the set of all living organisms or fictive beings : "animal, plant, angel, gnome, …"

1.2.1.1 **ANIMATE** – ANIME - this is just a formal node.

1.2.1.1.1 **ANIMAL** – *ANIMAL* – any living organism visible to the naked eye as opposed to plants and which cannot be classified in the subcategories below : "omnivore, farm animal, big game, pelotreis flavilatus, woodworm, krill, …"

1.2.1.1.1.1 **AMPHIBIAN** – *AMPHIBIEN* - formal biological definition : "alyte, toad, frog, …"

1.2.1.1.1.2 **FISH** – POISSON – formal biological definition "carp, tuna fish, goldfish, exotic fish, bleak, salmonide,

1.2.1.1.1.3 **INSECT** – *INSECTE* – formal biological definition :"bee, wasp, abraxas, ant, dragonfly, …"

1.2.1.1.1 .4 **BIRD** – *OISEAU* –formal biological definition : "eagle, game birds, sparrow, duck, duckling, chick, …"

1.2.1.1.1.5 **MOLLUSC** – *MOLLUSQUE* – formal biological

definition :“clam, snail, , oyster, murex , octopus…”

1.2.1.1.1 .6 **MAMMAL** – *MAMMIFERE* - formal biological definition : “bat, riding horse, race horse, tom cat, pig, mammal, panda,…”

1.2.1.1.1 .7 **REPTILE** – *REPTILE* - formal biological definition : “crocodile, alligator, dinosaur, T-Rex, …”

1.2.1.1.2 **HUMAN** – *HUMAIN* – set designations related to individuals or groups of human beings, not fitting any of the sub-categories : “symphonic orchestra, Pluto, harlequin, embassy, household, religious order, Antichrist, brigade, cast, escort, pogrom, organization, Church,…”

1.2.1.1.2.1 **INDIVIDUAL_NAMES** – *PERSONNE* – proper nouns designating individuals, “Henry the fifth, Napoleon III, Byron, Madona, Minerva, Queen Victoria, Newton, Joan of Arc, Noah, Sappho, …”

1.2.1.1.2.2 **GROUP_NAMES** - *PERSONNE_MORALE* – designations (mostly proper nouns) of groups like families (family names) , tribes, etc … “the Bourbons, the Scythes, the company, the elders, the Orient, …”

1.2.1.1.2.3 **BIO**-*BIO* – any classification of human beings (groups or individuals) according to a biological characteristic like age, sex etc…: “adult, twin, old timer, brother, miss, bastard, husband, …”

1.2.1.1.2.4 **ETHNOS** - *ETHNO* - designations of humans according to ethnological criteria : “ Swiss, Gypsy, Cajun, Creole speaking, Aussi, …”

1.2.1.1.2.5 **OCCUPATION_AGENT** – *FONCTION*- individuals or groups of humans identified according to a role in professional, social, religious, : “psychiatrist, priest, radionavigator, nun, soprano, surfer,… ”

1.2.1.1.2.6 **IDEO** - *IDEO* – individuals or groups of humans identified according to an ideological criterion : “rasta, Jungian, Arian, sexist, Sikh, Zionist, feddayin, …”

1.2.1.1.2.7 **SITU**-*SITU* - individuals or groups of humans identified according to an accidental , behavioral or punctual criterion : “fat, handicapped, striker, tenant, maniac, short-sighted,…”

1.2.1.2 **ORGANISM** - *ORGANISME* - particular phase in the development of an organism “chrysalis, foetus, ... ”

1.2.1.2.1 **MICROORGANISM** - *MICROORGANISME* - single cell living being invisible to the naked eye : “salmonella, virus, bacteria, ... ”

1.2.1.3 **INANIMATE**– *INANIME* - any living entity (or it’s part) which is not considered as animal: “branch, bulb, form”

1.2.1.3.1 **TREE** - *ARBRE* - any vegetal of considerable size “fruit tree, baobab, acaccia, balsa, palm tree, maple, …”

1.2.1.3.2 **SHRUB** – *ARBUSTE* – a small tree never exceeding the height of 7m : “bamboo, cranberry bush, vine, coffee tree, …”

1.2.1.3.3 **PLANT** – *PLANTE* – the set of vegetals of small size : “green pea, potato, nutmeg, chicory …”

1.2.1.3.4 **MUSHROOM** – *CHAMPIGNON* – “boletus, chanterelle, morel, mould, …”

1.2.1.3.5 **FLOWER** - *FLEUR* - “iris, carnation, lily, magnolia, …’

1.2.1.3.6 **FRUIT** - *FRUIT* - part of a vegetable produced mainly to carry seeds : "seedless fruit, coconut, avocado, grapes, berry, raspberry, nut, chestnut, …"

1.2.2 **NON_LIVING** - (*NON_VIVANT*)- this is a formal node in the hierarchy grouping classes of non-linving entities.

1.2.2.1 **LOCATION** - (*LIEU*)- this is a formal node in the hierarchy grouping classes of word senses designating locations.

1.2.2.1.1 **GEOGRAPHY** – *GEO* – any designation of administrative, political or geological divisions or areas: "capital, North Corea, Sahel, Rio Grande, Mount Everest, DC, …"

1.2.2.1.2 **FUNCTIONAL_SPACE** – *ESPACE* - any location that can be characterized by a functional criterion : "post-office, criminal court, saltern, movie theater, archives, pen, favela, …".

1.2.2.1.3 **BUILDING** – *BATIMENT* – any edifice or part of the structure of a building : " hotel room, tile, wall, brick, national palace, workshop, library, barn …"

1.2.2.2 **OBJECT** – *OBJET*-objects, solid or not : "train ticket, cartoon, snooker ball, id card, medal, song, habanera, egg, masterpiece, statue , …"

1.2.2.2.1 **BODY_PART** – *PCORPS* - any part or tissue of a human or animal body : "sirloin, vertebra, solar plexus, aorta, larynx, skin, …"

1.2.2.2.2 **ARTIFACT** – *ARTEFACT* – solid objects produced by humans for any purpose : "radar, post stamp, electric train, door mat, chewing gum, carbon paper, cage, …"

1.2.2.2.2.1.**MUSICAL_INSTRUMENT** - *INSTRUMENT_MUSIQUE*- any artifact which is a musical instrument : "flute, bongo, pipe, guitar, …"

1.2.2.2.2.2 **FURNITURE** – *MEUBLE* - artifacts (or their parts) used to fit out a building : "chair, cupboard, dining-room table, cradle, hammock, shelf, rack, mezzanine floor, sink, leg (of a table …) "

1.2.2.2.2.3 **CURRENCY** – *MONNAIE* - names of monetary units (fiduciary or not) used in commercial exchanges : "ECU, yen, sen, rupiah, rouble, cent, eurodollar, loose change , quarter, …"

1.2.2.2.2.4 **GARMENT** – *VETEMENT* – artifacts (or their parts) used as clothing, footwear or headgear : "mini skirt, tuxedo, string, uniform, pajamas, safety pin, hood, djellaba, tie, helmet, buckle, obi, …"

1.2.2.2.2.5 **VEHICLE** – *VEHICULE* – artifacts (or their parts) made for the transport of goods , livestock or people : "long range carrier, dinghy, license plate, truck, dashboard, tank, sedan, bicycle, steering wheel, wing, submarine, fighter, …"

1.2.2.2.2.6 **GAME** – *JEU*- artifacts related to or used in leisure activities or to play games : " ball, yoyo, go, puzzle, bet, doll, chess board, …"

1.2.2.2.2.7 **CONTAINER** – *CONTENANT* - artifacts used to store objects or a certain quantity of a substance: "safe, plate, reservoir, bucket, stoup, container, bottle, silo, case, …"

1.2.2.2.2.8 **TOOLS** - (*OUTILLAGE*) – formal node in the class hierarchy

1.2.2.2.2.8.1 **INSTRUMENT** – *INSTRUMENT* – any object made to accomplish a particular task; in general lees complex than an apparatus : "knife, photo diode, fishing

rod, abacus, …"

1.2.2.2.2.8.2 **APPARATUS** - *APPAREIL* - tools or devices used together to provide a particular functionality for a particular task : "micro-computer, camera, electronic microscope, harvester, septic tank, dishwasher, recorder, flight simulator , muffler , …"

1.2.2.2.2.8.3 **MEASURING_INSTRUMENT** - *INSTRUMENT_MESURE*- objects specifically designed for measuring purposes : " digital watch, volt meter, barometer, dynamograph, gauge, oscilloscope, …"

1.2.2.3 **MATTER** – *MATERIAU* – any kind of matter, be it vegetal, mineral or artificial : "poly ethylene, asbestos, gas oil, mono crystal, concrete, diamond, charcoal, …"

1.2.2.4 **SUBSTANCE** – *SUBSTANCE*- natural or elaborated objects characterized by their properties : "vitamin B9, tomato sauce, heavy metal, glutamin, enzyme, aspirin, barium, hashish, hydrate, venom, meat, wine"

1.2.2.5 **ALTERATION** – *ALTERATION* – any kind of alteration or modification made in the original composition or structure of an object, including its surface or texture : "tear, breach, blister, swelling, break, crack, hole , groove …"

1.2.2.6 **FORM** – *FORME*- any designation of a form, shape or pattern: "ring, thorus, arabesque, rounded, angle, ellipse, ellipsoid, facetted, lump, joint, strip, ream, slice,…"

SGML Representation

Semantic classes for nouns correspond to `WeightValuedSemFeature` objects, whose identifier contains the string `classificateur_de_nom`

```
weightvalsemfeaturel="TSVP_Situ_TS_classificateur_de_nom_C
…>
```

BODY	Verbs of grooming, dressing and bodily care : "wash, breath, ..."
CHANGE	Verbs of size, temperature change, intensifying, etc. : "break, whiten,…"
COGNITION	Verbs of thinking, judging, analyzing, doubting : "think, judge, ..."
COMMUNICATION	Verbs of telling, asking, ordering, singing : "tell, communicate, ..."
COMPETITION	Verbs of fighting, athletic activities: "raise, bet ,tally, gain , ..."
CONSUMPTION	Verbs of eating and drinking: "eat, drink, devour"
CONTACT	Verbs of touching, hitting, tying, digging: "touch, attach, ..."
CREATION	Verbs of sewing, baking, painting, performing : "cut, paint, …"
EMOTION	Verbs of feeling : "fear, enjoy, love, ..."
MOTION	Verbs of walking, flying, swimming: "walk, run, slide, ..."
PERCEPTION	Verbs of seeing, hearing, feeling: "see, peep, hear, ..."
POSSESSION	Verbs of buying, selling, owning : "give, get, carry, buy, ..."
SOCIAL	Verbs of political and social activities and events : "book, marry, …"
STATIVE	Verbs of being, having, spatial relations: "live, exist, have, …"
WEATHER	Verbs of raining, snowing, thawing, thundering: "rain, snow, blow, …"

SGML Representation

Semantic classes for verbs correspond to `WeightValuedSemFeature` objects, whose identifier contains the string `classificateur_de_veb`

```
weightvalsemfeaturel="TSVP_Possession_TS_classificateur_de_verb_C
…>
```

Distinctive features can be used to better specify the semantic class of a SemU, and for the definition of selectional restrictions on the arguments. The term 'distinctive' distinguishes them from the constitutive features illustrated in Appendix A.

ADMINISTRATIVE - *ADMINISTRATIF:* This feature is used for marking locations having been fitted out for or by a public administration : "Highway Department+FUNCTIONAL_SPACE@LOCATIVE@ADMINISTRATIVE, ..."

ANIMAL- *ANIMAL*: Applies to animals, their parts or their activities : "bark:PHENOMENON@ANIMAL, mohair:MATTER@ANIMAL@ELABORATED, ..."

CHEMICAL - *CHIMIQUE*: Attached to any chemical substance : "poly amino:SUBSTANCE@CHEMICAL, barium: SUBSTANCE@CHEMICAL, ..."

COLLECTIVE - *COLLECTIF*: Indicates any collection of any entities : vertebrate:ANIMAL@COLLECTIVE, people HUMAN@COLLECTIVE , generation:BIO@COLLECTIVE,..."

EDIBLE - *COMESTIBLE*: - Characterises any liquid, solid of any origin which can be consumed by humans : avocado:FRUIT@EDIBLE, pig:MAMMAL@EDIBLE, rye bread :SUBSTANCE@EDIBLE, ..."

DERMIC - *DERMIQUE* - used to characterize everything which is visible on the skin or which affects it directly or indirectly : "acrocyanose:PHENOMENON@DERMIC, blister : ALTERATION@DERMIC,..."

ELABORATE - *ELABORE* - anything which has been processed by humans (as opposed to a primary natural state) : "anti-rust:SUBSTANCE@ELABORATED, construction site:FUNCTIONAL_SPACE@ELABORATED, leather:SUBSTANCE@ELABORATED@ANIMAL..."

FICTIVE - *FICTIF*: anything which does not have existence in what is conventionally referred to as the real world: "unicorn:ANIMAL@FICTIVE, flying saucer:VEHICLE@FICTIVE, ..."

GEOMETRIC - *GEOMETRIQUE*: related to a geometrical form : "angle: FORM@GEOMETRIC, oval:FORM@GEOMETRIC,..."

HUMAN - *HUMAIN*: related to human capacities or characteristics : "hand:.BODY_PART@HUMAN, neuropathy:ILLNESS@HUMAN, ..."

ICONIC - *ICONIQUE*: any object which are a support medium for images or types of images : "road map :OBJECT@ICONIC, caricature :OBJECT@ICONIC, ..."

INSECT - *INSECTE* - related to insects "proboscis:BODY_PART@INSECT

LIQUID - *LIQUIDE*: - indicates the liquid state :" tomato sauce:SUBSTANCE@EDIBLE@LIQUID, Saint Emilion:SUBSTANCE@EDIBLE@ELABORATE@LIQUID,..."

LOCATIVE - *LOCATIF*: related to a particular place : primary school :OCCUPATION_AGENT@LOCATIVE, summer camp : FUNCTIONAL_SPACE@LOCATIVE,..."

MAMMAL- *MAMMIFERE*: related to mammals: "trunk:BODY_PART@MAMMAL, ..."

MEASURABLE - *MESURABLE*: - related to attributes which can be measured : "albedo:ATTRIBUTE@MEASURABLE, altitude:ATTRIBUTE@MEASURABLE, ..."

MIMETIC - *MIMETIQUE*: characterises human productions :" allegory: OBJECT@MIMETIC, android:OBJECT@MIMETIC, effigy:ENTITY@MIMETIC, ..."

MINERAL - *MINERAL*: natural substance usually found in the crust of a planet , often used for building, jewwellery, etc ... : pumice:SUBSTANCE@MINERAL, amber:SUBSTANCE@MINERAL,..."

NATURAL - *NATUREL*: which has not been modified by human activities : "earthquaque :PHENOMENON@NATURAL, egg :OBJECT@EDIBLE@NATURAL,..."

ORGANIC - *ORGANIQUE*: - related to organs of living beings : "hepatitis:ILLNESS@ORGANIC, hormone:SUBSTANCE@ORGANIC,..."

PART - *PARTIEL* - indicates that the semantic unit is characterized as a part of a larger entity : "electrode: ARTIFACT@PART, living room : BUILDING@PART, ..."

PATHOLOGICAL - *PATHOLOGIQUE*: related to a malfunction of a living being : "pervert:SITU@PATHOLOGICAL, aphasic:SITU@PATHOLOGICAL,..."

PROFESSIONAL - *PROFESSIONNEL* related to any professional activity : supermarket : FUNCTIONAL_SPACE@LOCATIVE@PROFESSIONAL, club house:BUILDING@PROFESSIONAL, ..."

SEMIOTIC - *SEMIOTIQUE* - related to intellectual activity : "intellectual property:ENTITY@SEMIOTIC, driving license:ENTITY@SEMIOTIC,..."

SOUND - *SONORE*: - related sounds : "car radio:OBJECT@SOUND, barking:FACULTY@ANIMAL@SOUND,..."

SYMBOLIC- *SYMBOLIQUE*:- which is related to any conventional symbol or sign : "Victoria Cross :OBJECT@SYMBOLIC, neon sign:OBJECT@SYMBOLIC, digit:ENTITY@SYMBOLIC..."

SYMPTOMATIC - *SYMPTOMATIQUE*-characterises semantic units related to symptoms of illnesses : "cancroide:FORM@SYMPTOMATIC, excrescence: FORM@SYMPTOMATIC, ..."

PLANT - *VEGETAL*- indicates a relation to plants (origin, presence, etc ...) : soy milk:SUBSTANCE@EDIBLE@PLANT, pasture:FUNCTIONAL_SPACE@PLANT, ..."

SGML Representation

Distinctive features correspond to `WeightValuedSemFeature` objects. The type of the `Semfeature` object is `DISTINCTIVE`.

Appendix F

Regular Polysemous Classes

This appendix contains the list of the regular polysemous classes which are currently represented in SIMPLE. They were elaborated starting from a list proposed by Wim Peters (SHE) enriched through the main regular polysemies listed in Malmgren (1988).

The first column of the following table contains the canonical name of the polysemous classes. In the second column, an example is given for each polisemy. The third column contains all the values of the **Complex** slot, which are the names assigned in SIMPLE to those polysemous classes. The fourth column contains the name of the templates that are instantiated by SemUs possibly belonging to a given polysemous class.

If a SemU of a lexical item *L* has as semantic type **[Type_1]**, and as value of **Complex [Type_1] [Type_2]**, this means that there is another SemU of *L* which has **[Type_2]** as semantic type. In other terms, if a lexical item has two SemUs which have the same value in **Complex**, this means that these SemUs belong to the same polysemous class and *that they are connected through a relation of regular polysemy*, i.e. they are regular polysemous senses of the same word.

Polysemous Class	Examples	Values of the Complex	Related templates
Activity-Profession	"violinist"	**[Agent_of_ persistent _activity] [Profession]**	[Agent_of_ persistent _activity] [Profession]
Animal-Food	"lamb"	**[Animal] [Food]**	[Animal] [Substance_Food] [Air-Animal] [Substance_Food] [Earth-Animal] [Substance_Food] [Water-Animal] [Substance_Food]
Animal-Fur	"fox"	**[Animal] [Material]**	[Animal] [Artifactual_material] [Air-Animal] [Artifactual_material] [Earth-Animal] [Artifactual_material] [Water-Animal] [Artifactual_material]
Artifact-Information	"book"	**[Information] [Semiotic_artifact]**	[Semiotic_artifact] [Information]
Building-Institution	"school"	**[Building] [Institution]**	[Building] [Institution]
Figure-Ground	"window"	**[Opening] [Artifact]**	[Opening] [Artifact]
Container-Content	"box"	**[Container] [Quantity]**	[Container] [Quantity]
Substance-Color: *Flower-Colour*	"turquoise" "violet"	**[Colour][Substance]** **[Colour] [Flower]**	[Natural_substance] [Colour] [Flower] [Colour]
People-Institution	"church"	**[Human_Group] [Institution]**	[Human_Group] [Institution]
People-Language	"Italian"	**[People] [Language]**	[People][Language]
Place-People: *Organization-Location*	"city" "newspaper"	**[Location] [Human_group]**	[Location] [Human_group] [Area] [Human_group] [Geopolitical_Location] [Human_Group] [Building] [Human_Group]
Producer-Product: *Plant-Fruit* *Plant-Flower*	 "limone" (it.) (*lemon tree/lemon*) "violet"	**[Flower] [Plant]** **[Fruit] [Plant]**	 [Plant] [Fruit] [Plant] [Flower]
Plant-Spice	"pepper"	**[Plant] [Flavouring]**	[Plant] [Flavouring]
Tree-Wood	"noce" (it.) (*walnut tree/walnut*)	**[Plant] [Substance]**	[Plant] [Natural_substance]
Cause-Speech Act	"indurre" (induce)	**[Cause][Directive_speech_act]**	[Cause][Directive_speech_act]
Amount-Container	"spoon"	**[Amount] [Container]**	[Amount] [Container]
Semiotic-Convention	"law"	**[Semiotic_artifact] [Convention]**	[Semiotic_artifact] [Convention]
Domain	"breeding"	**[Domain] [Purpose_act]**	[Domain] [Purpose_act]
Cause-Aspectual	"begin"	**[Aspectual][Cause_aspectual]**	[Aspectual] [Cause_aspectual]
State-Motion	"surround"	**[Stative_location][Change_of_location]**	[Stative_location][Change_of_location]
Cause-Move	"roll"	**[Move] [Cause_motion]**	[Move] [Cause_motion]
Cognition-Experience	"fear"	**[Cognitive_event] [Experience_ event]**	[Cognitive_event] [Experience_ event]
Cause-change	"change"	**[Change] [Cause_change]** **[Relational_change] [Cause_relational_change]** **[Constitutive_change] [Cause_constitutive_change]** **[Change_of_state] [Cause_change_of_state]** **[Change_of_value] [Cause_change_of_value]**	[Change] [Cause_change] [Relational_change] [Cause_relational_change] [Constitutive_change] [Cause_constitutive_change] [Change_of_state] [Cause_change_of_state] [Change_of_value] [Cause_change_of_value]
Creation-artifact	"construction"	**[Physical_creation] [Artifact]**	[Physical_creation] [Artifact]

Appendix G

The use of Base Concepts in SIMPLE

The task in SIMPLE is to build on the morphological and syntactic layers of the PAROLE lexica by adding semantic information. In order to both anticipate the needs of multi-lingual lexica and maintain coherence across different languages, it has been decided that there should a common set of senses encoded for each language for nouns, verbs and adjectives.

For nouns and verbs this set has been derived from the EuroWordNet Base Concepts. Sections 2, 3 and 4 of this document refer specifically to the processes involved for these part of speech. Base Concepts do not exist for adjectives in the same manner as they do for nouns and verbs in EuroWordNet and therefore in order to derive a set for SIMPLE the process has been slightly different. Please refer to Section 5. Section 6 provides guidelines for working with the Concepts for all parts of speech.

The following section summarises the notion and selection of Base Concepts in EWN from the fuller account which is given in *The EuroWordNet Base Concepts and Top Ontology (Deliverable D017, D034, D036, WP5)*, available at *http://www.let.uva.nl/~ewn.*

2.1. Base Concepts: Background

EuroWordNet (EWN), a current Language Engineering project (LE-2-4002), aims to build a multilingual database with wordnets for several languages. There are four languages involved in the first stage of the project: Dutch, English, Spanish and Italian. The wordnets are structured in the same way as the Princeton WordNet1.5 (Miller et al, 1990) and based around the notion of a *synset* or *set of synonymous word meanings*. For each language the synsets are related by means of semantic relations such as hyponymy and meronymy and the language-specific wordnets are also linked by means of an Inter-Lingual Index (ILI). One benefit of the Index is the ability to move from wordnet to wordnet comparing their synsets and relations across languages.

One aim during the building of the wordnets was to ensure that there was a core set of comparable wordnets (i.e. having the same conceptual coverage) which were encoded to the same degree for all languages. The Base Concepts were selected locally for nouns and verbs on the basis of varied criteria and then a common set was derived.

2.2. Selection Criteria

Base Concepts are characterised primarily by their importance in the wordnets and a concept is important if it is frequently used - either directly or to define other widely used concepts. Importance is thus reflected in the ability of a concept to function as an anchor to attach other concepts. Two operational criteria were applied to the resources in order to identify a concept's anchoring ability:

i. the number of relations (general or limited to hyponomy);
ii. the high position of the concept in a hierarchy (in WN1.5 or any other hierarchy).

Following these criteria, an initial set of nominal and verbal senses, grouped in synsets, were selected (using different qualities of resources and extraction procedures) for each language.

Once the local sets of Base Concepts had been selected and linked to WordNet 1.5, different procedures were used to derive a common set of 826 WN1.5 synsets (649 nouns and 177 verbs). Further re-tuning resulted in a larger final common set of 1024 synsets representing 796 nominal and 228 verbal Base Concepts.

The first task in the SIMPLE Specification Phase was to apply some criteria for refining the Base Concepts in terms of their content (to weed out oddities) and to try to balance the global level of sense granularity.

3.1. Lexical Frequency

Each Base Concept comprises a gloss or definition (relating to a sense) which is lexicalised by the members of a WN1.5 synset. The frequency of each word was extracted from a corpus (COBUILD Corpus of the English Language containing 220 million words) and then combined for each gloss and the concepts were listed in order of the highest combined lexical frequency. This process has ensured that words such as *month*, *day*, *play* and the concepts which they lexicalise appear in the list derived for SIMPLE, whilst concepts such as *any of a number of hoofed animals superficially similar but not necessarily closely related* and its lexicalisation *ungulate* do not. The highest combined frequency for nouns was 80000 occurrences. Those that occurred over 20000 times were retained. As a first step, this gave c.500 SIMPLE Base Concepts for nouns and c.200 for verbs.

The advantage gained by such a task is that the most frequent and therefore the most polysemous words will be encoded for all languages, whilst concepts which are lexicalised by highly restricted vocabulary will not. Since frequency of lexicalisation is one criterion, it also maximises the chance that the vocabulary will be found in our existing PAROLE lexica.

This task does not deal in any great measure however with the problem of sense granularity and therefore the notion of sense clustering, described below, has been adopted.

3.2. Sense Granularity

Of the words which lexicalise concepts in WordNet there are 509 nouns and 349 verbs which have two or more senses in the Base Concept set. These sense distinctions may, for various reasons, be too fine-grained for the lexicographic purposes of SIMPLE and any indication of relatedness between them might assist the SIMPLE task.

Within the EWN project, sense clusters have been created for a number of these words by means of manual inspection of the BC set and automatic extraction of semantic relations between synsets on the basis of their position in the WN hierarchy. An example of the latter is the so-called *sorority* criterion used in WordNet: if two senses share the same hypernym they are considered closely related. These EWN clusters are to be used for sense clustering in SIMPLE. It has to be born in mind however that they have been created on the basis of English lexicalisation patterns which may not necessarily be reflected in other languages.

Three types of clusters have been recognised:

3.2.a Generalisation Clusters

In clusters of this type concepts which are lexicalised by the same word are deemed too fine-grained and have been clustered together into one concept. The clustering task has initially been performed manually for the Base Concepts but in a later stage combinations have been created automatically on the basis of the hierarchical organisation of WN1.5. These clusters mainly represent instances of generalisation derived from the hierarchical configurations indicating sorority and autohyponymy from mappings of WN1.5 onto other resources (WN1.6 for nouns and the Levin database for verbs) as described in the EWN Deliverable 2D004 (forthcoming) and W.Peters, I.Peters and P.Vossen, Automatic Sense Clustering in EuroWordNet. In *Proceedings of the First International Conference on Language Resources and Evaluation (LREC), Granada, Spain, May 1998*.

The generalisation clustering is a means of reaching a relevant level of underspecification for the lexicographic purpose. All the synsets involved have been condensed into one Base Concept. The WN1.5 definitions and example synset member have been preserved so that partners can keep track of the process.

3.2.b Metonymic Clusters

This concerns systematic polysemy/metonymic relations between word senses such as animal/meat and organisation/building. Excessive reliance on English lexicalisation patterns for a multilingual database is dangerous and therefore, particularly with this type of clustering, the synsets involved have not been clustered into one underspecified synset. Instead partners have been sent a list of relations which should be checked for validity in the local languages and then a decision should be made on the possible combination into a complex type.

3.2.c. Verb Diathesis Clusters

A set of verb senses in which the verb displays systematic syntactic subcategorisation alternations, these alternations reflect semantic similarity. Their number is low in EWN and only 1 has so far been detected for SIMPLE.

3.3. Use of Clusters in SIMPLE

The use of such clusters in SIMPLE reduced the Base Concepts for nouns and verbs to 465 and 190 respectively (figures based on pre final version of the lists circulated 6th October 1998, *simple_n_bcrev.txt* and *simple_v_bcrev.txt*). A further re-working of the lists based on feedback has given final versions for the Specification Phase of 462 nominal and 187 verbal Base Concepts. Future reference is to these versions circulated to all partners on 10th November 1998, *simple_n_bcfin.txt* and *simple_v_bcfin.txt*.

To recap, there have been four releases of the Base Concepts for nouns and verbs:

1st release: June 30th 1998
2nd release: July 10th 1998, slight modification
3rd release: October 6th 1998, with clustered concepts
4th release: November 10th 1998. Final release.

The files *simple_n_bcfin.txt* and *simple_v_bcfin.txt* (final release). They contain a number of records (a record is equivalent to one Base Concept) which have 7 fields delimited by a /. The fields contain the following information:

Field 1: Concept Number
This is a unique identifier. Concepts which have been clustered on the basis of generalisation principles occur at the beginning of each file. They are assigned the same identifier as they are to be considered as ONE underspecified Base Concept.

Field 2: Old Concept Number
Based on the 3rd release.

Field 3: WN1.5 offset number
Not relevant at this present time.

Field 4: Gloss for cluster
This is an underspecified cluster gloss and it is the same for each individual concept in the cluster. When there is no cluster (in the majority of cases) this field is empty.

Field 5: Individual Gloss
Individual gloss for concepts which are/are not clustered. In some cases, the definition is merely an example in quotes. This has been inherited from WN and partners are requested to send any difficulties with understanding the meaning of the concept to the SIMPLE mailing list.

Field 6: Word
Each Base Concept is lexicalised by a WN1.5 synset. Field 6 contains ***one example member*** of the

relevant synset.

Field 7: Word Sense Number
This contains the sense number of the word in WN1.5.

Since EWN does not have the same resources for adjectives, Base Concepts have to be determined entirely within the SIMPLE project. As a starting point we have used the 1354 adjective senses (1200 distinct adjectives) in WN1.5 which occur more than once in the SEMCOR corpus. These adjectives are considered central or typical members of synsets (they are non-statellites in WN terminology). Within this list there are senses which contain only partial information (for example, many have missing glosses). Since this information is essential to the task of determining a Base Concept, these types have been extracted. There are also inflected forms of adjectives and these have been removed also. In order to reduce the set further to roughly the same size as the verb Base Concepts we have intersected the list with the 200 most frequent adjectives in COBUILD's Bank of English Corpus (220 million words). This has resulted in a first pass of 185 potential Base Concepts for adjectives. These were circulated to SIMPLE partners on 10th November and feedback has been requested by the end of November.

The format of the file *simple_adj_bc1.txt* is as follows:

Field 1: Concept Number
Field 2: WN1.5 offset number
Field 3: Gloss
Field 4: Word
Field 5: Word sense number in WN1.5

Presented here are guidelines for using the Base Concepts and suggested modes of work. For all parts of speech the procedures for the lexicographer are the same.

It is suggested that the following processes be followed for each Concept:

6.1. Each site should translate the meaning of the concept into their own language.

Partners can then work in a number of ways. Two suggested modes of working are EITHER:

6.2.a.
1. Determine the PROTOTYPICAL lexicalisation(s) for each concept or sense in the relevant language.
2. Make an intersection with these prototypical lexicalisations and the vocabulary found in the existing PAROLE lexicon.

OR

6.2.b.
1. Determine ALL lexicalisations for each concept/sense in the relevant language.
2. Make an intersection with the vocabulary found in the existing PAROLE lexicon.
3. Determine whether the overlapping words are prototypical enough to encode the concept/sense.

Comments

Although 6.2.a. is the default way of working, 6.2.b. could have some advantages such as allowing a greater coverage of the PAROLE lexicon to be encoded with semantic data and making easier the difficult task of determining prototypical lexicalisation(s).

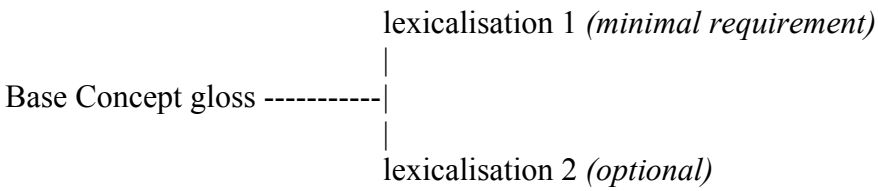
In terms of finding the prototypical lexicalisation(s) for each concept in 6.2.a. and all lexicalisations in 6.2.b. one step might be to look at all other members of the WN1.5 synset. With regard to clustered concepts lexicographers may choose from a larger range of synsets as they will have more than one word to expand – but they will still encode the prototypical lexicalisation(s) for that clustered concept. The number of lexicalisations for each concept is entirely site-specific but minimally one lexicalisation is enough to encode a Base Concept.

6.3. The intersection with the lexicon will inform partners of which concepts they are able to encode. Two types of information will be gathered during this process:

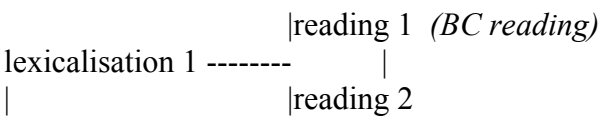
6.3.a. Concepts which are lexicalised and encoded by each site. This may be via partial encoding (i.e. not all words which are deemed prototypical are found in the lexicon). Sites are requested to keep a list of lexicalisations which are not found in order to aid any possible augmentation at a later date. This information will not be collected but held at individual sites.

6.3.b. Concepts which are not lexicalised by each site. Sites are requested to complete a form to be circulated shortly detailing the reason for the non-encoding of a concept (language-specificity, concept encoded by a multi-word item not found in lexicon etc.).

6.4 Sites will now have a number of concepts and related prototypical lexicalisation(s) covered by their PAROLE lexicon:



For each lexicalisation, each sense of the word including the Base Concept sense should be encoded:



Base Concept gloss ----------|
|
lexicalisation 2 --------|reading 1 *(BC reading)*

Comments:

It is suggested that the source for sense distinctions should be a medium-sized monolingual dictionary. Each reading, including the Base Concept one, will form 1 Semantic Unit. A slot will be added to the template structure so that when lexicographers are encoding a Base Concept sense, the Concept number can be recorded.

At the SIMPLE Workshop (Pisa, September 1998) it was decided that a Base Concept will be considered common if at least 3 languages encode it. The intersection for all languages will be done centrally at a time to be determined.

This will allow to automatically obtain, through the link to the same concept number, a set of multilingual links among the 12 SIMPLE languages for all the Base Concept subsets

Appendix H

Templates

Telic

Linguistic tests:	
Examples:	*Target, purpose, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Telic]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	//free//
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*telic* (1, <Usem>) //or any other telic relation//
Synonymy:	*synonymy* (1, <Usem>)
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<scopo_1> //purpose_1//
BC number:	*283*
Template_Type:	**[Telic]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	cio' a cui si tende, che si desidera ottenere
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*telic* (<scopo_1>, <ottenere>)
Synonymy:	*synonymy* (<scopo_1>, <fine_1>)
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<fine_1> //purpose_1//

BC number:	*283*
Template_Type:	**[Telic]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	proposito, scopo
Formal: **Agentive:** **Constitutive:**	<Nil> <Nil> <Nil>
Telic:	*telic* (<fine _1>, <raggiungere>)
Synonymy:	*synonymy* (<fine_1>, <scopo_1>)
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<meta_1> //destination, aim//
BC number:	<Nil>
Template_Type:	**[Telic]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	1. punto al quale si e' diretti; 2. fine da raggiungere
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*telic* (<meta_1>, <raggiungere>)
Synonymy:	*synonymy* (<meta_1>, <fine_1>)
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Agentive

Linguistic tests:	
Examples:	*Cause, origin, provenance, reason, motive, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Agentive]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	//free//
Pred_Rep.:	Lex_pred (<arg0>)
Selectional Restr.:	arg0 = **[Entity]**
Derivation:	<Derivational relation>
Formal:	<Nil>
Agentive:	*agentive* (1, <Usem>) //or any other agentive relation//
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<causa_1> //cause_4 //
BC number:	*402*
Template_Type:	**[Agentive]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	cio' che e' all'origine di qualcosa; cio' che produce un effetto; motivo, ragione
Pred_Rep.:	Lex_pred (<arg0>)
Selectional Restr.:	arg0 = **[Entity]**
Derivation:	<Derivational relation>
Formal:	<Nil>
Agentive:	*agentive* (<causa_1>, <entita'>)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	*synonymy* (<causa_1>, <motivo>) *synonymy* (<causa_1>, <ragione>)
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<agente_2> //agent_2//
BC number:	*410*
Template_Type:	**[Agentive]**
Template_Supertype:	**[Top]**
Domain:	*General, Sciences*

Semantic Class	*Notion*
Gloss:	corpo o sostanza provvisti di particolari proprieta' attive
Pred_Rep.:	Lex_pred (<arg0>)
Selectional Restr.:	arg0 = **[Entity]**
Derivation:	*Agentverb*(<agente_2>, <agire>)
Formal:	<Nil>
Agentive:	*agentive* (<agente_2>, <entita'>)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	*synonymy* (<agente_2>, <fattore>) *synonymy* (<agente_2>, <causa>)
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Cause

Examples:	*cause, get, induce, make, create (cause s.thing to happen), produce, avoid, etc.*
Linguistic Tests:	
Levin Class:	*27 (Engender verbs, e.g. cause, generate)*
Comments:	Verbs belonging to this type express general causation. They are either 2 or 3 place predicates. These verbs expressing basic causation can apply to any two entities. It would appear that <arg1> is best represented as an event: e.g. *his behavior produced uncertainty*

Template

Usem:	1
BC Number:	*20, 27,69, 110, 158, 176, 177, 95, 152, 176*
Template_Type:	**[Cause]**
Template_Supertype:	**[Agentive]**
Domain:	*General*
Semantic Class:	<Semantic class>
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred(<arg0>,<arg1>) Lex_Pred(<arg0>,<arg1>, <arg2>)
Derivation:	<Derivational relation>
Selectional Restr.:	arg0 = **[Entity]** arg1 = **[Event]** **//or//** arg0 = **[Entity]** arg1 = **[Human]** arg2 = **[Event]**
Formal:	*isa* (1,<Usem>:**[Cause]**)
Agentive:	<Nil>
Constitutive:	<Nil>
Synonymy:	<Nil>
Telic:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	indurre_1 //induce
BC Number:	*20*
Template_Type:	**[Cause]**
Template_Supertype:	**[Agentive]**
Domain:	*General*
Semantic Class:	<Semantic class>
Gloss:	//free//
Event type:	process
Pred _Rep.:	indurre (<arg0>,<arg1>, <arg2>)
Derivation: **Selectional Restr.:**	<Nil> arg0 = **[Entity]** arg1 = **[Human]** arg2 = **[Event]**
Formal:	*isa* (<indurre_1>,<causare>**[Cause]**)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Cause][Directive_speech_act]**

Usem:	causare //cause
BC Number:	*27*
Template_Type:	**[Cause]**
Template_Supertype:	**[Agentive]**
Domain:	*General*
Semantic Class:	<Semantic class>
Gloss:	//free//
Event type:	process
Pred_Rep.:	causare(<arg0>,<arg1>)
Derivation:	<Nil>
Selectional Restr.:	arg0 = **[Entity]** arg1 = **[Event]**
Formal:	*isa* (<causare>,<fare>:**[Cause]**)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Constitutive

Linguistic tests:	
Examples:	*Manner, way, part, group, style, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Constitutive]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	//free//
Pred_Rep.:	Lex_pred (<arg0>)
Selectional Restr.:	arg1 = [Entity]
Derivation:	<Nil>
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	*constitutive* (1, <Usem>) //or any other constitutive relation//
Telic:	<Nil>
Synonymy:	*synonymy* (1, <Usem>)
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<parte_1> //portion_1//
BC number:	*24*
Template_Type:	**[Constitutive]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	ciascun degli elementi che uniti insieme formano un tutto
Pred_Rep.:	parte (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	*is a part of* (<parte_1>, <entita'>:[Entity])
Telic:	<Nil>
Synonymy:	*synonymy* (<parte_1>, <porzione>) *synonymy* (<parte_1>, <pezzo>) *synonymy* (<parte_1>, <frazione>) *synonymy* (<parte_1>, <componente>)
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<mezzo_1> //way_2//
BC number:	*12*
Template_Type:	**[Constitutive]**
Template_Supertype:	**[Top]**

Domain:	*General*
Semantic Class	*Notion*
Gloss:	qualsiasi modo, strumento, procedimento di cui ci si avvale per raggiungere un fine
Pred_Rep.:	mezzo (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	*constitutive* (<mezzo_1>, <fine>)
Telic:	<Nil>
Synonymy:	*synonymy* (<mezzo_1>, <modo>)
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<stile_1> //style_2, style_3//
BC number:	*309, 310*
Template_Type:	**[Constitutive]**
Template_Supertype: **Domain:**	**[Top]** *General, Arts, Sport,*
Semantic Class	*Notion*
Gloss:	1. la particolare forma in cui si concretizza l'espressione letteraria o artistica 3. modo e tecnica di esecuzione di un esercizio o di un movimento (sport) 4. foggia di vestito o di accessorio di moda
Pred_Rep.:	stile (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	*concerns* (<stile_1>, <arte>) *concerns* (<stile_1>, <sport>) *concerns* (<stile_1>, <moda>) *constitutive* (<stile_1>, <opera_d'arte>) *constitutive* (<stile_1>, <sport>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<modo_1> //way_9//
BC number:	*12*
Template_Type:	**[Constitutive]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	maniera particolare in cui una persona si comporta, un'azione si svolge, un fenomeno si manifesta
Pred_Rep.:	modo (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	*constitutive* (<modo_1>, <comportamento>) *constitutive* (<modo_1>, <azione>) *constitutive* (<modo_1>, <fenomeno>)
Telic:	<Nil>
Synonymy:	*synonymy* (<modo_1>, <maniera_1>)

Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<maniera_1> //way_1//
BC number:	*35*
Template_Type:	**[Constitutive]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	modo
Pred_Rep.:	maniera (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	*constitutive* (<maniera_1>, <comportamento>) *constitutive* (<maniera_1>, <azione>)
Telic:	<Nil>
Synonymy:	*synonymy* (<maniera_1>, <modo_1>)
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<contenuto_1> //content//
BC number:	<Nil>
Template_Type:	**[Constitutive]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	cio' che e' dentro qualcosa
Pred_Rep.:	contenuto (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	*is_in* (<contenuto_1>, <contenitore>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Part

Linguistic tests:	X + PP complement : English: PPof; French: PPde; Spanish/Catalan: PPde; Italian: PPdi, etc. The PP complement is the semantic head of the NP Clitic test: 'en' in French; 'en/ne' in Catalan; 'ne' in Italian
Examples:	*piece, bit, portion, leaf, peel, bark, stone, brush etc.*
Comments:	This template represents the general class of parts of entities belonging to simple types.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Part]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Part* + <*Semantic Class*>
Gloss	//free//
Pred_Rep.:	Part_of (<arg0>) //for predicative lexical units //
Selectional Restr.:	arg0 = [Entity] //for predicative lexical units //
Derivation:	<Derivational Relation>
Formal:	*isa* (1, <part> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (1, <Usem>: [Constitutive])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<lato_2> //side//
BC number:	<Nil>
Template_Type:	**[Part]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Entity_Part*
Gloss:	parte, banda
Pred_Rep.:	Part_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<lato_2>, <parte>:[Part])
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<lato_2>, <entita'>:[Entity])
Telic:	<Nil>
Synonymy	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<battigia> //water's edge//
BC number:	**<**Nil>
Template_Type:	**[Part]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Location Part*
Gloss:	parte della spiaggia battuta dalle onde
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<battigia>, <parte>:[Part])
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<battigia>, <spiaggia>:[Area])

Telic:	<Nil>
Synonymy	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<buccia> //peel//
BC number:	<Nil>
Template_Type:	**[Part]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Concrete Part*
Gloss:	parte esterna, piu' o meno consistente, dei frutti e di alcuni tuberi
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<buccia>, <parte>:[Part])
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<buccia>, <frutto>: [Vegetal]) *is_a_part_of* (<buccia>, <tubero>: [Vegetal])
Telic:	<Nil>
Synonymy	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<tuorlo> //yolk//
BC number:	<Nil>
Template_Type:	**[Part]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Living_being_Part*
Gloss:	la parte centrale dell'uovo
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<tuorlo>, <parte>:[Part])
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<tuorlo>, <uovo>: [Organic_object])
Telic:	<Nil>
Synonymy	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<faccia_1> //side//
BC number:	*106*
Template_Type:	**[Part]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Entity Part*
Glossa:	parte esterna o anteriore di qualcosa
Pred_Rep.:	Part_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<faccia_1>, <parte>)

Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<faccia_1>, <entita'>: [Constitutive])
Telic:	<Nil>
Synonymy	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<branca_2> //subject_3//
BC number:	*57*
Template_Type:	**[Part]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Entity_Part*
Gloss:	ramo, settore di una scienza, di un'attivita'
Pred_Rep.:	Part_of (<arg0>)
Selectional Restr.:	arg0 = [Abstract_entity]
Derivation:	<Nil>
Formal:	*isa* (<branca_2>, <parte>)
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<branca_2>, <disciplina>: [Domain]) *is_a_part_of* (<branca_2>, <attivita'>)
Telic:	<Nil>
Synonymy	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<ramo_1> //subject_3//
BC number:	*57*
Template_Type:	**[Part]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Entity Part*
Gloss:	settore di un'attivita', branca di studi
Pred_Rep.:	Part_of (<arg0>)
Selectional Restr.:	arg0 = [Abstract_entity]
Derivation:	<Nil>
Formal:	*isa* (<ramo_1>, <parte>)
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<ramo_1>, <disciplina>: [Domain]) *is_a_part_of* (<ramo_1>, <attivita'>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Body_part

Linguistic tests:	
Examples:	*hand, head, eye, paw, tail, muzzle, etc.*
Comments:	This template represents the general class of body parts of humans and animals

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Body_part]**
Template_Supertype:	**[Part]**
Domain:	*General*
Semantic Class:	*Body_part*
Gloss:	//free//
Pred_Rep.:	Part_of (<arg0>) //for predicative lexical units //
Selectional Restr.:	arg0 = [Entity] //for predicative lexical units //
Derivation:	<Derivational Relation>
Formal:	*isa* (1, <part> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (1, <Usem>: [Entity])
Telic:	*indirect_telic* (1, <Usem>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<occhio_1> //eye//
BC number:	**<**Nil>
Template_Type:	**[Body_part]**
Template_Supertype:	**[Part]**
Domain:	*Anatomy Zoology*
Semantic Class:	*Body_part*
Gloss:	nell'uomo e negli altri vertebrati, ciascun degli organi simmetrici della vista
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<occhio_1 >, <organo>: [Body_part])
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<occhio_1 >, <testa>: [Body_part])
Telic:	*indirect_telic* (<occhio_1 >, <vedere>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<zampa_1> //paw//
BC number:	**<**Nil>
Template_Type:	**[Body_part]**
Template_Supertype:	**[Part]**
Domain:	*Zoology*
Semantic Class:	*Body_part*
Gloss:	ciascuno degli arti degli animali

Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<zampa_1>, <arto>:[Body_part])
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<zampa_1>, <animale>:[Animal])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<mano_1> //hand//
BC number:	**<**Nil>
Template_Type:	**[Body_part]**
Template_Supertype:	**[Part]**
Domain:	*General*
Semantic Class:	*Body_part*
Gloss:	estremita' dell'arto superiore formata dal polso, dal dorso, dalla palma e dalle cinque dita.
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<mano_1>, <parte>:[Part])
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<mano_1>, <braccio>: [Body_part]) *has_as_part (*<mano_1>, <palmo>: [Body_part]) *has_as_part (*<mano_1>, <dita>: [Body_part])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<membro_1> //limb//
BC number:	<Nil>
Template_Type:	**[Body_part]**
Template_Supertype:	**[Part]**
Domain:	*General*
Semantic Class:	*Body_part*
Gloss:	ciascuna delle parti in cui si articola il corpo umano
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<membro_1>, <parte>:[Part])
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<membro_1>, <corpo>: [Organic_object])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Group

Linguistic tests:	X is composed of n elements

	X + PP complement : English: PPof; French: PPde; Spanish/Catalan: PPde; Italian: PPdi, etc. The PP complement is the semantic head of the NP clitic test: 'en' in French; 'en/ne' in Catalan; 'ne' in Italian
Examples:	*group, set, drove, flight, flock, pack, shoal, collection, pair, etc.*
Comments:	This template represents the general class of group nouns.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Group]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Collective*
Gloss:	*//free//*
Pred_Rep.:	set_of (<arg0>) //for predicative lexical units //
Selectional Restr.:	arg0 = [Constitutive] //for predicative lexical units //
Derivation:	<Derivational Relation>
Formal:	*isa* (1, <group> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*has_as_member* (1, <Usem>: [Constitutive]) *scalar*= {yes, no} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<insieme_1> //grouping_1//
BC number:	*114*
Template_Type:	**[Group]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Entity Collective*
Gloss:	unione di più elementi
Pred_Rep.:	set_of (<arg0>)
Selectional Restr.:	arg0 = [Constitutive]
Derivation:	<Nil>
Formal:	*isa* (<insieme_1>, <gruppo>)
Agentive:	<Nil>
Constitutive:	*has_as_member* (<insieme_1>, <entita'>) scalar= {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<stormo_2> //flight//
BC number:	<Nil>
Template_Type:	**[Group]**

Template_Supertype:	**[Constitutive]**
Domain:	*Ornithology General*
Semantic Class:	*Animal Collective*
Gloss:	gruppo di uccelli o di insetti in volo
Pred_Rep.:	set_of (<arg0>)
Selectional Restr.:	arg0 = [Air_animal]
Derivation:	<Nil>
Formal:	*isa* (<stormo_2>, <gruppo>: [Group])
Agentive:	<Nil>
Constitutive:	*has_as_member* (<stormo_2>, <uccello>) *has_as_member* (<stormo_2>, <insetto>) scalar= {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<costellazione_1> //constellation//
BC number:	<Nil>
Template_Type:	**[Group]**
Template_Supertype:	**[Constitutive]**
Domain:	*Astronomy*
Semantic Class:	*Object Collective*
Gloss:	raggruppamento di stelle
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<costellazione_1>, <gruppo>: [Group])
Agentive:	<Nil>
Constitutive:	*has_as_member* (<costellazione_1>, <stella>: [Physical_object])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<costellazione_2> //constellation//
BC number:	<Nil>
Template_Type:	**[Group]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class:	*Object Collective*
Glossa:	insieme di elementi simili raggruppati in uno spazio
Pred_Rep.:	set_of (<arg0>)
Selectional Restr.:	arg0 = [Constitutive]
Derivation:	<Nil>
Formal:	*isa* (<costellazione_2>, <gruppo>: [Group])
Agentive:	<Nil>
Constitutive:	*has_as_member* (<costellazione_2>, <Usem>: [Constitutive])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Human_Groups

Linguistic tests:	
Examples:	*band, senate, audiency, home, the Bourbons, etc.*
Comments:	This template allows to encode all collective nouns which are composed by humans. The counterpart of this type is the constitutive relation *Is_a_member_of* in templates of **[People]**, **[Kinship]**, **[Profession]**.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Human_Group]**
Template_Supertype:	**[Group]**
Domain:	*General*
Semantic Class:	*Human Collective*
Glossa:	*//free//*
Pred_Rep.:	set_of (<arg0>) //for predicative lexical units //
Selectional Restr.:	arg0 = [Entity] //for predicative lexical units //
Derivation:	<Derivational Relation>
Formal: **Agentive:**	*isa* (1, <group> or <hyperonym>) <Nil>
Constitutive:	*has_as_member* (1, <person>: [Human])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Location] [Human_group]** **[Human_Group] [Institution]** **[Location] [Human_group]**

Examples

Usem:	<commissione_1> //committee_1//
BC number:	*213*
Template_Type:	**[Human_Group]**
Template_Supertype:	**[Group]**
Domain:	*General*
Semantic Class:	*Human Collective*
Gloss:	gruppo di persone a cui e' affidato un compito
Pred_Rep.:	set_of (<arg0>)
Selectional Restr.:	arg0 = [Human]
Derivation:	<Nil>
Formal:	*isa* (<commissione_1>, <gruppo>)
Agentive:	<Nil>
Constitutive:	*has_as_member* (<commissione_1>, <persona>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<senato_2> //senate//
BC number:	<Nil>

Template_Type:	**[Human_Group]**
Template_Supertype:	**[Group]**
Domain:	*Politics*
Semantic Class:	*Human Collective*
Gloss:	l'adunanza dei senatori
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<senato_2>, <adunanza>:[Group])
Agentive:	<Nil>
Constitutive:	*has_as_member* (<senato_2>, <senatore>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Location] [Human_group]** **[Human_Group] [Institution]**

Usem:	<paese_4> //village//
BC number:	<Nil>
Template_Type:	**[Human_Group]**
Template_Supertype:	**[Group]**
Domain:	*General*
Semantic Class:	*Human Collective*
Gloss:	la popolazione che abita in un paese
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<paese_4>, <popolazione>: [Group])
Agentive:	<Nil>
Constitutive:	*has_as_member* (<paese_4>, <abitante>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Location] [Human_group]**

Usem:	<citta'_3> //village//
BC number:	<Nil>
Template_Type:	**[Human_Group]**
Template_Supertype:	**[Group]**
Domain:	*General*
Semantic Class:	*Human Collective*
Gloss:	la popolazione che abita in una citta'
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<citta'_3>, <popolazione>: [Group])
Agentive:	<Nil>
Constitutive:	*has_as_member* (<citta'_3>, < abitante>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Location] [Human_group]**

Usem:	<chiesa_1> //church//
BC number:	<Nil>
Template_Type:	**[Human_Group]**

Template_Supertype:	**[Group]**
Domain:	*General*
Semantic Class:	*Human Collective*
Gloss:	comunita' di fedeli che professano una delle confessioni cristiane
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<chiesa_1>, <comunita'>: [Group])
Agentive:	<Nil>
Constitutive:	*has_as_member* (<chiesa_1>, <fedele>: [Human]) *has_as_member* (<chiesa_1>, <clero>: [Social_status])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Location] [Human_group]** **[Human_Group] [Institution]**

Usem:	<casa_3> //home//
BC number:	<Nil>
Template_Type:	**[Human_Group]**
Template_Supertype:	**[Group]**
Domain:	*General*
Semantic Class:	*Human Collective*
Gloss:	l'insieme delle persone che costituiscono uno stesso nucleo familiare
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<casa_3>, <gruppo>)
Agentive:	<Nil>
Constitutive:	*has_as_member* (<casa_3>, <familiare>: [Kinship])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Location] [Human_group]**

Amount

Linguistic tests:	Construction: *a X of* (mass_noun) or (plural_noun), e.g.: *a drop of water, the same quantity of salt and pepper, a heap of books, * a heap of book, an alarming degree of violence, a batch of letters, a deal of trouble, a lot of money, etc*.
Examples:	*drop, spoon, bit, pinch , heap, quantity, degree, pile, myriad, number/1 BC 140 etc.*
Comments:	

Template

Usem:	1
BC number:	*number*

Template_Type:	**[Amount]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class	*Amount*
Gloss:	//free//
Pred_Rep.:	Lex_pred (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation: **Formal:**	<Derivational relation> *isa* (1, <amount> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*quantifies* (1, <Usem>) *is_in* (1, <Usem>) //optional: for polysemous entries//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Amount] [Container]**

Examples

Usem:	<mucchio_1> // whole slew_1//
BC number:	*52*
Template_Type:	**[Amount]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class	*Amount*
Gloss:	quantita' di cose ammassate, cumulo
Pred_Rep.:	mucchio (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<mucchio_1>, <quantita'>)
Agentive:	<Nil>
Constitutive:	*quantifies* (<mucchio_1>, <Usem>:[Entity])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<cucchiaio_2> //spoon//
BC number:	*number*
Template_Type:	**[Amount]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class	*Amount*
Gloss:	la quantita' di cibo che puo' contenere un cucchiaio
Pred_Rep.:	cucchiaio (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<cucchiaio_2>, <quantita'>)
Agentive:	<Nil>
Constitutive:	*quantifies* (<cucchiaio_2>, <Usem>:[Food]) *quantifies* (<cucchiaio_2>, <Usem>:[Substance]) *quantifies* (<cucchiaio_2>, <Usem>:[Flavouring]) *is_in* (<cucchiaio_2>, < cucchiaio_1>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)

Complex:	**[Amount] [Container]**

Usem:	<grado_1> //level_1// //livello_1//
BC number:	*158*
Template_Type:	**[Amount]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class	*Amount*
Gloss:	ciascuno degli stadi intermedi che conducono da un livello, uno stato ad un altro; livello
Pred_Rep.:	grado (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<grado_1>, <quantita'>)
Agentive:	<Nil>
Constitutive:	*quantifies* (<grado_1>, <Usem>:[Entity]) //except for concrete entitites//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<quantita'_1> //quantum_1//
BC number:	*232*
Template_Type:	**[Amount]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class	*Amount*
Gloss:	grandezza, massa, misura, numero di qualcosa
Pred_Rep.:	quantita' (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<quantita'_1>, <misura>)
Agentive:	<Nil>
Constitutive:	*quantifies* (<quantita'_1>, <Usem>: [Entity])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<bottiglia_2> //bottle//
BC number:	*number*
Template_Type:	**[Amount]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class	*Amount*
Gloss:	quantita' di liquido contenuto in una bottiglia
Pred_Rep.:	bottiglia (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<bottiglia_2>, <quantita'>)
Agentive:	<Nil>
Constitutive:	*quantifies* (<bottiglia_2>, <Usem>:[Substance]) *is_in* (<bottiglia_2>, <bottiglia_1>)
Telic:	<Nil>
Synonymy:	<Nil>

Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Amount] [Container]**

Usem:	<scatola_2> //box//
BC number:	*number*
Template_Type:	**[Amount]**
Template_Supertype:	**[Constitutive]**
Domain:	*General*
Semantic Class	*Amount*
Gloss:	cio' che e' contenuto in una scatola
Pred_Rep.:	scatola (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<scatola_2>, <quantita'>)
Agentive:	<Nil>
Constitutive:	*quantifies* (<scatola_2>, <Usem>:[Concrete_entity]) *is_in* (<scatola_2>, <scatola_1>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Amount] [Container]**

Entity

Linguistic tests:	
Examples:	*God, spirit, thing*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Entity]**
Template_Supertype:	**[Top]**
Domain:	<Nil>
Semantic Class	*Notion*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <Usem>:[Entity])
Agentive: **Constitutive:**	<Nil> <Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<Dio> //God//
BC number:	**<**Nil>
Template_Type:	**[Entity]**
Template_Supertype:	**[Top]**
Domain:	*Religion*
Semantic Class	*Notion*
Gloss:	Essere supremo e assoluto
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<Dio>, <entita'>:[Entity])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<cosa_1> //thing_9//
BC number:	*73*
Template_Type:	**[Entity]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	qualsiasi entita', concreta o astratta, che e' oggetto dell'attenzione di chi parla o di chi scrive e che non si puo' o non si vuole indicare con precisione
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<cosa_1>, <entita'>:[Entity])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<entita'_1> //thing_9//
BC number:	*73*
Template_Type:	**[Entity]**
Template_Supertype:	**[Top]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	qualsiasi ente senza alcuna determinazione o riferimento particolare
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	<Nil>
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)

Complex:	<Nil>

Concrete Entities

Linguistic tests:	
Examples:	*thing, object*
Comments:	

Template

Usem:	1
BC Number:	*number*
Template_Type:	**[Concrete_Entity]**
Template_Supertype:	**[Entity]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <Usem>:[Concrete_entity])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<oggetto_1> //object//
BC Number:	<Nil>
Template_Type:	**[Concrete_Entity]**
Template_Supertype:	**[Entity]**
Domain:	*General*
Semantic Class	*Notion*
Gloss:	tutto cio' che e' percepito dal soggetto come diverso da se'; il mondo esterno
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<oggetto_1>, <entita'>:[Concrete_entity])
Agentive:	<Nil>
Constitutive:	<Nil>

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Location

Linguistic tests:	- Something is in/under/on/ etc. X -Types of locations may be distinguished by different prepositions they may occur with.
Examples:	*Place, location, etc.*
Comments:	This class is articulated in a number of subtemplates referring to either geographical locations or to natural locations of different sorts.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Location]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*General*
Semantic Class:	*Location*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <location> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*Dimension* ={1,2,3} //optional//
Synonymy:	<Nil>
Telic:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Location] [Human_group]**

Examples

Usem:	<luogo_1> //location//
BC number:	**<**Nil>
Template_Type:	**[Location]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*General*
Semantic Class:	*Location*
Gloss:	porzione determinato dello spazio
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<luogo_1>, <entita'> : [Concrete_entity])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

3 D Location

Linguistic tests:	X has a certain depth or X has a certain height
Examples:	*Cave, cavern, hole, sea, river, well, etc.*
Comments:	This class contains names referring to natural locations which are 3 D and have an extension either in depth or in height.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[3_D_Location]**
Template SuperType:	**[Location]**
Domain:	*General*
Semantic Class:	*Location*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <location> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*Has_as_part* (1, <Usem>: [Entity]) //optional// *Dimension* ={3}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<caverna >//cave//
BC number:	<Nil>
Template_Type:	**[3_D_Location]**
Template SuperType:	**[Location]**
Domain:	*General*
Semantic Class:	*Location*
Gloss:	Spazio cavo sotterraneo
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<caverna>, <spazio>: [Location])
Agentive:	<Nil>
Constitutive:	*Dimension* ={3}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<mare> //sea//
BC number:	<Nil>
Template_Type:	**[3_D_Location]**
Template SuperType:	**[Location]**

Domain:	*General*
Semantic Class:	*Location*
Gloss:	le acque salate che ricoprono la maggior parte della superficie terrestre
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<mare>, <luogo>: [Location])
Agentive:	<Nil>
Constitutive:	*Dimension* ={3} *made_of* (<mare>, <acqua>: [Substance])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<montagna> //mountain //
BC number:	<Nil>
Template_Type:	**[3_D_Location]**
Template SuperType:	**[Location]**
Domain:	*Geography*
Semantic Class:	*Location*
Gloss:	monte
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<montagna>, <rilievo>: [3_D_Location])
Agentive:	<Nil>
Constitutive:	*Dimension* ={3}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<altura_1> //natural elevation//
BC number:	<Nil>
Template_Type:	**[3_D_Location]**
Template SuperType:	**[Location]**
Domain:	*Geography*
Semantic Class:	*Location*
Gloss:	luogo piu' elevato rispetto al terreno circostante, colle, monte
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<altura_1>, <colle>: [3_D_Location])
Agentive:	<Nil>
Constitutive:	*Dimension* ={3}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<rilievo_2> //natural elevation//
BC number:	<Nil>
Template_Type:	**[3_D_Location]**

Template SuperType:	**[Location]**
Domain:	*Geography*
Semantic Class:	*Location*
Gloss:	sopraelevazione della superficie terrestre, l'insieme delle montuosita' di una regione
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<rilievo_2>, <sopraelevazione>: [3_D_Location])
Agentive:	<Nil>
Constitutive:	*Dimension* ={3}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Geopolitical Location

Linguistic tests:	Something lives in X
Examples:	*France, Yorkshire, Tuscany, Rome, nation, city, district, village, etc.*
Comments:	This class contains proper and common names referring to geopolitical locations.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Geopolitical_Location]**
Template_SuperType	**[Location]**
Domain:	*Geography*
Semantic Class:	*Geo*
Gloss:	//f*ree*//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <location> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*has_as_part* (1, <Usem>) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Location] [Human_Group]**

Examples

Usem:	<paese_1> //state_5//
BC number:	*20*
Template_Type:	**[Geopolitical_Location]**
Template_Supertype:	**[Location]**

Domain:	*Geography*
Semantic Class:	*Geo*
Gloss:	territorio di uno stato, nazione, patria
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<paese_1>, <territorio>: [Location])
Agentive:	<Nil>
Constitutive:	*has_as_part* (<paese_1>, <regione>: [Geopolitical_location])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Location] [Human_Group]**

Usem:	<stato_4> //state_5//
BC number:	*20*
Template_Type:	**[Geopolitical_Location]**
Template_Supertype:	**[Location]**
Domain:	*Geography*
Semantic Class:	*Geo*
Gloss:	territorio nazionale
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<stato_4>, <territorio>: [Location])
Agentive:	<Nil>
Constitutive:	*has_as_part* (<stato_4>, <regione>: [Geopolitical_location])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Location] [Human_Group]**

Usem:	<nazione_2> //state_5//
BC number:	*20*
Template_Type:	**[Geopolitical_Location]**
Template_Supertype:	**[Location]**
Domain:	*Geography*
Semantic Class:	*Geo*
Gloss:	stato
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<nazione_2>, <stato>: [Location])
Agentive:	<Nil>
Constitutive:	*has_as_part* (<nazione_2>, <regione>: [Geopolitical_location])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Location] [Human_Group]**

Usem:	<Francia> //France//
BC number:	<Nil>
Template_Type:	**[Geopolitical_Location]**
Template_SuperType:	**[Location]**
Domain:	*Geography*
Semantic Class:	*Geo*

Gloss:	Paese europeo
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<Francia>, <paese_2>: [Geopolitical_location])
Agentive:	<Nil>
Constitutive:	*is_in* (<Francia>, <Europa>: [Geopolitical_location]) *has_as_part* (<Francia>, <regione>: [Geopolitical_location])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Location] [Human_Group]**

Usem:	<paese_3> //village//
BC number:	<Nil>
Template_Type:	**[Geopolitical_Location]**
Template_Supertype:	**[Location]**
Domain:	*Geography*
Semantic Class:	*Geo*
Gloss:	villaggio
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<paese_3>, <villaggio>: [Location])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Location] [Human_Group]**

Usem:	<citta'_1 > //city //
BC number:	<Nil>
Template_Type:	**[Geopolitical_Location]**
Template_Supertype:	**[Location]**
Domain:	*Geography*
Semantic Class:	*Geo*
Gloss:	centro abitato
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<citta'_1>, <centro_6>: [Location])
Agentive:	<Nil>
Constitutive:	*is_in* (<citta'_1>, <regione_2>: [Geopolitical_location])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Location] [Human_Group]**

Usem:	<regione_2> //territory_1//
BC number:	*343*
Template_Type:	**[Geopolitical_Location]**
Template SuperType	**[Location]**
Domain:	*Geography*
Semantic Class:	*Geo*
Gloss:	territorio con caratteri storici, linguistici e culturali suoi propri

Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<regione_2>, <territorio>: [Location])
Agentive:	<Nil>
Constitutive:	*is_in* (<regione_2>, <stato>: [Geopolitical_location]) *has_as_part* (<regione_2>, <provincia>:[Geopolitical_location])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Location] [Human_Group]**

Area

Linguistic tests:	Something is in / on / along X
Examples:	*Beach, clearing, field etc.*
Comments:	This class contains names referring to natural locations which are areas or surfaces. They are 2-D spaces.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Area]**
Template SuperType:	**[Location]**
Domain:	*General*
Semantic Class:	*Location*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <location> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*is_in* (1, <Usem>: [Location]) //optional// *Dimension*={2}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Location] [Human_Group]**

Examples

Usem:	<radura> //clearing//
BC number:	<Nil>
Template_Type:	**[Area]**
Template SuperType:	**[Location]**
Domain:	*General*
Semantic Class:	*Location*
Gloss:	spazio aperto e senza alberi in un bosco

Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<radura>, <spazio>: [Location])
Agentive:	<Nil>
Constitutive:	*is_in* (<radura>, <bosco>: [Location]) *Dimension*= {2}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Opening

Linguistic tests:	Something/someone is going through X
Examples:	*Hole, tunnel, window, door, etc*
Comments:	This class contains names referring to locations which are openings.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Opening]**
Unification_path:	**[Location | Agentive]**
Domain:	*General*
Semantic Class:	*Location*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <opening> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])
Constitutive:	*is_a_part_of* (1, <Usem>: [Concrete_entity]) //optional// *dimension* ={3}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Opening] [Artifact]**

Examples

Usem:	<finestra> //window//
BC number:	<Nil>
Template_Type:	**[Opening]**
Unification_path:	**[Location | Agentive]**
Domain:	*General*
Semantic Class:	*Location*
Gloss:	Apertura praticata in un muro esterno di un edificio
Pred_Rep.:	<Nil>

Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<finestra>, <apertura>)
Agentive:	*created_by* (<finestra>, <Usem>: [Creation])
Constitutive:	*is_a_part_of* (<finestra>, <parete>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Opening] [Artifact]**

Building

Linguistic tests:	Something is entering X
Examples:	*Bank, school, house, shack, igloo, etc.*
Comments:	This class contains names referring to locations which are buildings. They are all artifactual, and telic marked. Sometimes it may be necessary to add information about the material (e.g. igloo => ice; The igloo melted). This information will be expressed by constitutive relation *Made_of*.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Building]**
Unification_path:	**[Location | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*General*
Semantic Class:	*Building*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <building> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Event])
Constitutive:	*has_as_part* (1, <Usem>: [Location]) //optional// *Dimension* ={3}
Telic:	*used_for* (1, <Usem>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Building] [Institution]** **[Building] [Human_Group]**

Examples

Usem:	<edificio> //building_complex_1//
BC number:	*264*
Template_Type:	**[Building]**
Unification_path:	**[Location | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*General*

Semantic Class:	*Building*
Gloss:	costruzione architettonica di una certa grandezza
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<edificio>, <costruzione>)
Agentive:	*created_by* (<edificio>, <fabbricare>: [Event])
Constitutive:	*has_as_part* (<edificio>, <stanza>: [Building]) *Dimension* ={3}
Telic:	*used_for* (<edificio>, <Usem>: [State])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<scuola_1> //school_1//
BC number:	*137*
Template_Type:	**[Building]**
Unification_Path:	**[Location | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	Architecture
Semantic Class:	*Building*
Gloss:	Edificio pubblico che ospita una scuola
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<scuola_1>, <edificio>: [Building])
Agentive:	*created_by* (<scuola_1>, <costruire>: [Creation])
Constitutive:	*has_as_part* (<scuola_1>, <aula>: [Location]) *Dimension* ={3}
Telic:	*used_for* (<scuola_1>, <insegnare>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Building] [Institution]** **[Building] [Human_Group]**

Usem:	<chiesa_3> //church//
BC number:	<Nil>
Template_Type:	**[Building]**
Unification_Path:	**[Location | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	Architecture
Semantic Class:	*Building*
Gloss:	Edificio sacro
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<chiesa_3>, <edificio>: [Building])
Agentive:	*created_by* (<chiesa_3>, <costruire>: [Creation])
Constitutive:	*Dimension* ={3}
Telic:	*used_for* (<chiesa_3>, <pregare>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Building] [Institution]** **[Building] [Human_Group]**

Usem:	<casa_2> //home_1//
BC number:	*86*
Template_Type:	**[Building]**

Unification_path:	**[Location | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class:	*Building*
Gloss:	edificio a uno o piu' piani, suddiviso in vani ed addibito ad abitazione
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<casa_2>, <edificio>:[Building])
Agentive:	*created_by* (<casa_2>, <costruire>: [Event])
Constitutive:	*has_as_part* (<casa_2>, <vano>: [Location]) *Dimension* ={3}
Telic:	*used_for* (<casa_2>, <abitare>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Building] [Human_Group]**

Usem:	<ditta_2> //company//
BC number:	**<**Nil>
Template_Type:	**[Building]**
Unification_path:	**[Location | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class:	*Building*
Gloss:	la sede in cui una ditta svolge la sua attivita'
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<ditta_2>, <sede>)
Agentive:	*created_by* (<ditta_2>, <costruire>: [Event])
Constitutive:	*Dimension* ={3}
Telic:	*used_for* (<ditta_2>, <Usem>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Building] [Institution]**

Usem:	<aula_1> //classroom//
Bc number:	**<**Nil>
Template_Type:	**[Building]**
Unification_path:	**[Location | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class:	*Building*
Gloss:	locale in cui si tengono lezioni scolastiche
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<aula_1>, <locale>:[Location])
Agentive:	*created_by* (<aula_1>, <costruire>: [Creation])
Constitutive:	*is_a_part_of* (<aula_1>, <scuola>: [Building]) *Dimension* ={3}
Telic:	*used_for* (<aula_1>, <Usem>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Building] [Human_Group]**

Artifactual_area

Linguistic tests:	Something is in / on / along X
Examples:	*Square, road, etc.*
Comments:	This class contains names referring to artifactual locations which are areas or surfaces. They are 2-D spaces.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Artifactual_area]**
Unification_path:	**[Location | Artifact $_{\text{Agentive}}$ | Telic]**
Domain:	*General*
Semantic Class:	*Location*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <location> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])
Constitutive:	*is_in* (1, <Usem>: [Location]) //optional// *Dimension*={2} //optional//
Telic:	*used_for* (1, <Usem>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Area] [Human_group]**

Examples

Usem:	<percorso_2> //course//
BC number:	<Nil>
Template_Type:	**[Artifactual_area]**
Unification_path:	**[Location | Artifact $_{\text{Agentive}}$ | Telic]**
Domain:	*Sport*
Semantic Class:	*Location*
Gloss:	itinerario che i concorrenti di una gara devono seguire.
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<percorso_2>, <itinerario>: [Location])
Agentive:	*created_by* (<percorso_2>, <tracciare>: [Creation])
Constitutive:	*Dimension*={2}
Telic:	*used_for* (<percorso_2>, <gara>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<strada_1> //route_2//
BC number:	*183*
Template_Type:	**[Artifactual_area]**

Unification_path:	**[Location | Artifact $_{\text{Agentive}}$ | Telic]**
Domain:	*General*
Semantic Class:	*Location*
Gloss:	striscia spianata di terreno che serve da via di comunicazione
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<strada_1>, <luogo>: [Location])
Agentive:	*created_by* (<strada_1>, <Usem>: [Creation])
Constitutive:	*is_in* (<strada_1>, <terreno>: [Location]) *Dimension*={2}
Telic:	*used_for* (<strada_1>, <comunicazione>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Material

Linguistic tests:	John built / made something using X
Examples:	*Material, etc.*
Comments:	The elements of this class are entities of different types, which are used as materials to produce something else. They are underspecified with respect to both their natural/artifactual nature and composition, Those materials which are specified for their artifactual nature and composition are to be encoded in the template **Artifactual_material**. Those materials which are derived from natural substances, e.g.: 'silver' are to be encoded in the template **Natural_substances**, which is also optionally specified for the Telic role.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Material]**
Unification_path:	**[Concrete_entity | Telic]**
Domain:	*General*
Semantic Class:	*Matter*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <material> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*used_for* (1, <Usem>: [Creation])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<materiale_1> //material_4//
BC number:	*360*
Template_Type:	**[Material]**
Unifcation_path:	**[Concrete_entity | Telic]**
Domain:	*General*
Semantic Class:	*Matter*
Gloss:	Tutto ciò che serve per creare o costruire qualche cosa
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<materiale_1>, <entita'>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*used_for* (<materiale_1>, <costruire>: [Creation]) *used_for* (<materiale_1>, <fabbricare>: [Creation])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<rivestimento_2> // protective covering_1//
BC number:	*441*
Template_Type:	**[Material]**
Unification_path:	**[Concrete_entity | Telic]**
Domain:	*General*
Semantic Class:	*Matter*
Gloss:	il materiale usato per rivestire
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<rivestimento_2>, <materiale>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*used_for* (<rivestimento_2>, <rivestire>: [Process])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Artifact

Linguistic tests:	John made /built /produced X.
Examples:	*Artifact, product, etc.*
Comments:	The elements of this class are substances, locations, objects, etc. which are characterized by the fact of being produced by man. This class is a unified type, i.e. it corresponds to a simple type plus agentive information. Artifacts are typically functionally specified types too. This means that they will often also be unified with a telic template.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Artifact]**
Unification_path:	**[Concrete_entity | Agentive | Telic]**
Domain:	*General*
Semantic Class:	*Artifact*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <entity> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (1, <Usem>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<manufatto_1> //artifact//
BC number:	<Nil>
Template_Type:	**[Artifact]**
Unification_path:	**[Concrete_entity | Agentive | Telic]**
Domain:	*General*
Semantic Class:	*Artifact*
Gloss:	Oggetto fatto a mano o con attrezzi manuali
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<manufatto_1>, <oggetto>)
Agentive:	*created_by* (<manufatto_1>, <fabbricare>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<manufatto_1>, <Usem>:[Process])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<copertura_2> // protective covering_1//
BC number:	*441*
Template_Type:	**[Artifact]**
Unification_path:	**[Concrete_entity | Agentive | Telic]**
Domain:	*General*
Semantic Class:	*Artifact*
Gloss:	cio' che serve a coprire
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<copertura_2>, <entità>: [Concrete_entity])
Agentive:	*created_by* (<copertura_2>, <Usem>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<copertura_2>, <coprire>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<lastra_1> //sheet_6//
BC number:	*383*
Template_Type:	**[Artifact]**
Unification_path:	**[Concrete_entity | Agentive | Telic]**
Domain:	*General*
Semantic Class:	*Artifact*
Gloss:	pezzo di materiale solido di spessore ridotto
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<lastra_1>, <oggetto>: [Concrete_entity])
Agentive:	*created_by* (<lastra_1>, <fabbricare>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<lastra_1>, <Usem>:[Process])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<macchina_1> //machine_1; simple machine_1//
BC number:	*376 373*
Template_Type:	**[Artifact]**
Unification_path:	**[Concrete_entity | Agentive | Telic]**
Domain:	*General*
Semantic Class:	*Artifact*
Gloss:	sistema costituito da uno o piu' meccanismi per compiere operazioni che imitano o potenziano le capacità umane oppure per trasformare un tipo di energia in un'altra utile a compiere un lavoro
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<macchina_1>, <entità??>)
Agentive:	*created_by* (<macchina_1>, <costruire>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<macchina _1>, <Usem>:[Process])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)

Complex:	<Nil>

Artifactual_material

Linguistic tests:	John built / made something using X X is created, or is derived from another entity
Examples:	*Concrete, plastic, leather, brick, wire, fur etc.*
Comments:	The elements of this class are artifactual substances or objects which are used as materials to produce something else. This class is a unified type, i.e. it corresponds to a simple type plus telic information. The polysemy **[Material] [Animal]** is the one commonly referred to as: Animal-Fur.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Artifactual_material]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Material$_{\text{Telic}}$]**
Domain:	*General*
Semantic Class:	*Matter*
Gloss:	//*free*//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <material> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation]) *derived_from* (1, <Usem>: [Concrete_Entity]) //for derived substances//
Constitutive:	*made_of* (1, <Usem>) //optional//
Telic:	*used_for* (1, <Usem>: [Creation]) *used_as* (1, <material>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Material] [Animal]**

Examples

Usem:	<calcestruzzo> //concrete//
BC number:	<Nil>
Template_Type:	**[Artifactual_material]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Material$_{\text{Telic}}$]**
Domain:	*Construction*
Semantic Class:	*Matter*
Gloss:	materiale da costruzione ottenuto mescolando sabbia, ghiaia e cemento con acqua
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>

Derivation:	<Nil>
Formal:	*isa* (<calcestruzzo>, <materiale>)
Agentive:	*created_by* (<calcestruzzo>, <impastare>: [Creation])
Constitutive:	*made_of* (<calcestruzzo>, <sabbia>) *made_of* (<calcestruzzo>, <ghiaia>) *made_of* (<calcestruzzo>, <cemento>)
Telic:	*used_for* (<calcestruzzo>, <costruire>: [Creation]) *used_as* (<calcestruzzo>, <materiale>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<carta_1> //paper_1//
BC number:	*271*
Template_Type:	**[Artifactual_material]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Material$_{Telic}$]**
Domain:	*General*
Semantic Class:	*Matter*
Gloss:	Materiale ottenuto dalla lavorazione di fibre di cellulosa, che si presenta in forma di fogli sottili e pieghevoli, adatti a vari usi
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<carta_1>, <materiale>)
Agentive:	*created_by* (<carta_1>, <lavorazione>: [Creation]) *derived_from* (<carta_1>, <cellulosa>: [Natural_substance])
Constitutive:	<Nil>
Telic:	*used_for* (<carta_1>, <Usem>: [Creation]) *used_as* (<carta_1>, <materiale>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<nylon> //nylon//
BC number:	<Nil>
Template_Type:	**[Artifactual_material]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Material$_{Telic}$]**
Domain:	*General*
Semantic Class:	*Matter*
Gloss:	Fibra tessile artificiale ottenuta tramite reazioni da sottoprodotti del carbone
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<nylon>, <materiale>)
Agentive:	*created_by* (<nylon>, <derivare>: [Creation])
Constitutive:	*derived_from* (<nylon>, <carbone>)
Telic:	*used_for* (<nylon>, <Usem>: [Creation]) *used_as* (<nylon>, <materiale>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<mattone> //brick//
BC number:	<Nil>
Template_Type:	**[Artifactual_material]**

Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Material$_{Telic}$]**
Domain:	*General*
Semantic Class:	*Matter*
Gloss:	Laterizio di argilla, usato in edilizia
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<mattone>, <laterizio>: [Artifact])
Agentive:	*created_by* (<mattone>, <fabbricare>: [Creation])
Constitutive:	*made_of* (<mattone>, <argilla>: [Material])
Telic:	*used_for* (<mattone>, <costruire>: [Creation]) *used_as* (<mattone>, <materiale>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<coccodrillo_2> //crocodile//
BC number:	<Nil>
Template_Type:	**[Artifactual_material]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Material$_{Telic}$]**
Domain:	*General, Fashion*
Semantic Class:	*Matter*
Gloss:	pelle conciata del coccodrillo
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<coccodrillo_2>, <pelle_3>)
Agentive:	*created_by* (<coccodrillo_2>, <conciare>: [Creation]) *derived_from* (<coccodrillo_2>, < coccodrillo_1>: [Water_animal])
Constitutive:	<Nil>
Telic:	*used_for* (<coccodrillo_2>, <Usem>: [Creation]) *used_as* (<coccodrillo_2>, <materiale>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Material] [Animal]**

Furniture

Linguistic tests:	The room was furnished with X.
Examples:	*Table, chair, closet, cupboard, etc.*
Comments:	The elements of this class are artifacts which are typically used for furnishing a room. This class is a unified type, i.e. it corresponds to a simple type plus agentive information. Pieces of furniture are typically functionally specified types too. This means they will also be unified with a telic.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Furniture]**

Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*furnishing*
Semantic Class:	*Furniture*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <furniture> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])
Constitutive:	*made_of* (1, <Usem>) //optional// *has_as_part* (1, <Usem>) //optional//
Telic:	*used_for* (1, <furnish>: [Event]) *used_for* (1, <Usem>: [Event]) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<mobile_2> //furniture//
BC number:	*227*
Template_Type:	**[Furniture]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*furnishing*
Semantic Class:	*Furniture*
Gloss:	ciascuno degli oggetti di arredamento di una casa
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<mobile_2>, <oggetto>)
Agentive:	*created_by* (<mobile_2>, <fabbricare>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<mobile_2>, <arredare>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<armadio> //cupboard//
BC number:	<Nil>
Template_Type:	**[Furniture]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*furnishing*
Semantic Class:	*Furniture*
Gloss:	Pezzo di mobilia con ante per riporre indumenti od oggetti di vario tipo
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<armadio>, <mobile>: [Furniture])
Agentive:	*created_by* (<armadio>, <fabbricare>: [Creation])
Constitutive:	*made_of* (<armadio>, <legno>: [Natural_substance]) *made_of* (<armadio>, <metallo>: [Natural_substance]) *has_as_part* (<armadio>, <anta>: [Part])
Telic:	*used_for* (<armadio>, <arredare>: [Event]) *used_for* (<armadio>, <contenere>: [State])

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<tavola_1> //table//
BC number:	*21*
Template_Type:	**[Furniture]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*furnishing*
Semantic Class:	*Furniture*
Gloss:	tavolo; tavolo a cui ci si siede per consumare i pasti
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<tavola_1>, <mobile>)
Agentive:	*created_by* (<tavola_1>, <fabbricare>: [Creation])
Constitutive:	*made_of* (<tavola_1>, <legno>: [Natural_substance]) *has_as_part* (<tavola_1>, <piano>) *has_as_part* (<tavola_1>, <gambe>)
Telic:	*used_for* (<tavola_1>, <arredare>: [Event]) *used_for* (<tavola_1>, <mangiare>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<tavolo_1> //table_3//
BC number:	*21*
Template_Type:	**[Furniture]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*furnishing*
Semantic Class:	*Furniture*
Gloss:	mobile costituito da un piano orizzontale sostenuto per lo piu' da quattro gambe
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<tavolo_1>, <mobile>)
Agentive:	*created_by* (<tavolo_1>, <fabbricare>: [Creation])
Constitutive:	*made_of* (<tavolo_1>, <legno>: [Natural_substance]) *has_as_part* (<tavolo_1>, <piano>) *has_as_part* (<tavolo_1>, <gambe>)
Telic:	*used_for* (<tavolo_1>, <arredare>: [Event]) *used_for* (<tavolo_1>, <mangiare>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Clothing

Linguistic tests:	John wore X.
Examples:	*Dress, jacket, shirt, trousers, shoes, handbag, etc.*
Comments:	The elements of this class are pieces of clothing of different sorts, which are worn on different parts of the body. This class is a

	unified type, i.e. it corresponds to a simple type plus agentive information. Pieces of clothing are typically functionally specified types too. This means they will also be unified with a telic.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Clothing]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*Fashion*
Semantic Class:	*Garment*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <clothing> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])
Constitutive:	*made_of* (1, <Usem>) //optional// *has_as_part* (1, <Usem>) //optional//
Telic:	*object_of_the_activity* (1, <wear>: [Event]) *used_for* (1, < Usem >) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<vestito> //cloth//
BC number:	<Nil>
Template_Type:	**[Clothing]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*Fashion*
Semantic Class:	*Garment*
Gloss:	Capo di vestiario
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<vestito>, <indumento>: [Clothing])
Agentive:	*created_by* (<vestito>, <cucire>: [Creation])
Constitutive:	*made_of* (<vestito>, <stoffa>: [Material])
Telic:	*object_of_the_activity* (<vestito>, <indossare>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<borsa_1> //handbag//
BC number:	<Nil>
Template_Type:	**[Clothing]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*Fashion*
Semantic Class:	*Garment*

Gloss:	sacchetto di pelle, stoffa o altro materiale che si porta in mano o a spalla per tenervi effetti personali
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<borsa_1>, <accessorio>: [Clothing])
Agentive:	*created_by* (<borsa_1>, <fabbricare>: [Creation])
Constitutive:	*made_of* (<borsa_1>, <pelle>) *made_of* (<borsa_1>, <stoffa>)
Telic:	*object_of_the_activity* (<borsa_1>, <portare>: [Event]) *used_for* (<borsa_1>, <contenere>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Container

Linguistic tests:	
Examples:	*container, box, bottle, glass, etc.*
Comments:	The polysemy Container-Content is assumed to be a lexical rule and it is not explicitly represented in the template.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Container]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*General*
Semantic Class	*Container*
Gloss:	//free//
Pred_Rep.:	Lex_pred (<arg0>) //for predicative lexical units //
Selectional Restr.:	arg0 = [Entity] //for predicative lexical units //
Derivation:	<Derivational relation>
Formal:	*isa* (1, <container> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])

Constitutive:	*made_of* (1, <Usem>) //optional//
	has_as_part (1, <Usem>) //optional//
	contains (1, <Usem>) //optional, for polysemous entries//

Telic:	*used_for* (1, <contain>) *used_for* (1, <measure>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Amount] [Container]**

Examples

Usem:	<recipiente> //container//
BC number:	<Nil>
Template_Type:	**[Container]**

Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class	*Container*
Gloss:	termine generico indicante ogni involucro che possa contenere liquidi o meteriali incoerenti
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<recipiente>, <oggetto>)
Agentive:	*created_by* (<recipiente>, <fabbricare>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<recipiente>, <contenere>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<contenitore> //container//
BC number:	<Nil>
Template_Type:	**[Container]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*Container*
Semantic Class	*Notion*
Gloss:	recipiente; involucro che serve da imballaggio per il trasporto di materiale
Pred_Rep.:	contenere (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	*Agentverb* (<contenitore>, <contenere>)
Formal:	*isa* (<contenitore>, <oggetto>)
Agentive:	*created_by* (<contenitore>, <fabbricare>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<contenitore>, <contenere>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<scatola_1> //box//
BC number:	<Nil>
Template_Type:	**[Container]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class	*Container*
Gloss:	recipiente fornito di coperchio, usato per riporvi oggetti vari
Pred_Rep.:	scatola (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<scatola_1>, <oggetto>)
Agentive:	*created_by* (<scatola_1>, <fabbricare>: [Creation])
Constitutive:	*has_as_part* (<scatola_1>, <coperchio>) *contains* (<scatola_1>, <scatola_2>: [Amount])
Telic:	*used_for* (<scatola_1>, <contenere>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Amount] [Container]**

Usem:	<bottiglia_1> //bottle//

BC number:	<Nil>
Template_Type:	**[Container]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class	*Container*
Gloss:	Recipiente di vetro o di plastica, con corpo cilindrico e collo stretto che serve a contenere liquidi
Pred_Rep.:	bottiglia (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<bottiglia_1>, <recipiente>)
Agentive:	*created_by* (<bottiglia_1>, <fabbricare>: [Creation])
Constitutive:	*made_of* (<bottiglia_1>, <vetro>) *made_of* (<bottiglia_1>, <plastica>) *has_as_part* (<bottiglia_1>, <collo>) *contains* (<bottiglia_1>, < bottiglia_2>: [Amount])
Telic:	*used_for* (<bottiglia_1>, <contenere>) *used_for* (<bottiglia_1>, <misurare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Amount] [Container]**

Usem:	<thermos> //thermos//
BC number:	<Nil>
Template_Type:	**[Container]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class	*Container*
Gloss:	recipiente termoisolante portatile per conservare caldi o freddi bevande o alimenti
Pred_Rep.:	thermos (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<thermos>, <recipiente>)
Agentive:	*created_by* (<thermos>, <fabbricare>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<thermos>, <contenere>) *used_for* (<thermos>, <conservare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Amount] [Container]**

Usem:	<cassonetto> //rubbish bin//
BC number:	<Nil>
Template_Type:	**[Container]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class	*Container*
Gloss:	grande contenitore di rifiuti solidi
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<cassonetto>, <contenitore>)
Agentive:	*created_by* (<cassonetto>, <fabbricare>: [Creation])
Constitutive:	*contains* (<cassonetto >, <spazzatura>)
Telic:	*used_for* (<cassonetto>, <contenere>)
Synonymy:	<Nil>

Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<botte_1> //barrel//
BC number:	<Nil>
Template_Type:	**[Container]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class	*Container*
Gloss:	recipiente di legno fatto di doghe arcuate tenute unite da cerchi di ferro; serve per la conservazione e il trasporto di liquidi, specialmente vino
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<botte_1>, <recipiente>)
Agentive:	*created_by* (<botte_1>, <fabbricare>: [Creation])
Constitutive:	*made_of* (<botte_1>, <legno>) *contains* (<botte_1>, <liquido>) *contains* (<botte_1>, <vino>)
Telic:	*used_for* (<botte_1>, <contenere>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Amount] [Container]**

Artwork

Linguistic tests:	John drew / painted / composed / sculpted X.
Examples:	*Painting, sculpture, drawing, etc.*
Comments:	The elements of this class are pieces of artwork.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Artwork]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$]**
Domain:	*Arts*
Semantic Class:	*Artifact*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <artwork> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])
Constitutive:	*made_of* (1, <Usem>) //optional// *has_as_part* (1, <Usem>) //optional//
Telic:	*object_of_the_activity* (1, <Usem>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<opera_2> //work//
BC number:	<Nil>
Template_Type:	**[Artwork]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$]**
Domain:	*Arts*
Semantic Class:	*Artifact*
Gloss:	l'effetto, il risultato di un'attività artistica
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<opera_2>, <entita'>)
Agentive:	*created_by* (<opera_2>, <Usem>: [Creation])
Constitutive:	<Nil>
Telic:	*object_of_the_activity* (<opera_2>, <Usem>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<quadro> //painting//
BC number:	<Nil>
Template_Type:	**[Artwork]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$]**
Domain:	*Arts*
Semantic Class:	*Artifact*
Gloss:	Dipinto su tela, legno o altro supporto
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<quadro>, <opera>: [Artifact])
Agentive:	*created_by* (<quadro>, <dipingere>: [Creation])
Constitutive:	<Nil>
Telic:	*object_of_the_activity* (<quadro>, <guardare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<dipinto_1> //picture_1//
BC number:	*455*
Template_Type:	**[Artwork]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$]**
Domain:	*Arts*
Semantic Class:	*Artifact*
Gloss:	opera di pittura
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<dipinto_1>, <opera_d'arte>: [Artifact])
Agentive:	*created_by* (<dipinto_1>, <dipingere>: [Creation])
Constitutive:	<Nil>
Telic:	*object_of_the_activity* (<dipinto_1>, <guardare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)

Complex:	<Nil>

Usem:	<disegno_1> //pattern//
BC number:	<Nil>
Template_Type:	**[Artwork]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$]**
Domain:	*Arts*
Semantic Class:	*Artifact*
Gloss:	motivo ornamentale
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<disegno_1>, <opera_d'arte>: [Artifact])
Agentive:	*created_by* (<disegno_1>, <disegnare>: [Creation])
Constitutive:	<Nil>
Telic:	*object_of_the_activity* (<dipinto_1>, <guardare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Instrument

Linguistic tests:	John used X to do… John did something with X
Examples:	*Tool, hammer, lancet, etc.*
Comments:	The elements of this class are tools of different sorts, which are used to perform some task. This class is a unified type, i.e. it corresponds to a simple type plus agentive information. Tools are typically functionally specified types too. This means they will also be unified with a telic.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Instrument]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class:	*Instrument, Musical_Instrument, Measuring_Instrument, Apparatus*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <instrument> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])
Constitutive:	*made_of* (1, <Usem>) //optional// *has_as_part* (1, <Usem>) //optional//
Telic:	*used_for* (1, <Usem>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<strumento_1> //tool//
BC number:	<Nil>
Template_Type:	**[Instrument]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class:	*Instrument*
Gloss:	attrezzo, apparecchio atto all'esecuzione di determinate operazioni
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<strumento_1> <oggetto>)
Agentive:	*created_by* (<strumento_1>, <Usem>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<strumento_1>, <Usem>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<bisturi> //lancet//
BC number:	<Nil>
Template_Type:	**[Instrument]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*Medicine*
Semantic Class:	*Instrument*
Gloss:	Strumento chirurgico usato per incidere tessuti molli
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<bisturi>, <strumento>: [Instrument])
Agentive:	*created_by* (<bisturi>, <fabbricare>: [Creation])
Constitutive:	*made_of* (<bisturi>, <metallo>: [Substance]) *has_as_part* (<bisturi>, <lama>: [Part])
Telic:	*used_for*(<bisturi>, <incidere>: [Event]) *used_by* (<bisturi>, <chirurgo>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<violino> //violin//
BC number:	<Nil>
Template_Type:	**[Instrument]**
Unification_Path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*Music*
Semantic Class:	*Musical_Instrument*
Gloss:	Strumento musicale a corde
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<violino>, <strumento>: [Instrument])
Agentive:	*created_by* (<violino>, <fabbricare>: [Creation])
Constitutive:	*made_of* (<violino>, <legno>: [Natural_substance])

	has_as_part (<violino>, <corda>: [Part])
Telic:	*used_for* (<violino>, <suonare>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Money

Linguistic tests:	John payed with X
Examples:	*money,....*
Comments:	The elements of this class are all representational objects that have a financial value, i.e money and all related objects. This class is of unified type, i.e. it unifies the simple type Physical_Object plus the Artifact (from which inherits the agentive infromation) and the telic information.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Money]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*Commerce*
Semantic Class:	*Currency*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <object> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>)
Constitutive:	*made_of* (1, <paper>) //optional// *made_of* (1, <metal>) //optional//
Telic:	*used_for* (1, <Usem>: [Change_of_possession])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<moneta_3> //money_1//
BC number:	*152*
Template_Type:	**[Money]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*Commerce*
Semantic Class:	*Currency*
Gloss:	banconota o qualsiasi altro oggetto che può essere usato come merce di scambio
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<moneta_3>, <oggetto>)

Agentive:	*created_by* (<moneta_3>, <Usem>)
Constitutive:	*made_of* (<moneta_3>, <carta>) *made_of* (<moneta_3>, <metallo>)
Telic:	*used_for* (<moneta_3>, <Usem>: [Change_of_possession])
Synonymy:	<Nil>
Collocates:	*Collocate* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<denaro_1> //money_1//
BC number:	*152*
Template_Type:	**[Money]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*Commerce*
Semantic Class:	*Currency*
Gloss:	ogni sorta di moneta, metallica o cartacea
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<denaro_1>, <moneta_3>)
Agentive:	*created_by* (<denaro_1>, <Zecca> : [Institution])
Constitutive:	*made_of* (<denaro_1>, <carta>) *made_of* (<denaro_1>, <metallo>)
Telic:	*used_for* (<denaro_1>, <Usem>: [Change_of_possession])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<soldo_1> //money_1//
BC number:	*152*
Template_Type:	**[Money]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*Commerce*
Semantic Class:	*Currency*
Gloss:	denominazione di diversi tipi di monete, in genere di scarso valore; denaro
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<soldo_1>, <moneta_3>)
Agentive:	*created_by* (<soldo_1>, <Zecca> : [Institution])
Constitutive:	*made_of* (<soldo_1>, <carta>) *made_of* (<soldo_1>, <metallo>)
Telic:	*used_for* (<soldo_1>, <Usem>: [Change_of_possession])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Vehicle

Linguistic tests:	John went to Rome by X
Examples:	*Vehicle, car, ship, etc.*
Comments:	The elements of this class are vehicles of different sorts, which are used for transportation, and in general to move.

	Vehicles are typically functionally specified types too. This means they will also be specified for telic information.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Vehicle]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*Transport*
Semantic Class:	*Vehicle*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <vehicle> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])
Constitutive:	*made_of* (1, <Usem>) //optional// *has_as_part* (1, <Usem>) //optional//
Telic:	*used_for* (1, <Usem>: [Motion]) *object_of_the_activity* (1, <Usem>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<veicolo_1> //vehicle_1//
BC number:	*435*
Template_Type:	**[Vehicle]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*Transport*
Semantic Class:	*Vehicle*
Gloss:	Qualsiasi mezzo di trasporto
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<veicolo>, <oggetto>: [Concrete_entity])
Agentive:	*created_by* (<veicolo>, <costruire>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<veicolo>, <trasportare>: [Motion]) *used_for* (<veicolo>, <muoversi>: [Motion]) *object_of_the_activity* (<veicolo>, <guidare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<macchina_2> //motorcar_1//
BC number:	*129*
Template_Type:	**[Vehicle]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*Transport*

Semantic Class:	*Vehicle*
Gloss:	automobile
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<macchina_2>, <veicolo>)
Agentive:	*created_by* (<macchina_2>, <costruire>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<macchina_2>, <trasportare>: [Motion]) *used_for* (<macchina_2>, <muoversi>: [Motion]) *object_of_the_activity* (<macchina_2>, <guidare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<automobile_1> //motorcar_1//
BC number:	*129*
Template_Type:	**[Vehicle]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*Transport*
Semantic Class:	*Vehicle*
Gloss:	automobile
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<automobile_1>, <veicolo>)
Agentive:	*created_by* (<automobile_1>, <costruire>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<automobile_1>, <trasportare>: [Motion]) *used_for* (<automobile_1>, <muoversi>: [Motion]) *object_of_the_activity* (<automobile_1>, <guidare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<autovettura_1> //motorcar//
BC number:	*129*
Template_Type:	**[Vehicle]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*Transport*
Semantic Class:	*Vehicle*
Gloss:	automobile
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<autovettura_1>, <veicolo>)
Agentive:	*created_by* (<autovettura_1>, <costruire>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<autovettura_1>, <trasportare>: [Motion]) *used_for* (<autovettura_1>, <muoversi>: [Motion]) *object_of_the_activity* (<autovettura_1>, <guidare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<auto_1> //motorcar_1//

BC number:	*129*
Template_Type:	**[Vehicle]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*Transport*
Semantic Class:	*Vehicle*
Gloss:	automobile
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<auto_1>, <veicolo>)
Agentive:	*created_by* (<auto_1>, <costruire>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<auto_1>, <trasportare>: [Motion]) *used_for* (<auto_1>, <muoversi>: [Motion]) *object_of_the_activity* (<auto_1>, <guidare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Semiotic artifact

Linguistic tests:	X contains a message John reads X
Examples:	*book, document, card, letter etc.*
Comments:	The elements of this class are physical objects supporting information. The abstract information content is encoded in the template **[Information]**. Regular polysemy: **[Information] [Semiotic_artifact]** Regular polysemy: **[Convention] [Semiotic_artifact]**

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Semiotic_artifact]**
Unification_path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Telic]**
Domain:	*General*
Semantic Class:	*Artifact*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <object> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])
Constitutive:	*contains* (1, <Usem>) //optional//
Telic:	*used_for* (1, <Usem>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Information] [Semiotic_artifact]** **[Convention] [Semiotic_artifact]**

Examples

Usem:	<carta_4> //card_1//
BC number:	*347*
Template_Type:	**[Semiotic_artifact]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class:	*Artifact*
Gloss:	cartoncino rettangolare per giochi da tavolo, su cui sono impressi semi o figure diverse
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<carta_4>, <oggetto>: [Concrete_entity])
Agentive:	*created_by* (<carta_4>, <produrre>: [Creation])
Constitutive:	<Nil>
Telic:	*used_for* (<carta_4>, <giocare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Information] [Semiotic_artifact]**

Usem:	<libro_1> //volume_4//
BC number:	*154*
Template_Type:	**[Semiotic_artifact]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class:	*Artifact*
Gloss:	insieme di fogli stampati cuciti insieme e chiusi da una copertina
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<libro_1>, <oggetto>: [Concrete_entity])
Agentive:	*created_by* (<libro_1>, <rilegare>: [Creation])
Constitutive:	*contains* (<libro_1>, <informazione>)
Telic:	*used_for* (<libro_1>, <leggere>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Information] [Semiotic_artifact]**

Usem:	<contratto_2> //contract//
BC number:	<Nil>
Template_Type:	**[Semiotic_artifact]**
Unification_path:	**[Concrete_entity | Artifact$_{Agentive}$ | Telic]**
Domain:	*General*
Semantic Class:	*Artifact*
Gloss:	documento su cui e' scritto un contratto
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<contratto_2>, <documento>)
Agentive:	*created_by* (<contratto_2>, <stilare>)
Constitutive:	*contains* (<contratto_2>, <contratto_1>)
Telic:	*used_for* (<contratto_2>, <accordarsi>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Information] [Semiotic_artifact]**

Food

Linguistic tests:	John eats X.
Examples:	*Food, nourishment, nutriment, etc.*
Comments:	The elements of this class are entities that are used for alimentation. This class is a unified type, i.e. it corresponds to a simple type plus telic information.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Food]**
Unification_Path:	**[Concrete_entity | Telic]**
Domain:	*Food General*
Semantic Class:	*Edible Concrete*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <food> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*object_of_the_activity* (1, <eat>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<cibo_1> // nutrient \ 1//
BC number:	*226*
Template_Type:	**[Food]**
Unification_Path:	**[Concrete_entity | Telic]**
Domain:	*Food*
Semantic Class:	*Edible Concrete*
Gloss:	Tutto cio' che si mangia
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<cibo_1>, <entita'>: [Concrete_entity])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*object_of_the_activity* (<cibo_1>, <mangiare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Artifact Food

Linguistic tests:	John has cooked X John has prepared X in order to eat it
Examples:	*Cake, roastbeef, sandwich, etc.*
Comments:	The elements of this class are artifact entities that are prepared in order to be eaten. This class is a unified type, i.e. it corresponds to a simple type plus telic and agentive information.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Artifact_Food]**
Unification_Path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Food$_{\text{Telic}}$]**
Domain:	*Food_General*
Semantic Class:	*Artifact Edible*
Gloss:	//*free*//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <food> or <hyperonym>)
Agentive:	*created_by* (1, <Usem>: [Creation])
Constitutive:	*made_of* (1, <Usem>) //optional//
Telic:	*object_of_the_activity* (1, <eat>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<arrosto> //roast//
BC number:	<Nil>
Template_Type:	**[Artifact_Food]**
Unification_Path:	**[Concrete_entity | Artifact$_{\text{Agentive}}$ | Food$_{\text{Telic}}$]**
Domain:	*Food*
Semantic Class:	*Artifact Edible*
Gloss:	Carne cotta direttamente sulla fiamma o in forno
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<arrosto>, <carne>: [Food])
Agentive:	*created_by* (<arrosto>, <cucinare>: [Creation])
Constitutive:	<Nil>
Telic:	*object_of_the_activity* (<arrosto>, <mangiare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Flavouring

Linguistic tests:	John has seasoned the food with X. John added X to the roast

Examples:	*Condiment, spice, pepper, salt, parsley, vinegar, dressing etc.*
Comments:	The elements of this class are entities which are used as ingredients to prepare food or to season dishes. This class is a unified type, i.e. it corresponds to a simple type plus telic information.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Flavouring]**
Unification_Path:	**[Concrete_entity | Telic]**
Domain:	*Food_General*
Semantic Class:	*Edible Concrete*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <ingredient> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*produced_by* (1, <Usem>: [Plant]) //optional//
Telic:	*used_for* (1, <flavour>: [Event]) //or// *used_for* (1, <season>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Flavouring] [Plant]**

Examples

Usem:	<pepe_2> //pepper//
BC number:	<Nil>
Template_Type:	**[Flavouring]**
Unification_Path:	**[Concrete_entity | Telic]**
Domain:	*Food_General*
Semantic Class:	*Edible Concrete*
Gloss:	spezia che si ricava dalla pianta del pepe
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<pepe_2>, <spezia>)
Agentive:	<Nil>
Constitutive:	*produced_by* (<pepe_2>, <pepe_1>: [Plant])
Telic:	*used_for* (<pepe_2>, <condire>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Flavouring] [Plant]**

Physical Object

Linguistic tests:	They are typically count nouns. John saw three X.
Examples:	*Stone, rock, etc.*
Comments:	They refer to shaped, natural, non-living entities.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Physical_object]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*General*
Semantic Class:	*Object*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Agentive:	<Nil>
Formal:	i*sa* (1, <Usem> or <hyperonym>)
Constitutive:	*has_as_part* (1, <Usem>) //optional// *made_of* (1, <Usem>) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<sasso_1> //stone_1//
BC number:	*250*
Template_Type:	**[Physical_object]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*Geology*
Semantic Class:	*Object*
Gloss:	ciottolo
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<sasso_1>, <oggetto>: [Concrete_entity])
Agentive	<Nil>
Constitutive:	*made_of* (<sasso_1>, <roccia_2>: [Substance])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Organic Object

Linguistic tests:	They are typically count nouns. John saw three X.
Examples:	*Egg, body etc.*
Comments:	They refer to natural entities, which are sometimes produced by other living entities

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Organic_object]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*General*
Semantic Class:	*Object*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <object>)
Agentive:	<Nil>

Constitutive:	*produced_by* (1, <Usem: [Living_entity]>) //optional//
	has_as_part (1, <Usem>) //optional//
	made_of (1, <Usem>) //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<uovo> //egg///
BC number:	<Nil>
Template_Type:	**[Organic_object]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*General Zoology*
Semantic Class:	*Object*
Gloss:	Entita' prodotta dagli animali ovipari per la loro riproduzione
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<uovo>, <oggetto>: [Concrete_entity])
Agentive	<Nil>
Constitutive:	*produced_by* (<uovo>, <gallina>: [Animal]) *has_as_part* (<uovo>, <tuorlo>: [Part]) *has_as_part* (<uovo>, <albume>: [Substance])
Telic:	*object_of_the_activity* (<uovo>, <mangiare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Living entity

Linguistic tests:	
Examples:	*living entity*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Living_entity]**
Template_Supertype:	**[Concrete_entity]**
Domain:	<Nil>
Semantic Class	*Living_Being*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <Usem>:[Concrete_entity])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<organismo_2> //organism_1//
BC number:	*70*
Template_Type:	**[Living_entity]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*General*
Semantic Class	*Living_Being*
Gloss:	ogni essere vivente in quanto costituito di un complesso di organi vitali
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<organismo_2>, <entita'>:[Concrete_entity])
Agentive:	<Nil>
Constitutive:	*has_as_part* (<organismo_2>, <organo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	essere_vivente_2 //organism_1//
BC number:	*70*
Template_Type:	**[Living_entity]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*general*
Semantic Class	*Living_Being*
Gloss:	entita' animata
Pred_Rep.:	<Nil>

Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<essere_vivente_2>, <entita'>:[Concrete_entity])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	essere_2 //organism_1//
BC number:	*70*
Template_Type:	**[Living_entity]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*general*
Semantic Class	*Living_Being*
Gloss:	entita' animata
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<essere_2>, <entita'>:[Concrete_entity])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Animal

Linguistic tests:	
Examples:	*animal, etc.*
Comments:	The encoding of the semantics of animals does not reflect the standard approaches that adopt very elaborated taxonomies. The concern is to encode only those aspects that are relevant for composition, and more specifically selectional restrictions. Usually, for purposes of argument selection, predicates are sensitive to either high-level information (select for living_entity, or animal: breath -> living_entity, to water -> plants) or to specific information (select for a specific lemma: bark -> dog). For natural kind nouns the Agentive role is empty by default. The logical polysemy which characterizes certain lexical items (lamb, rabbit) is represented as a reciprocal link between two Usems. For example, the regular polysemy **[Animal][Food]** (*lamb*, *rabbit*) is explicitely marked in the slot: Complex: **[Animal][Food]** in the Usem of <animal_1> which contains a pointer to the Usem of <animal_2> which is a type of **[Food]**. Another regular polysemy is **[Animal][Material]** which is commonly referred to as *Animal-Fur.*

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Animal]**
Template_Supertype:	**[Living_entity]**
Domain:	*Zoology, General*
Semantic Class	*Animal* (*Amphibian, Fish, Insect, Bird, Mollusc, Mammal, Reptile)*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <Animal> or <Hyperonym>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Material]** **[Animal] [Food]**

Examples

Usem:	<animale_1> //fauna_2//
BC number:	*301*
Template_Type:	**[Animal]**
Template_Supertype:	**[Living_entity]**
Domain:	*Zoology, General*
Semantic Class	*Animal*
Gloss:	ogni organismo vivente dotato di sensi e di movimento autonomo
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<animale_1>, <organismo>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Earth Animal

Linguistic tests:	
Examples:	*elephant, etc*.
Comments:	The polysemy marked **[Animal] [Material]** corresponds to the one commonly referred to as: *Animal-Fur*

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Earth-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*Zoology, General*
Semantic Class	*Animal, Mammal, Anfibian, Reptile*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <Animal> or <Hyperonym>)
Agentive:	<Nil>

Constitutive:	*habitat*={earth}
	has_as_part (1, <Usem>) //optional//
	sex={male,female} //optional//
	constitutive_activity (1,<Usem>) //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]** **[Animal] [Material]**

Examples

Usem:	<cavallo_1> //horse_1//
BC number:	*356*
Template_Type:	**[Earth-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*Zoology, General*
Semantic Class	*Mammal*
Gloss:	grosso mammifero erbivoro con testa lunga, collo dritto, arti con un solo dito coperto da zoccolo
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<cavallo_1>, <mammifero>)
Agentive:	<Nil>

Constitutive:	*habitat*={earth} *has_as_part* (<cavallo>, <criniera>) *has_as_part* (<cavallo>, <zoccolo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]**

Usem:	<elefante> //elephant//
BC number:	<Nil>
Template_Type:	**[Earth-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*Zoology, General*
Semantic Class	*Mammal*
Gloss:	mammifero proboscidato, il più grande animale terrestre
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<elefante>, <mammifero>)
Agentive:	<Nil>
Constitutive:	*habitat*={earth} *has_as_part* (<elefante>, <proboscide>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<leonessa> //lioness//
BC number:	<Nil>
Template_Type:	**[Earth-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*Zoology, General*
Semantic Class	*Mammal*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Gloss:	femmina del leone
Formal:	*isa* (<leonessa>, <mammifero>)
Agentive:	<Nil>
Constitutive:	*habitat*={earth} *sex*={*female*}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<agnello_1> //lamb//
BC number:	<Nil>
Template_Type:	**[Earth-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*Zoology, General*
Semantic Class	*Mammal*
Gloss:	nato della pecora, al di sotto di un anno di età
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<agnello_1>, <ovino>)
Agentive:	<Nil>

Constitutive:	*habitat*={earth} *has_as_part* (<agnello_1>, <vello>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]** **[Animal] [Material]**

Usem:	<rana> //frog//
BC number:	<Nil>
Template_Type:	**[Earth-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*Zoology, General*
Semantic Class	*Amphibian*
Gloss:	anfibio a pelle liscia
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<rana>, <anfibio>)
Agentive:	<Nil>
Constitutive:	*habitat*={earth, water}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]**

Air Animal

Linguistic tests:	x flies; x lives in the air
Examples:	*bird, moskito, eagle, etc.*
Comments:	This template is an expansion of the more general template for **[Animal]**. It is a specialization obtained by specifying the class of animals that live in the air.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Air-Animal]**
Template_supertype:	**[Animal]**
Domain:	*Ornithology, General*
Semantic Class	*Bird, Insect*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <Animal> or <Hyperonym>)
Agentive:	<Nil>
Constitutive:	*habitat*={air}

	has_as_part (1, <Usem>) //optional//
	sex={male,female} //optional//
	constitutive_activity (1,<Usem>) //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]**

Examples

Usem:	<uccello_1> //bird_1//
BC number:	*404*
Template_Type:	**[Air-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*Ornithology, General*
Semantic Class	*Bird*
Gloss:	animale vertebrato oviparo dal corpo coperto di penne e piume, con becco ed ali
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<uccello_1>, <volatile>)
Agentive:	<Nil>
Constitutive:	*habitat*={air} *has_as_part* (<uccello_1>,<ali>) *has_as_part* (<uccello_1>,<piume>) *constitutive_activity* (<uccello_1>,<volare>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<pernice> //partridge//
BC number:	<Nil>
Template_Type:	**[Air-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*Ornithology, General*
Semantic Class	*Bird*
Gloss:	uccello di media grandezza, con piumaggio bruno, becco e zampe rosse, cacciato per le carni squisite
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<pernice>, <uccello>)
Agentive:	<Nil>
Constitutive:	*habitat*={air} *has_as_part* (<pernice>,<ali>) *has_as_part* (<pernice>,<piume>) *constitutive_activity* (<pernice>,<volare>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]**

Usem:	<zanzara> //mosquito//

BC number:	<Nil>
Template_Type:	**[Air-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*Ornithology, General*
Semantic Class	*Insect*
Gloss:	piccolo insetto
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<zanzara>, <insetto>)
Agentive:	<Nil>
Constitutive:	*habitat*={air} *has_as_part* (<zanzara>,<ali>) *has_as_part* (<zanzara>,<antenne>) *constitutive_activity* (<zanzara>,<pungere>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<pettirosso> //robin//
BC number:	<Nil>
Template_Type:	**[Air-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*Ornithology, General*
Semantic Class	*Bird*
Gloss:	piccolo e vivace passeriforme buon cantore
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<pettirosso>,<uccello>)
Agentive:	<Nil>
Constitutive:	*habitat*={air} *has_as_part* (<pettirosso>, <ali>) *constitutive_activity* (<pettirosso>,<volare>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Water Animal

Linguistic tests:	x lives under water
Examples:	*fish, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Water-Animal]**

Template_Supertype:	**[Animal]**
Domain:	*Zoology General*
Semantic Class:	*Animal, Fish, Amphibian*, *Mammal, Mollusc, Reptile*
Gloss:	//free//
Formal:	• *isa* (1, <Animal> or <hyperonym>)
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Agentive:	<Nil>

Constitutive:	*habitat*={water}
	has_as_part (1, <Usem>) //optional//
	sex={male,female} //optional//
	constitutive_activity (1,<swim>) //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]** **[Animal] [Material]**

Examples

Usem:	<pesce_1> //fish_1//
BC number:	*389*
Template_Type:	**[Water-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*zoology*, *general*
Semantic Class:	*Fish*
Gloss:	animale vertebrato acquatico
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<pesce_1>, <animale>)
Agentive:	<Nil>
Constitutive:	*habitat*={water} *has_as_part* (<pesce_1>, <pinne >) *constitutive_activity* (<pesce_1>, <nuotare>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]**

Usem:	<aragosta> //lobster//
BC number:	<Nil>
Template_Type:	**[Water-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*zoology*, *general*
Semantic Class:	*Animal*
Gloss:	grosso crostaceo marino
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<aragosta>, <crostaceo>)

Agentive:	<Nil>
Constitutive:	*habitat*={water} *has_as_part* (<aragosta>, <chele>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]**

Usem:	<ostrica> //oyster//
BC number:	<Nil>
Template_Type:	**[Water-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*zoology*, *general*
Semantic Class	*Mollusc*
Gloss:	mollusco marino commestibile
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<ostrica>, <mollusco>)
Agentive:	<Nil>
Constitutive:	*habitat*={water} *has_as_part* (<ostrica>, <conchiglia>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]**

Usem:	<coccodrillo_1> //crocodile//
BC number:	<Nil>
Template_Type:	**[Water-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*zoology*, *general*
Semantic Class:	*Reptile*
Gloss:	grosso e vorace rettile acquatico africano
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<coccodrillo_1>, <rettile>)
Agentive:	<Nil>
Constitutive:	*habitat*={water, earth} *has_as_part* (<coccodrillo_1>, <coda>) *has_as_part* (<coccodrillo_1>, <zampe>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Material]**

Usem:	<celenterato> //coelentarate//
BC number:	<Nil>
Template_Type:	**[Water-Animal]**
Template_Supertype:	**[Animal]**
Domain:	*zoology, general*
Semantic Class:	*Animal*
Gloss:	invertebrati acquatici quasi tutti marini
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>

Formal:	*isa* (<celenterato>, <invertebrato>)
Agentive:	<Nil>
Constitutive:	*habitat*={water}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Human

Linguistic tests:	x thinks
Examples:	*person, child, teen-ager, man, woman, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Human]**
Template_Supertype:	**[Living_entity]**
Domain:	*General*
Semantic Class:	*Human, Bio*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <living entity> or <human>)
Agentive:	<Nil>

Constitutive:	sex={male, female} //optional//
	age={young, adult, old} //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<donna_1> //woman_1//
BC number:	*67*
Template_Type:	**[Human]**
Template_Supertype:	**[Living_entity]**
Domain:	*General*
Semantic Class:	*Human, Bio*
Gloss:	essere umano adulto di sesso femminile

Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<donna_1>, <persona>)
Agentive:	<Nil>
Constitutive:	sex={female} age={adult}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<bambino> //child//
BC number:	<Nil>
Template_Type:	**[Human]**
Template_Supertype:	**[Living_entity]**
Domain:	*General*
Semantic Class:	*Human, Bio*
Gloss:	l'essere umano dalla nascita fino all'inizio dell'adolescenza
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<bambino>, <persona>)
Agentive:	<Nil>
Constitutive:	sex={male} age={young}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<persona_2> //soul_2//
BC number:	*29*
Template_Type:	**[Human]**
Template_Supertype:	**[Living_entity]**
Domain:	*General*
Semantic Class:	*Human, Bio*
Gloss:	ogni essere umano, senza distinzione di sesso, eta' e condizione
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<persona_2>, <essere_umano>)
Agentive:	<Nil>
Constitutive:	<Nil> <Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

People

Linguistic tests:	Someone is a citizen of a country, lives in a region or a town.
Examples:	*French, Spanish, American, Eskimo, citizen etc.*
Comments:	Applies to people connected with or related to different ratial groups of people (Spanish) or people who live in some geographical place (Roman).

Template

Usem:	1
BC number:	*number*
Template_Type:	**[People]**
Template_Supertype:	**[Human]**
Domain:	*General, Sociology, Ethnology*
Semantic Class:	*Ethnos*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <human>)
Agentive:	<Nil>
Constitutive:	*is_a_member_of* (1, <people>) //optional// *lives_in* (1, <Usem>:[Location])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[People][Language]**

Examples

Usem:	<italiano> //Italian//
BC number:	<Nil>
Template_Type:	**[People]**
Template_Supertype:	**[Human]**
Domain:	*General, Sociology, Ethnology*
Semantic Class:	*Ethnos*
Gloss:	abitante, nativo dell'Italia
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<italiano>, <persona>)
Agentive:	<Nil>
Constitutive:	*is_a_member_of* (<italiano>, <popolo>) *lives_in* (<italiano>, <Italia>:[Geographical_location])
Telic:	<Nil>
Synonymy:	<Nil>

Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[People][Language]**

Role

Linguistic Tests:	someone is a member of / part of
Examples:	*member, follower, adherent*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Role]**
Template_Supertype:	**[Human]**
Domain:	*General*
Semantic Class:	*Human*
Gloss:	//free//
Pred_Rep.:	Lex_Pred (<arg0>) //for Predicative Usems//
Selectional Restr.:	arg0=[Human_group] or [Institution] //for Predicative Usems//
Derivation:	<derivational relation>
Formal:	*isa* (1, <human>)
Agentive:	<Nil>

Constitutive:	*is_a_member_of* (1, <Usem>)
	sex={male, female} //optional//
	age={young, adult, old} //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<membro_2> //member//
BC number:	<Nil>
Template_Type:	**[Role]**
Template_Supertype:	**[Human]**
Domain:	*General*
Semantic Class:	*Human*
Gloss:	ciascuna delle persona che formano un gruppo, una collettivita',

	un'associazione.
Pred_Rep.:	membro (<arg0>)
Selectional Restr.:	arg0=[Human_group] [Institution]
Derivation:	<Nil>
Formal:	*isa* (<membro_2>, <persona>)
Agentive:	<Nil>
Constitutive:	*is_a_member_of* (<membro_2>, <gruppo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<capo_2> //leader_1//
BC number:	*186*
Template_Type:	**[Role]**
Template_Supertype:	**[Human]**
Domain:	*General*
Semantic Class:	*Human*
Gloss:	chi ha un ruolo preminente e gode di particolare prestigio e autorevolezza.
Pred_Rep.:	capo (<arg0>)
Selectional Restr.:	arg0=[Human_group] [Institution]
Derivation:	<Nil>
Formal:	*isa* (<capo _2>, <persona>)
Agentive:	<Nil>
Constitutive:	*is_a_member_of* (<capo_2>, <gerarchia>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Ideo

Linguistic tests:	someone who follows a movement or a leader
Examples:	*communist, Christian, Jewish, freudian etc.*
Comments:	This template groups the nouns denoting people which follow some ideological movement. Their are related with an abstract noun indicating the corresponding ideology (communism ➢ communist) or a leader (freudian ➢ Freud).

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Ideo]**
Template_Supertype:	**[Role]**
Domain:	*General*
Semantic Class:	*Ideo*
Gloss:	//free//
Pred_Rep.:	<Nil>

Selectional Restr.:	<Nil>
Derivation:	<Derivational relation>
Formal:	*isa* (1, <person>)
Agentive:	<Nil>
Constitutive:	*is_a_follower_of* (1, <Usem >)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<comunista> //communist//
BC number:	<Nil>
Template_Type:	**[Ideo]**
Template_Supertype:	**[Role]**
Domain:	*General*
Semantic Class:	*Ideo*
Gloss:	chi sostiene, adotta o si ispira al comunismo
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	*NounNoun* (<comunista>, <comunismo>)
Formal:	*isa* (<comunista>, <persona>)
Agentive:	<Nil>
Constitutive:	*is_a_follower_of* (<comunista>, <comunismo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex	<Nil>

Kinship

Linguistic tests:	
Examples:	*mother, father, brother, son, etc.*
Comments:	Kinship nominals are all relational. They have a predicative representation and a specification of the argument type that they select.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Kinship]**

Template_Supertype:	**[Role]**
Domain:	*General*
Semantic Class:	*Bio*
Gloss:	//free//
Pred_Rep.:	Relative_of (<arg0>) //or a lexicalised predicate//
Selectional Restr.:	arg0 = [Human]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <human>)
Agentive:	<Nil>

Constitutive:	*is_a_member_of* (1, <family>)
	sex={male, female} //optional//
	age={young, adult, old} //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<figlio_1> //kid_3//
BC number:	*69*
Template_Type:	**[Kinship]**
Template_Supertype:	**[Role]**
Domain:	*General*
Semantic Class:	*Bio*
Gloss:	ogni individuo rispetto a chi l'ha generato
Pred_Rep.:	Relative_of (<arg0>)
Selectional Restr.:	arg0 = [Human]
Derivation:	<Nil>
Formal:	*isa* (<figlio_1>, <persona>)
Agentive:	<Nil>
Constitutive:	*is_a_member_of* (<figlio_1>, <famiglia>) age={young}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<figlio_2> //son//
BC number:	<Nil>
Template_Type:	**[Kinship]**
Template_Supertype:	**[Role]**
Domain:	*General*
Semantic Class:	*Bio*
Glossa:	ogni individuo di sesso maschile rispetto a chi l'ha generato
Pred_Rep.:	Relative_of (<arg0>)
Selectional Restr.:	arg0 = [Human]
Derivation:	<Nil>
Formal:	*isa* (<figlio_2>, <persona>)
Agentive:	<Nil>
Constitutive:	*is_a_member_of* (<figlio_2>, <famiglia>) sex={male} age={young}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)

Complex:	<Nil>

Social status

Linguistic tests:	someone has as title, or is at a certain level of a social hierarchy
Examples:	*lord, leader, etc.*
Comments:	This template allows to encode nouns which refer to people having a special social role in different fields: religion, aristocracy, government. It is different from **[Profession]** template because it lacks of the telic role.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Social-status]**
Template_Supertype:	**[Role]**
Domain:	*Politics and government*, *Military*, *Education*, *Sports_and_Leisure,. Arts*, *Religion*
Semantic Class:	*Occupation_agent*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <person> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*is_a_member_of* (1, <Usem>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<onorevole> //M.P.//
BC number:	<Nil>
Template_Type:	**[Social-status]**
Template_Supertype:	**[Role]**
Domain:	*Politics and government*
Semantic Class:	*Occupation_agent*
Gloss:	titolo dato ai membri del parlamento
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<onorevole>, <persona>)
Agentive:	<Nil>
Constitutive:	*is_a_member_of* (<onorevole>, <parlamento>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)

Complex:	<Nil>

Agent of temporary activity

Linguistic tests:	1. Allow locative modifiers to make reference to the event (*John is a pedestrian in France / *John is a linguist in France*). 2. Allow temporal modifiers (*Rush-hour pedestrian / *Rush-hour smokers; frequent customers / * frequent violinist*). 3. With numeral modifiers events or individuals can be counted (*five doctors* = 5 different individuals only; *five customers* = 5 or less individuals, namely you can also count the events irrespectively of the individuals). 4. Have predicative structure. 5. Generally require the main verb to occur within the temporal interval in which the individual performs the activity (*John hit a pedestrian* - in this case the individual has to be walking at that time / *John hit a violinist* - in this case the individual may not be playing the violin); 6. If the defining event is negated the result is a contradiction, unlike with persistent nouns (e.g., *John is a violinist but does not play the violin anymore / *John is a passenger but does not travel anymore*).
Examples:	*tenant, student, murderer, pedestrian, passenger, patient, fugitive, neighbourgh etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Agent_of_temporary_activity]**
Unification_path:	**[Human | Agentive]**
Domain:	*General*
Semantic Class:	*Human*
Gloss:	//free//
Pred_Rep.:	//for predicative Usems//
Selectional Restr.:	//for predicative Usems//
Derivation:	<Derivational relation>
Formal:	*isa* (1, <person>)
Agentive:	*agentive* (1, <Usem>) //or// *agentive_prog* (1, < Usem >)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<visitatore> //visiting person//
BC number:	<Nil>

Template_Type:	**[Agent_of_temporary_activity]**
Unification_path:	**[Human | Agentive]**
Domain:	*General*
Semantic Class:	*Human*
Gloss:	chi si reca in visita presso qualcuno
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<visitatore>, <persona>)
Agentive:	*agentive* (<visitatore>, <visitare>)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<studente> //student//
BC number:	<Nil>
Template_Type:	**[Agent_of_temporary_activity]**
Unification_path:	**[Human | Agentive]**
Domain:	*General*
Semantic Class:	*Human*
Gloss:	chi è iscritto a una scuola o all'Universita'
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<studente>, <persona>)
Agentive:	*agentive* (<studente>, <studiare>)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Agent of persistent activity

Linguistic tests:	1. Do not allow locative modifiers to make reference to the event (*John is a pedestrian in France / *John is a linguist in France*). 2. With the exception of items denoting habits, they do not allow temporal modifiers (*Rush-hour pedestrian / *Rush-hour smokers; frequent customers / * frequent violinist*). 3. With numeral modifiers only individuals can be *counted (five doctors* = 5 different individuals; *five customers* = 5 or less individuals, namely you can also count the events irrespectively of the individuals). 4. If the defining event is negated the result is not a contradiction - with the exception of habits -, unlike with temporary nouns (e.g., *John is a violinist but does not play the violin anymore / *John is a passenger but does not travel anymore*).
Examples:	*violinist, sailor, etc.*
Comments:	Some of these nominals are ambiguous between an agentive noun and a profession. This template allows to encode habits, abilities and hobbies through the telic role.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Agent_of_persistent_activity]**
Unification_path:	**[Human | Telic]**
Domain:	*Business, Managment*, *Service_industry* and its subtypes, *Manufactoring_industry* and some of its subtypes, *Politics and government*, *Science*, *Health and Medecine*, *Military*, *Education*, *Sports and Leisure, Arts*, *Religion*, *Law*
Semantic Class:	*Occupation_agent*
Gloss:	//free//
Pred_Rep.:	//for predicative Usems//
Selectional Restr.:	//for predicative Usems//
Derivation:	<Derivational relation>
Formal:	*isa* (1, <person>)
Agentive:	<Nil>
Constitutive:	sex={male, female} //optional//
Telic:	*is_the_ability_of* (1, <Usem>) //or// *is_the_habit_of* (1,< Usem >)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Agent_of_ persistent _activity] [Profession]**

Examples

Usem:	<violinista> //violinist//
BC number:	*number*
Template_Type:	**[Agent_of_persistent_activity]**
Unification_path:	**[Human | Telic]**
Domain:	*Arts, Music*
Semantic Class:	*Occupation_agent*
Gloss:	chi suona il violino
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<violinista>, <persona>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*is_the_ability_of* (<violinista>, <suonare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Agent_of_ persistent _activity] [Profession]**

Usem:	<musicista_1> //player//
BC number:	<Nil>
Template_Type:	**[Agent_of_persistent_activity]**
Unification_path:	**[Human | Telic]**
Domain:	*Music*
Semantic Class:	*Occupation_agent*
Gloss:	chi compone ed/o esegue musica
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<musicista_1>, <persona>)

Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*is_the_ability_of* (<musicista_1> , <comporre>) *is_the_ability_of* (<musicista_1> , <suonare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Agent_of_persistent_activity] [Profession]**

Profession

Linguistic tests:	someone earns money from his/her activity.
Examples:	*lawyer, butcher, waiter, major-general, journalist, etc.*
Comments:	The encoding of the semantics of professions is a way to group all profession nouns, which are characterised through a telic role. Since in many cases there is no one particular activity that can be used to specify the telic information, the following is assumed: - The domain provides the field of activity. - In the telic role the Usem which specifies the action simply is <work>.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Profession]**
Unification_path:	**[Human | Telic]**
Domain:	*Business, Managment*, *Service_industry* and its subtypes, *Manufactoring_industry* and some of its subtypes, *Politics and government*, *Science*, *Health and Medecine*, *Military*, *Education*, *Sports_and_Leisure, Arts*, *Religion*, *Law*
Semantic Class:	*Occupation_agent*
Gloss:	//free//
Pred_Rep.:	//for predicative Usems//
Selectional Restr.:	//for predicative Usems//
Derivation:	<Derivational relation>
Formal:	*isa* (1, <person>)
Agentive:	<Nil>

Constitutive:	sex={male, female} //optional//
	is_a_member_of (1,<organization>) //optional//

Telic:	*is_the_activity_of* (1, <work>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Agent_of_persistent_activity] [Profession]**

Examples

Usem:	<lavoratore_1> //worker_1//
BC number:	*293*
Template_Type:	**[Profession]**
Unification_path:	**[Human |Telic]**

Domain:	*general*
Semantic Class:	*Occupation_agent*
Gloss:	chi lavora
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	*Agentverb* (<lavoratore>, <lavorare>)
Formal:	*isa* (<lavoratore>, <persona>)
Agentive:	<Nil>
Constitutive:	sex={male}
Telic:	*is_the_activity_of* (<lavoratore>, <lavorare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<operaio_2> //worker_1//
BC number:	*293*
Template_Type:	**[Profession]**
Unification_path:	**[Human |Telic]**
Domain:	*Manufactoring_industry*
Semantic Class:	*Occupation_agent*
Gloss:	chi svolge un'attivita' lavorativa manuale alle dipendenze di qualcuno
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<operaio_1>, <persona>)
Agentive:	<Nil>
Constitutive:	sex={male}
Telic:	*is_the_activity_of* (<operaio_1>, <work>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<macellaio_1> //butcher (the one who kills the animals whose meat will be sold)//
BC number:	<Nil>
Template_Type:	**[Profession]**
Unification_path:	**[Human |Telic]**
Domain:	*General*
Semantic Class:	*Occupation_agent*
Gloss:	chi macella le bestie
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	*Agentverb* (<macellaio>, <macellare>)
Formal:	*isa* (<macellaio_1>, <persona>)
Agentive:	<Nil>
Constitutive:	sex= {male}
Telic:	*Is_the_activity_of* (<macellaio_1>,<macellare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<macellaio_2> //butcher (the one who sells the meat)//
BC number:	<Nil>

Template_Type:	**[Profession]**
Unification_path:	**[Human |Telic]**
Domain:	*Commerce*
Semantic Class:	*Occupation_agent*
Gloss:	chi vende le carni in una macelleria
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<macellaio_2>, <person>)
Agentive:	<Nil>
Constitutive:	sex={male}
Telic:	*is_the_activity_of* (<macellaio_2>, <vendere>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<musicista_2> //player_2//
BC number:	*196*
Template_Type:	**[Profession]**
Unification_path:	**[Human | Telic]**
Domain:	*Music*
Semantic Class:	*Occupation_agent*
Gloss:	compositore di musica; esecutore di composizioni musicali come professione
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<musicista_2>, <persona>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*is_the_activity_of* (<musicista_2>, <suonare>) *is_the_activity_of* (<musicista_2>, <comporre>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Agent_of _persistent_activity] [Profession]**

Vegetal entity

Linguistic tests:	
Examples:	*vegetable*
Comments:	The encoding of the semantics of vegetal world does not reflect the standard approaches that follow the point of view of botany. We distinguished three simple sub-templates for **[Plants]** (without distinguishing among bush, trees, etc), **[Flowers]**, **[Fruit]**.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Vegetal_entity]**
Template_Supertype:	**[Living_entity]**
Domain:	*Botany General*
Semantic Class:	*Inanimate, Mushroom*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <vegetable> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*object_of_the_activity* (1, <eat>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<vegetale> //vegetable_2//
BC number:	<Nil>
Template_Type:	**[Vegetal_entity]**
Template_Supertype:	**[Living_entity]**
Domain:	*Botany General*
Semantic Class:	*Inanimate*
Gloss:	ogni organismo vivente che appartiene al regno vegetale
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<vegetale>, <organismo>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<fungo_1> //mushroom//
BC number:	<Nil>
Template_Type:	**[Vegetal_entity]**
Template_Supertype:	**[Living_entity]**
Domain:	*Botany General*
Semantic Class:	*Mushroom*
Gloss:	vegetale privo di clorofilla; il corpo fruttifero dei funghi piu' grandi
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<fungo_1>, <vegetale>: [Vegetal_entity])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*object_of_the_activity* (<fungo_1>, <mangiare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Plant

Linguistic tests:	
Examples:	*plant, oak, lemon tree, lettuce, etc.*
Comments:	For **[Plant]**, the polysemy which may hold between a plant and a fruit or a flower can be considered as a case of the 'producer/product' alternation. In the lexical entry of the plant it is encoded in the Constitutive role by means of the relation *produces*

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Plant]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany*
Semantic Class:	*Plant Tree Schrub*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <plant> or <hyperonym>)
Agentive:	<Nil>

Constitutive:	*has_as_part_* (1, <Usem> : [Part]) //optional//
	produces (1, < Usem>: [Fruit]) //optional//
	produces (1, < Usem>: [Flower]) //optional//

Telic:	*object_of_the_activity* (1, <eat>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Plant] [Substance]** **[Fruit] [Plant]** **[Flower] [Plant]** **[Plant] [Flavouring]**

Examples

Usem:	<limone_1> //lemon (tree)//
BC number:	<Nil>
Template_Type:	**[Plant]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany*
Semantic Class:	*Tree*
Gloss:	albero con foglie sempreverdi, fiori bianchi e frutti gialli
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<limone_1>, <albero>: [Plant])
Agentive:	<Nil>
Constitutive:	*has_as_part* (<limone_1>, <foglie>)

	produces (<limone_1>, <limone_2>:[Fruit]) *produces* (<limone_1>, <fiore>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Fruit] [Plant]**

Usem:	<noce_1> //walnut (tree)//
BC number:	<Nil>
Template_Type:	**[Plant]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany*
Semantic Class	*Tree*
Gloss:	grande albero con foglie composte e frutti commestibili
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<noce_1>, <albero>:[Plant])
Agentive:	<Nil>
Constitutive:	*has_as_part* (<noce_1>, <foglie>) *produces* (<noce_1>, <noce_2>:[Fruit])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Plant] [Substance]**

Usem:	<viola_1> //violet//
BC number:	<Nil>
Template_Type:	**[Plant]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany*
Semantic Class	*Plant*
Gloss:	pianta erbacea
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<viola_1>, <pianta>)
Agentive:	<Nil>
Constitutive:	*produces* (<viola_1>, <viola_2>: [Flower])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Flower] [Plant]**

Usem:	<lattuga> //lettuce//
BC number:	<Nil>
Template_Type:	**[Plant]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany*
Semantic Class:	*Plant*
Gloss:	pianta erbacea coltivata negli orti
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<lattuga>, <pianta>)
Agentive:	<Nil>
Constitutive:	<Nil>

Telic:	*object_of_the_activity* (<lattuga>, <mangiare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<pepe_1> //pepper tree//
BC number:	<Nil>
Template_Type:	**[Plant]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany*
Semantic Class:	*Plant*
Gloss:	pianta tropicale
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<pepe_1>, <plant>)
Agentive:	<Nil>
Constitutive:	*produces* (<pepe_1>, <pepe_2>: [Flavouring])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Plant] [Flavouring]**

Flower

Linguistic tests:	
Examples:	*rose, violet.*
Comments:	The polysemy which may hold between a flower and a plant can be considered as a case of the 'product/producer' alternation. In the lexical entry of the flower, it is encoded in the Constitutive role by means of the relation *produced_by*.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Flower]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	B*otany*
Semantic Class:	*Flower*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <flower> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*has_as_colour* (1, <Usem>:[Colour]) //optional// *produced_by* (1, <Usem>:[Plant]) /optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)

Complex:	**[Colour] [Flower]** **[Flower] [Plant]**

Examples

Usem:	<viola_2> //violet//
BC number:	<Nil>
Template_Type:	**[Flower]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany*
Semantic Class:	*Flower*
Gloss:	il fiore della pianta della viola
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<viola_2>, <fiore>)
Agentive:	<Nil>
Constitutive:	*has_as_colour* (<viola_2>,<viola_3>:[Colour]) *produced_by* (<viola_2>, <viola_1> : [Plant]>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Colour] [Flower]** **[Flower] [Plant]**

Fruit

Linguistic tests:	
Examples:	*fruit, berry, banana, apple, orange, pineapple*
Comments:	The polysemy which may hold between a fruit and a plant can be considered as a case of the 'product/producer' alternation. In the lexical entry of the fruit, it is encoded in the Constitutive role by means of the relation *produced_by*.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Fruit]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany General*
Semantic Class:	*Fruit Edible*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <fruit> or <hyperonym>)

Agentive:	<Nil>
Constitutive:	*produced_by* (1, <plant>) //optional// *has_as_colour* (1, <Usem >:[Colour]) //optional//
Telic:	*object_of_the_activity* (1, <eat>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Fruit] [Plant]**

Examples

Usem:	<frutto_1> //fruit_1//
BC number:	*444*
Template_Type:	**[Fruit]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany General*
Semantic Class:	*Fruit*
Gloss:	il prodotto della maturazione dell'ovario, che contiene i semi
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<frutto_1>, <frutto>)
Agentive:	<Nil>
Constitutive:	*is_produced_by* (<frutto_1>, <pianta>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<bacca> //berry//
BC number:	<Nil>
Template_Type:	**[Fruit]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany General*
Semantic Class:	*Fruit*
Gloss:	piccoli frutti tondeggianti di diverse piante
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<bacca>, <frutto>)
Agentive:	<Nil>
Constitutive:	*is_produced_by* (<bacca>, <pianta>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<frutta> //edible fruit//
BC number:	<Nil>
Template_Type:	**[Fruit]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany General*
Semantic Class:	*Fruit*
Gloss:	l'insieme dei frutti commestibili
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>

Derivation:	<Nil>
Formal:	*isa* (<frutta>, <frutto>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*object_of_the_activity* (<frutta>, <mangiare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<noce_2> //walnut//
BC number:	**<**Nil>
Template_Type:	**[Fruit]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany General*
Semantic Class:	*Edible Fruit*
Gloss:	frutto del noce, composto di una parte esterna etc.
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<noce_2>, <frutto>)
Agentive:	<Nil>
Constitutive:	*is_produced_by* (<noce_2>, <noce_1>: [Plant])
Telic:	*object_of_activity* (<noce_2>, <mangiare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Fruit] [Plant]**

Usem:	<limone_2> //lemon//
BC number:	<Nil>
Template_Type:	**[Fruit]**
Template_Supertype:	**[Vegetal_entity]**
Domain:	*Botany General*
Semantic Class:	*Edible Fruit*
Gloss:	il frutto del limone
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<limone_2>, <frutto>)
Agentive:	<Nil>
Constitutive:	*produced_by* (<limone_2>, <limone_1>:[Plant]) *has_as_colour* (<limone_2>, <giallo>:[Colour])
Telic:	*object_of_activity* (<limone_2>, <mangiare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Fuit][Plant]**

Micro-organism

Linguistic tests:	
Examples:	*bacterium, virus, staphylococcus, plancton*
Comments:	Micro-organisms, typically visible with the microscope, are included here.

Template

Usem:	1
BC number:	<Nil>
Template_Type:	**[Micro-organism]**
Template_Supertype:	**[Living_entity]**
Domain:	*Biology*
Semantic Class:	*Microorganism*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <micro-organism> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<cellula_1> //cell_2//
BC number:	*416*
Template_Type:	**[Micro-organism]**
Template_Supertype:	**[Living_entity]**
Domain:	*Biology*
Semantic Class:	*Microorganism*
Gloss:	la piu' piccola unita' di sostanza vivente
Formal:	*isa* (<cellula_1>, <microrganismo>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Substance

Linguistic tests:	They are typically mass terms
Examples:	*Substance, matter, stuff, etc.*
Comments:	They refer to unshaped entities, i.e. natural substances, chemical substances, etc.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Substance]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*Chemistry, Geology, Mineralogy, Science, General*
Semantic Class:	*Substance*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <substance> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*made_of* (1, <Usem>) //optional// *state* = {solid, liquid, gas} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<materia_2> //substance_1//
BC number:	*252*
Template_Type:	**[Substance]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*General*
Semantic Class:	*Substance*
Gloss:	sostanza di cui sono fatti i corpi
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<materia_2>, <sostanza>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocate* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<sostanza_1> //substance_1//
BC number:	*252*
Template_Type:	**[Substance]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*General*

Semantic Class:	*Substance*
Gloss:	la materia, in quanto insieme di molecole di cui sono costituiti i corpi
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<sostanza_1>, <entita'_1>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<droga_2> //drug_1//
BC number:	*255*
Template_Type:	**[Substance]**
Template_Supertype:	**[Concrete_entity]**
Domain:	*Chemistry*
Semantic Class:	*Substance*
Gloss:	sostanza di origine naturale o sintetica con azione terapeutica o con proprieta' stupefacenti , allucinogene o eccitanti
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<droga_2>, <sostanza>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*used_for* (<droga_2>, <terapia>) *used_as* (<droga_2>, <stupefacente>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Natural substance

Linguistic tests:	They are typically mass terms
Examples:	*Uranium, silver, sweat, clay, wood, sand, marble etc.*
Comments:	They refer to natural substances, chemical sustances, etc., and to substances produced by natural entities. PLANT / SUBSTANCE: x is plant or part of plant => substance obtained from x (e.g. *the oak in the garden => the table is made of oak*). SUBSTANCE / COLOUR: x is a substance with a typical colour, e.g. *turquoise*. The use of natural substances is encoded in the telic role.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Natural_substance]**
Template_Supertype:	**[Substance]**
Domain:	*Chemistry, Geology, Mineralogy, Science, General, Physiology*

Semantic Class:	*Substance, Matter*
Gloss:	//*free*//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <substance> or <hyperonym>)
Agentive:	<Nil>

Constitutive:	*made_of* (1, <Usem>) //optional//
	state = {solid, liquid, gas} //optional//
	produced_by (1, <Usem>) //optional: for substances produced by natural entities//
	has_as_colour (1, <Usem>) //optional//

Telic:	*object_of_the_activity* (1, <Usem>) //optional// *used_as* (1, <Usem>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Plant] [Substance]** **[Colour] [Substance]**

Examples

Usem:	<argento_1> //silver//
BC number:	<Nil>
Template_Type:	**[Natural_substance]**
Template_Supertype:	**[Substance]**
Domain:	*Chemistry*
Semantic Class:	*Substance, Matter*
Gloss:	Elemento chimico di simbolo Ag
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<argento_1>, <sostanza>: [Substance])
Agentive:	<Nil>
Constitutive:	*state* = {solid} *has_as_colour* (<argento_1>, < argento_2>)
Telic:	*used_as* (<argento_1>, <materiale>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Colour] [Substance]**

Usem:	<acqua_3> //water_2//
BC number:	*108*
Template_Type:	**[Natural_substance]**
Template_Supertype:	**[Substance]**
Domain:	*Chemistry*
Semantic Class:	*Substance*
Gloss:	Liquido composto di idrogeno e ossigeno
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<acqua_3>, <sostanza>: [Substance])
Agentive:	<Nil>
Constitutive:	*made_of* (<acqua_3>, <ossigeno>: [Substance]) *made_of* (<acqua_3>, <idrogeno>: [Substance]) *state* = {liquid}
Telic:	*object_of_the_activity* (<acqua>, <bere>)
Synonymy:	<Nil>

Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<sudore> //sweat//
BC number:	<Nil>
Template_Type:	**[Natural_substance]**
Template_Supertype:	**[Substance]**
Domain:	*Physiology*
Semantic Class:	*Substance, Matter*
Gloss:	Sostanza liquida emessa dalla pelle
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<sudore>, <sostanza>: [Substance])
Agentive:	<Nil>
Constitutive:	*state* = {liquid} *produced_by* (<sudore>, <ghiandola>: [Part])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<argilla> //clay//
BC number:	<Nil>
Template_Type:	**[Natural_substance]**
Template_Supertype:	**[Substance]**
Domain:	*General*
Semantic Class:	*Substance, Matter*
Gloss:	roccia sedimentaria usata per fabbricare mattoni e vasi
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<argilla>, <sostanza>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*used_as* (<argilla>, <materiale>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<cotone_1> //cotton//
BC number:	<Nil>
Template_Type:	**[Natural_substance]**
Template_Supertype:	**[Substance]**
Domain:	*General*
Semantic Class:	*Substance, Matter*
Gloss:	Tipo di fibra vegetale
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<cotone_1>, <fibra>: [Substance])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*used_as* (<cotone_1>, <materiale>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)

Complex:	**[Plant] [Substance]**

Usem:	<turchese_1> //turquoise//
BC number:	<Nil>
Template_Type:	**[Natural_substance]**
Template_Supertype:	**[Substance]**
Domain:	*Mineralogy*
Semantic Class:	*Substance, Matter*
Gloss:	pietra dura opaca di colore azzurro intenso tendente al verde
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	i*sa* (<turchese_1>, <pietra>)
Agentive:	<Nil>
Constitutive:	*state* = {solid} *has_as_colour* (<turchese_1>, <turchese_2>)
Telic:	*used_as* (<turchese_1>, <materiale>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[Colour] [Substance]**

Substance food

Linguistic tests:	
Examples:	*honey, lamb, chicken, meat, etc*.
Comments:	This template is meant for the encoding of natural substances used as food, e.g.: honey, meat.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Substance_food]**
Unification_path:	**[Substance | Food$_{Telic}$]**
Domain:	*general*
Semantic Class:	*Substance*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <substance> or <Hyperonym>)
Agentive:	<Nil>
Constitutive:	*produced_by* (1, <Usem>) //optional//
Telic:	*Object_of_the_activity* (1, <eat>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]**

Examples

Usem:	<agnello_2> //lamb//
BC number:	<Nil>
Template_Type:	**[Substance_food]**
Unification_path:	**[Substance | Food$_{Telic}$]**
Domain:	*general*
Semantic Class:	*Substance*
Gloss:	la carne dell'agnello macellato
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<agnello_2>, <carne>: [Substance])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*Object of the activity* (<agnello_2>, <mangiare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Animal] [Food]**

Usem:	<miele> //honey//
BC number:	<Nil>
Template_Type:	**[Substance_food]**
Unification_path:	**[Substance | Food$_{Telic}$]**
Domain:	*general*
Semantic Class:	*Substance*
Gloss:	sostanza molto dolce, di color biondo, prodotta dalle api
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<miele>, <sostanza>)
Agentive:	<Nil>
Constitutive:	*produced by* (<miele>, <ape>)
Telic:	*Object of the activity* (<miele>, <mangiare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Drink

Linguistic tests:	John drinks X.
Examples:	*Drink, beverage, etc.*
Comments:	The elements of this class are substances that are used for drinking. This class is a unified type, i.e. it corresponds to a simple type plus telic information.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Drink]**
Unification_Path:	**[Substance | Telic]**
Domain:	*Food, Drink*
Semantic Class:	*Edible Substance*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <drink> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*object of the activity* (1, <drink>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<bibita> //drink_1//
BC number:	*437*
Template_Type:	**[Drink]**
Unification_Path:	**[Substance | Telic]**
Domain:	*Food, Drink*
Semantic Class:	*Edible Substance*
Gloss:	bevanda dissetante analcolica
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<bibita>, <bevanda>: [Drink])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*object of the activity* (<bibita>, <bere>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Artifactual drink

Linguistic tests:	
Examples:	*Cocktail, wine, beer, etc.*
Comments:	The elements of this class are artifactual substances that are used for drinking.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Artifactual_drink]**
Unification_Path:	**[Substance | Artifact$_{\text{Agentive}}$ |Telic]**
Domain:	*Food General*
Semantic Class:	*Substance Edible*
Gloss:	//*free*//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <drink> or <hyperonym>)
Agentive:	*created by* (1, <Usem>: [Creation])
Constitutive:	*made_of* (1, <Usem>) //optional//
Telic:	*object_of_the_activity* (1, <drink>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<vino_1> //wine_1//
BC number:	*387*
Template_Type:	**[Artifactual_drink]**
Unification_Path:	**[Substance | Artifact$_{\text{Agentive}}$ |Telic]**
Domain:	*Food*
Semantic Class:	*Substance Edible*
Gloss:	bevanda alcolica ottenuta dalla fermentazione del mosto d'uva
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<vino_1>, <bevanda>: [Drink])
Agentive:	*created by* (<vino_1>, <fermentazione>)
Constitutive:	*made_of* (<vino_1>, <uva>: [Fruit])
Telic:	*object_of_the_activity* (<vino>, <bere>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Property

Linguistic tests:	N + PPof (arg0) <-> Poss + N: The property of something / its property
Examples:	*property, characteristic, aspect, peculiarity, quality, faculty, feature, attribute, etc.*
Comments:	This template is used to encode synonyms of property.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Property]**
Template_Supertype:	**[Entity]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	//free//
Pred_Rep.:	Property_of (<arg0>) //or// Lex_Pred (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Entity] arg1: optional = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <attribute> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<caratteristica_2> //property_2//
BC number:	*319*
Template_Type:	**[Property]**
Template_Supertype:	**[Entity]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	qualita' tipica
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<caratteristica_2>, <proprieta'>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<peculiarita'_1> //property_2//
BC number:	*319*

Template_Type:	**[Property]**
Template_Supertype:	**[Entity]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	qualita' particolare, tratto caratteristico
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<peculiarita'_1>, <proprieta'>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<facolta'_1> //ability_1//
BC number:	*403*
Template_Type:	**[Property]**
Template_Supertype:	**[Entity]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	capacita', attitudine umana (la mia capacita' di intuire)
Pred_Rep.:	facolta' (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event]
Derivation:	<Nil>
Formal:	*isa* (<facolta'_1>, <proprieta'>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Quality

Linguistic tests:	N + PPof (arg0) <-> Poss + N: The beauty of Mary / her beauty
Examples:	*beauty, goodness, ugliness, courage, dirtiness, etc.*
Comments:	The items encoded in this template are mostly deadjectival nouns (*goodness, ugliness*). These nouns, when used as qualities, are uncountable. This template is also used for the encoding of general items such as *colour*, shape, etc. which can be seen as attributes of entities.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Quality]**
Template_Supertype:	**[Property]**
Domain:	*General*

Semantic Class:	*Attribute*
Gloss:	//free//
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <quality> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*connotation* = {positive, negative} //optional// *property_of* (1, <Adj_Usem>) //for deadjectival Usems only//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<bellezza_1> //beauty//
BC number:	<Nil>
Template_Type:	**[Quality]**
Template_Supertype:	**[Property]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	qualita' di cio' che e' bello
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	Nounadjective (<bellezza>, <bello>)
Formal:	*isa* (<bellezza_1>, <qualita'>)
Agentive:	<Nil>
Constitutive:	*connotation* = {positive} *property_of* (<bellezza_1>, <bello>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<sicurezza> //safety//
BC number:	<Nil>
Template_Type:	**[Quality]**
Template_Supertype:	**[Property]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	qualita' di cio' che e' sicuro
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	Nounadjective (<sicurezza>, <sicuro>)
Formal:	*isa* (<sicurezza >, <qualita'>)
Agentive:	<Nil>
Constitutive:	*connotation* = {positive} *property_of* (<sicurezza >, <sicuro>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Psychological property

Linguistic tests:	
Examples:	*faculty, intelligence, courage, confidence, attention, care, intuition, reason, thought, cynism, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Psych_property]**
Template_Supertype:	**[Property]**
Domain:	*General*
Semantic Class:	*Psychological_feature*
Gloss:	//free//
Pred_Rep.:	Property_of (<arg0>) //or// Lex_Pred (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1: optional = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <property> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*concerns* (1, < Usem >) //optional//
Telic:	*indirect_telic* (1, <Usem>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<facolta'_1> //ability_1//
BC number:	*403*
Template_Type:	**[Psych_property]**
Template_Supertype:	**[Property]**
Domain:	*General*
Semantic Class:	*Psychological_feature*
Gloss:	capacita', attitudine umana (la mia capacita' di intuire)
Pred_Rep.:	facolta' (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<facolta'_1>, <proprieta'>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<sicurezza_2> //confidence//
BC number:	<Nil>

Template_Type:	**[Psych_property]**
Template_Supertype:	**[Property]**
Domain:	*General*
Semantic Class:	*Psychological_feature*
Gloss:	qualita' di chi e' sicuro di se', delle proprie azioni
Pred_Rep.:	sicurezza (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1: optional = [Entity]
Derivation:	Nounadjective (<sicurezza>, <sicuro>)
Formal:	*isa* (<sicurezza_2>, <proprieta'>)
Agentive:	<Nil>
Constitutive:	*concerns* (<sicurezza_2>, <personalita'>) *concerns* (<sicurezza_2>, <comportamento>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<pensiero_1> //thought_2//
BC number:	*346*
Template_Type:	**[Psych_property]**
Template_Supertype:	**[Property]**
Domain:	*General*
Semantic Class:	*Psychological_feature*
Gloss:	la facolta' del pensare
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Human]
Derivation:	Stateverb (<pensiero> <pensare>)
Formal:	*isa* (<pensiero_1>, <facolta'>)
Agentive:	<Nil>
Constitutive:	*concerns* (<pensiero _1>, <mente>)
Telic:	*indirect_telic* (<pensiero _1>, <pensare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<premura_1> //tending_1//
BC number:	*156*
Template_Type:	**[Behaviour]**
Template_Supertype:	**[Process]**
Domain:	*General Psychology*
Semantic Class	*Psychological_feature*
Gloss:	cura, sollecitudine nei confronti di qualcuno o di qualcosa
Pred_Rep.:	premura (<arg0>, <arg1>)
Selectional Restr.:	arg0: optional = [Human] [Animal] arg1: optional = [Event] [Entity]
Derivation:	<Nil>
Formal:	*isa* (<premura_1>, <comportamento>)
Agentive:	<Nil>
Constitutive:	*connotation* = {positive}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Physical property

Linguistic tests:	N + PPof (arg0) <-> Poss + N: The colour of something / its colour
Examples:	*colour, shape, measurement, magnitude, dimension, value, lenght, size, weight, temperature, speed*, etc.
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Physical_property]**
Template_Supertype:	**[Property]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	//free//
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <attribute> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*property_of* (1, <Adj_Usem>) //for deadjectival Usems only// *measured_by* (1, <Usem> [Unit_of_measurement]) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<forma_1> //shape_2//
BC number:	*206*
Template_Type:	**[Physical_property]**
Template_Supertype:	**[Property]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	aspetto esteriore di qualcosa
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<forma_1>, <proprieta'>)
Agentive:	<Nil>
Constitutive:	<Nil>
Synonymy:	<Nil>
Telic:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<colore_2> //colouring_1//
BC number:	*317*
Template_Type:	**[Physical_property]**

Template_Supertype:	**[Property]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	qualita' dei corpi per cui essi riflettono in vario modo la luce
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<colore_2>, <proprieta'>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<misura_1> //measurement_1//
BC number:	*372*
Template_Type:	**[Physical_property]**
Template_Supertype:	**[Property]**
Domain:	*General, Mathematics*
Semantic Class:	*Attribute*
Gloss:	l'insieme delle dimensioni di un oggetto
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<misura_1>, <proprieta'>)
Agentive:	<Nil>
Constitutive:	*measured_by* (<misura_1>, <metro>: [Unit_of_measurement])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<dimensione_1> //measurement_1//
BC number:	*372*
Template_Type:	**[Physical_property]**
Template_Supertype:	**[Property]**
Domain:	*General, Mathematics*
Semantic Class:	*Attribute*
Gloss:	ciascuna delle misure che nello spazio determinano l'estensione di un corpo (lunghezza, larghezza, altezza)
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<dimensione_1>, <misura>)
Agentive:	<Nil>
Constitutive:	*measured_by* (<dimensione_1>, <metro>: [Unit_of_measurement])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<lunghezza_1> //length//
BC number:	<Nil>
Template_Type:	**[Physical_property]**
Template_Supertype:	**[Property]**

Domain:	*General, Mathematics*
Semantic Class:	*Attribute*
Gloss:	quella delle tre dimensioni di un corpo che si sviluppa maggiormente in senso orizzontale; estensione di un segmento; la misura di tale dimensione
Pred_Rep.:	Property_of (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	Nounadjective (<lunghezza>, <lungo>)
Formal:	*isa* (<lunghezza_1>, <dimensione>)
Agentive:	<Nil>
Constitutive:	*property_of* (<lunghezza_1>, <lungo>) *measured_by* (<lunghezza_1>, <metro>: [Unit_of_measurement])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Physical power

Linguistic tests:	
Examples:	*smell, taste, hearing, sight, touch, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Physical_power]**
Template_Supertype:	**[Physical_property]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <faculty> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*concerns* (1, < Usem >) //optional//
Telic:	*indirect_telic* (1, <Usem>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<senso_1> //sentiency_1//
BC number:	*270*
Template_Type:	**[Physical_power]**
Template_Supertype:	**[Physical_property]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	facolta' propria degli organismi animali di avvertire l'azione prodotta da stimoli

	esterni od interni
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<senso_1>, <facolta'>)
Agentive:	<Nil>
Constitutive:	*concerns* (<senso_1>, <organo_sensoriale>)
Telic:	*indirect_telic* (<senso_1>, <sentire_1>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<gusto_1> //taste//
BC number:	<Nil>
Template_Type:	**[Physical_power]**
Template_Supertype:	**[Physical_property]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	senso che permette di percepire e distinguere i sapori
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<gusto_1>, <senso_1>)
Agentive:	<Nil>
Constitutive:	*concerns* (<gusto _1>, <sapore>)
Telic:	*indirect_telic* (<gusto _1>, <sentire_1>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Color

Linguistic tests:	
Examples:	*Red, green,etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Color]**
Template_Supertype:	**[Physical_property]**
Domain:	*General*
Semantic Class:	*Color*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <color> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	scalar= {yes}
Telic:	<Nil>

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Colour] [Substance]** **[Colour] [Flower]**

Examples

Usem:	<rosso> //red//
BC number:	<Nil>
Template_Type:	**[Color]**
Template_Supertype:	**[Physical_property]**
Domain:	*General*
Semantic Class:	*Color*
Gloss:	il colore rosso
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<rosso>, <colore_2>)
Agentive:	<Nil>
Constitutive:	scalar= {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Shape

Linguistic tests:	
Examples:	*rectangle, triangle, hexagon, solid,* etc.
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Shape]**
Template_Supertype:	**[Physical_property]**
Domain:	*General, Geometry*
Semantic Class:	*Form*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <shape> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	dimension={1,2,3, undespecified} scalar={no} *has_as_part* (1, <Usem>) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)

Complex:	<Nil>

Examples

Usem:	<figura> //figure_6//
BC number:	*261*
Template_Type:	**[Shape]**
Template_Supertype:	**[Physical_property]**
Domain:	*Geometry*
Semantic Class:	*Form*
Gloss:	ente geometrico formato da un insieme di punti , di linee o di superfici
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<figura>, <entita'>)
Agentive:	<Nil>
Constitutive:	dimension={underspecified} scalar= {no}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<cilindro_1> // cylinder//
BC number:	<Nil>
Template_Type:	**[Shape]**
Template_Supertype:	**[Physical_property]**
Domain:	*Geometry*
Semantic Class:	*Form*
Gloss:	solido generato da un rettangolo che ruota intorno a uno dei suoi lati
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<cilindro_1>, <solido>)
Agentive:	<Nil>
Constitutive:	dimension={3} scalar= {no}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<rettangolo_1> //rectangle//
BC number:	<Nil>
Template_Type:	**[Shape]**
Template_Supertype:	**[Physical_property]**
Domain:	*Geometry*
Semantic Class:	*Form*
Gloss:	ogni figura geometrica che ha uno o piu' angoli retti
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<rettangolo _1>, <figura>)
Agentive:	<Nil>

Constitutive:	dimension={2} scalar= {no} *has_as_part* (<rettangolo _1>, <lato>) *has_as_part* (<rettangolo _1>, <angolo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Social property

Linguistic tests:	
Examples:	*power, authority, right, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Social_Property]**
Unification_path:	**[Property | Agentive]**
Domain:	*General*
Semantic Class:	*Attribute*
Gloss:	//free//
Pred_Rep.:	Lex_Pred (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event] //John's power to do s.thing// or [Human] //John's authority over s.one//
Derivation:	<Derivational relation>
Formal:	*isa* (1, <property> or <hyperonym>)
Agentive:	*source* (1, <society>)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<facolta' _2> //power//
BC number:	<Nil>
Template_Type:	**[Social_Property]**
Unification_path:	**[Property | Agentive]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	autorita', potere, diritto (facolta' di fare q.cosa)
Pred_Rep.:	facolta' (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1= [Event]
Derivation:	<Nil>

Formal:	*isa* (<facolta'_2>, < proprieta'>)
Agentive:	*source* (<facolta'_2>, <societa'>)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<potere_2> //powerfulness_1//
BC number:	*167*
Template_Type:	**[Social_Property]**
Unification_path:	**[Property | Agentive]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	autorita', diritto a compiere determinati atti (potere di fare q.cosa)
Pred_Rep.:	potere (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1= [Event]
Derivation:	Stateverb (<potere> <potere>)
Formal:	*isa* (<potere_2>, <proprieta'>)
Agentive:	*source* (<potere_2>, <societa'>)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<potere_3> //power//
BC number:	<Nil>
Template_Type:	**[Social_Property]**
Unification_path:	**[Property | Agentive]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	capacita' di influire sulla volonta', sulle azioni di qlcu.
Pred_Rep.:	potere (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1= [Human]
Derivation:	Stateverb (<potere> <potere>)
Formal:	*isa* (<potere_3>, <capacita'>)
Agentive:	*source* (<potere_3>, <societa'>)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Abstract entity

Linguistic tests:	
Examples:	*matter, topic*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Abstract_Entity]**
Template_Supertype:	**[Entity]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <entity> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<cosa_3> //thing//
BC number:	<Nil>
Template_Type:	**[Abstract_Entity]**
Template_Supertype:	**[Entity]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	fatto, avvenimento, situazione
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<cosa_3>, <entita'>:[Entity])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Domain

Linguistic tests:	
Examples:	*discipline, field, medecine, physics, breeding, journalism, trade, agriculture, research, teaching, etc.*

Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Domain]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*Science, Health_and_Medecine, Livestock_farming, etc.*
Semantic Class	*Occupation*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <field> or <hyperonym>)
Agentive:	<Nil>

Constitutive:	*concerns* (1, <Usem>) //optional//
	is_a_part_of (1, <Usem>) //optional//
	has_as_part (1, <Usem>) //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Domain] [Purpose_act]**

Examples

Usem:	<disciplina_1> //scientific discipline_1 //
BC number:	*351*
Template_Type:	**[Domain]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*Science*
Semantic Class:	*Occupation*
Gloss:	materia di studio e di insegnamento
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<disciplina_1>, <materia>)
Agentive:	<Nil>
Constitutive:	*concerns* (<disciplina_1>, <studio>:[Activity]) *concerns* (<disciplina_1>, <insegnamento>: [Activity])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<scienza_1> //scientific discipline_1//
BC number:	*351*
Template_Type:	**[Domain]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*Science*
Semantic Class:	*Occupation*
Gloss:	insieme di conoscenze avente un oggetto e un metodo determinati e

	riconosciuti, e fondato su relazioni oggettive verificabili
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<scienza _1>, <conoscenza>)
Agentive:	<Nil>
Constitutive:	*has_as_part* (<scienza _1>, <oggetto>) *has_as_part* (<scienza _1>, <metodo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<biologia_1> //life science_1 //
BC number:	*78*
Template_Type:	**[Domain]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*Science*
Semantic Class:	*Occupation*
Gloss:	scienza che studia gli organismi viventi e i fenomeni, i processi che in essi avvengono
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<biologia_1>, <scienza_1>: [Domain])
Agentive:	<Nil>
Constitutive:	*concerns* (<biologia_1>, <organismo>: [Living_entity])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<pediatria> //pediatrics//
BC number:	<Nil>
Template_Type:	**[Domain]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*Health_and_Medecine*
Semantic Class:	*Occupation*
Gloss:	branca della medicina che studia le malattie del bambino
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<pediatria>, <scienza_1>: [Domain])
Agentive:	<Nil>
Constitutive:	*concerns* (<pediatria>, <bambino>: [Human]) *is_a_part_of* (<pediatria>, <medicina>: [Domain])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<fisica_1> //physics_1//
BC number:	*292*
Template_Type:	**[Domain]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*Science*

Semantic Class:	*Occupation*
Gloss:	scienza che studia i fenomeni naturali
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<fisica_1>, <scienza_1>: [Domain])
Agentive:	<Nil>
Constitutive:	*concerns* (<fisica_1>, <fenomeno_naturale>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<allevamento_1> //breeding//
BC number:	<Nil>
Template_Type:	**[Domain]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*General, Livestock_farming*
Semantic Class:	*Occupation*
Gloss:	insieme delle pratiche con cui si allevano specie animali
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<allevamento_1>, <settore_di_attivita'>)
Agentive:	<Nil>
Constitutive:	*concerns* (<allevamento_1>, <bestiame>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Domain] [Purpose_act]**

Time

Linguistic tests:	Something happened in / on / during X.
Examples:	*Jurassic, youth, Spring, Renaissance, Sunday, instant, etc.*
Comments:	This template allows to encode all nouns referring to temporal expressions: time, point of time, periods of time, or parts of processes or events (e.g. youth); The feature '*iterative* = yes' has been used to indicate those periods of time which are cyclic, e.g.: *Spring*, *Monday* vs. *Jurassic*. The feature *'punctual* = yes' has been used to indicate points of time, i.e: instant.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Time]**
TemplateSupetype:	**[Abstract_entity]**
Domain:	*General*
Semantic Class:	*Time_period, Period, Month, Day*
Gloss:	*//free//*

Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <period> or <hyperonym>)
Agentive:	<Nil>

Constitutive:	*is_a_part_of* (1, <Usem>: [Time]) //optional//
	has_as_part (1, <Usem>: [Time]) //optional//
	iterative = {yes, no}
	successor_of (1, <Usem>: [Time]) //optional//
	punctual = {yes, no} //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<epoca_2> //time period_1//
BC number:	*26*
Template_Type:	**[Time]**
TemplateSupetype:	**[Abstract_entity]**
Domain:	*General*
Semantic Class:	*Time_period, Period*
Gloss:	tempo, momento, periodo; momento storico o geologico caratterizzato da grandi avvenimenti
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<epoca_1>, <periodo>)
Agentive:	<Nil>
Constitutive:	*iterative* = {no}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<giorno_2> //daytime_1//
BC number:	*37*
Template_Type:	**[Time]**
TemplateSupetype:	**[Abstract_entity]**
Domain:	*General*
Semantic Class:	*Time_period, Period, Day*
Gloss:	il periodo di luce in cui il Sole è sopra l'orizzonte (opposto a notte)
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<giorno_2>, <periodo>)
Agentive:	<Nil>
Constitutive:	*has_as_part* (<giorno_2>, <ora>: [Unit_of_measurement]) *iterative* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<stagione_1> //season//
BC number:	<Nil>
Template_Type:	**[Time]**
TemplateSupetype:	**[Abstract_entity]**
Domain:	*General*
Semantic Class:	*Time_period, Period*
Gloss:	ciascuno dei quattro periodi in cui si suddivide l'anno solare
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<stagione_1>, <periodo>)
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<stagione_1>, <anno_1>: [Unit_of_measurement]) *iterative* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<primavera_1> //Spring//
BC number:	<Nil>
Template_Type:	**[Time]**
TemplateSupetype:	**[Abstract_entity]**
Domain:	*General*
Semantic Class:	*Time_period, Period*
Gloss:	stagione intermedia fra l'inverno e l'estate
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<primavera_1>, <stagione_1>)
Agentive:	<Nil>
Constitutive:	*is_a_part_of* (<primavera_1>, <anno_1>: [Unit_of_measurement]) *iterative* = {yes} *successor_of* (<primavera_1>, <inverno>: [Time])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<istante_1> //second_4//
BC number:	*112*
Template_Type:	**[Time]**
TemplateSupetype:	**[Abstract_entity]**
Domain:	*General*
Semantic Class:	*Time_period*
Gloss:	momento brevissimo, attimo
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<istante_1>, <momento>)
Agentive:	<Nil>
Constitutive:	*punctual* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Moral standards

Linguistic tests:	
Examples:	*Right, good, perfection, charity, equality, fraternity, freedom, etc.*
Comments:	This template encodes moral principles which affect people's attitudes and behaviour

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Moral_standard]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <standard> or <hyperonym>)
Agentive:	<Nil>

Constitutive:	*connotation* = {positive, negative} //optional//
	concerns (1, <*society*>: [Human_group]) //optional//
	concerns (1, <individual>: [Human]) //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<diritto_1> //right_1//
BC number:	*162*
Template_Type:	**[Moral_standard]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	cio' che e' permesso in una collettivita' umana in conformita' a regole morali, sociali
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<diritto_1>, <valore>)
Agentive:	<Nil>
Constitutive:	*connotation* = {positive} *concerns* (<diritto_1>, <societa'>) *concerns* (<diritto_1>, <individuo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<liberta'_1> //freedom//
BC number:	<Nil>
Template_Type:	**[Moral_standard]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	diritto di esprimere qualunque opinione politica o religiosa e di agire secondo la propria convinzione e volonta' entro i limiti riconosciuti validi dalla società stessa
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<liberta'_1>, <ideale>)
Agentive:	<Nil>
Constitutive:	*connotation* = {positive} *concerns* (<liberta'_1>, <societa'>) *concerns* (<liberta'_1>, <individuo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<uguaglianza_3> //equality//
BC number:	<Nil>
Template_Type:	**[Moral_standard]**
Template_Supertype:	**[Abstract_entity]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	principio etico-politico secondo il quale tutti gli uomini hanno la stessa dignita' umana e sociale e gli stessi diritti
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<uguaglianza_3>, <principio>)
Agentive:	<Nil>
Constitutive:	*connotation* = {positive} *concerns* (<uguaglianza_3>, <societa'>) *concerns* (<uguaglianza_3>, <individuo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Cognitive fact

Linguistic tests:	
Examples:	*knowledge, thought, theory, notion, interpretation, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Cognitive_fact]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General, Psychology*
Semantic Class:	*Cognitive_fact*
Gloss:	//free//
Pred_Rep.:	Lex_pred (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] or [Eventuality]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Cognitive_fact] or <hyperonym>)
Agentive:	*result_of* (1, <Usem>: [Mental_process])
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<conoscenza_2> //knowledge_1//
BC number:	*411*
Template_Type:	**[Cognitive_fact]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General, Psychology*
Semantic Class:	*Cognitive_fact*
Gloss:	la cosa conosciuta; cognizione, nozione
Pred_Rep.:	conoscenza (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] or [Eventuality]
Derivation:	Stateverb (<conoscenza>, <conoscere>)
Formal:	*isa* (<conoscenza_2>, **<**fatto_cognitivo>)
Agentive:	*result_of* (<conoscenza_2>, <conoscere>: [Mental_state])
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<idea_1> //thought_1//
BC number:	*165*
Template_Type:	**[Cognitive_fact]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General, Psychology*
Semantic Class:	*Cognitive_fact*
Gloss:	qualsiasi rappresentazione mentale, prodotto dell'attivita' del pensiero o dell'immaginazione
Pred_Rep.:	idea (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] or [Eventuality]
Derivation:	<Nil>
Formal:	*isa* (<idea_1>, <rappresentazione_mentale>)
Agentive:	*result_of* (<idea_1>, <pensare>: [Mental_process])
Constitutive:	<Nil>
Telic:	<Nil>

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<pensiero_2> //thought_1//
BC number:	*165*
Template_Type:	**[Cognitive_fact]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General, Psychology*
Semantic Class:	*Cognitive_fact*
Gloss:	cio' che si pensa; il contenuto, l'oggetto del pensiero
Pred_Rep.:	pensiero (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] or [Eventuality]
Derivation:	Processverb (<pensiero>, <pensare>)
Formal:	*isa* (<pensiero_2>, **<**fatto_cognitivo>)
Agentive:	*result_of* (<pensiero_2>, <pensare>: [Mental_process])
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<teoria_1> //theory_1//
BC number:	*396*
Template_Type:	**[Cognitive_fact]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General, Psychology*
Semantic Class:	*Cognitive_fact*
Gloss:	insieme di ipotesi volto a spiegare un fenomeno
Pred_Rep.:	teoria (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] or [Eventuality]
Derivation:	<Nil>
Formal:	*isa* (<teoria_1>, **<**fatto_cognitivo>)
Agentive:	*result_of* (<teoria_1>, <teorizzare>: [Mental_process])
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<nozione_1> //notion//
BC number:	<Nil>
Template_Type:	**[Cognitive_fact]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General, Psychology*
Semantic Class:	*Cognitive_fact*
Gloss:	conoscenza elementare, intuitiva di qualcosa
Pred_Rep.:	nozione (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<nozione_1>, <conoscenza>:[Cognitive_fact])
Agentive:	*result_of* (<nozione_1>, <conoscere>: [Mental_state])
Constitutive:	<Nil>

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Movement of thought

Linguistic tests:	
Examples:	*Communism, Marxism, Socialism, Romanticism, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Movement_of_thought]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General, Politics_and_government, Philosophy, Economics, Arts*
Semantic Class:	*System_of_thought*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Derivational relation>
Formal:	*isa* (1, <movement> or <hyperonym>)
Agentive:	*agentive* (1, <Usem>: [Human])
Constitutive:	*concerns* (1, <Usem>) //optional// *has_as_member* (1, <Usem>) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<socialismo> //socialism//
BC number:	<Nil>
Template_Type:	**[Movement_of_thought]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General, Politics_and_government, Philosophy, Economics*
Semantic Class:	*System_of_thought*
Gloss:	movimento e sistema politico che si propone come fine la realizzazione della giustizia sociale
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	Nounadjective (<socialismo>, <sociale>)
Formal:	*isa* (<socialismo>, <movimento>: [Movement_of_thought])
Agentive:	*agentive* (<socialismo>, <Usem>: [Human])
Constitutive:	*concerns* (<socialismo>, <economia>) *concerns* (<socialismo>, <filosofia>) *concerns* (<socialismo>, <politica>) *has_as_member* (<socialismo>, <socialista>: [Ideo])
Telic:	<Nil>

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<marxismo> //marxism//
BC number:	<Nil>
Template_Type:	**[Movement_of_thought]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General, Politics_and_government, Philosophy, Economics*
Semantic Class:	*System_of_thought*
Gloss:	Complesso delle dottrine economiche, politiche, filosofiche di Marx e Engels
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	NounPropernoun (<Marxismo>, <Marx>)
Formal:	*isa* (<marxismo>, <movimento>: [Movement_of_thought])
Agentive:	*agentive* (<marxismo>, <Marx>: [Human])
Constitutive:	*concerns* (<marxismo>, <politica>) *concerns* (<marxismo>, <economia>) *concerns* (<marxismo>, <filosofia>) *has_as_member* (<marxismo>, <marxista>: [Ideo])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Institution

Linguistic tests:	X has been founded in…(date) They have instituted X in …(date)
Examples:	*Bank, museum, school, church, party, etc.*
Comments:	This class contains names referring to human institutions and organizations. They are associated with some creative act and sets of procedures and norms that regulate their activities. They are also always related with a function.
Polysemic classes:	The BUILDING / INSTITUTION polysemy is explained by the relation *is_in*: *The school burnt. => The school has been founded in 1815.*

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Institution]**
Unification_Path:	**[Abstract_entity | Agentive| Telic]**
Domain:	*General, Education, Business, Religion*
Semantic Class:	*Agency*
Gloss:	*//free//*
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <institution> or <hyperonym>)

Agentive:	*result_of* (1, <found>: [Creation])
Constitutive:	*is_in* (1, <Usem>: [Building]) //optional//
Telic:	*telic* (1, <Usem>: [Activity])
Synonymy:	<Nil>
Collocates:	*Collocates* (1, <Usem1>,…,<Usemn>)
Complex:	**[Institution] [Building]** **[Institution] [Human_Group]**

Examples

Usem:	<scuola_2> //school_1//
BC number:	*137*
Template_Type:	**[Institution]**
Unification_Path:	**[Abstract_entity | Agentive| Telic]**
Domain:	*Education*
Semantic Class:	*Agency*
Gloss:	Istituzione educativa
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<scuola_2>, <istituzione>: [Institution])
Agentive:	*result_of* (<scuola_2>, <fondare>: [Creation])
Constitutive:	*is_in* (<scuola_2>, <scuola_1>: [Building])
Telic:	*telic* (<scuola_2>, <insegnamento_1>: [Activity])
Synonymy:	<Nil>
Collocates:	*Collocates* (1, <Usem1>,…,<Usemn>)
Complex:	**[Institution] [Building]** **[Institution] [Human_Group]**

Usem:	<chiesa_2> //church//
BC number:	<Nil>
Template_Type:	**[Institution]**
Unification_Path:	**[Abstract_entity | Agentive| Telic]**
Domain:	*Religion*
Semantic Class:	*Agency*
Gloss:	la chiesa cristiana cattolica
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<chiesa_2>, <istituzione>: [Institution])
Agentive:	*result_of* (<chiesa_2>, <fondare>: [Creation])
Constitutive:	*is_in* (<chiesa_2>, <chiesa_3>: [Building])
Telic:	*telic* (<chiesa_2>, <Usem>: [Activity])
Synonymy:	<Nil>
Collocates:	*Collocates* (1, <Usem1>,…,<Usemn>)
Complex:	**[Institution] [Building]** **[Institution] [Human_Group]**

Usem:	<compagnia_3> //company//
BC number:	<Nil>
Template_Type:	**[Institution]**
Unification_Path:	**[Abstract_entity | Agentive| Telic]**
Domain:	*General, Business*
Semantic Class:	*Agency*
Gloss:	societa' commerciale di trasporti o di assicurazioni

Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<compagnia_3>, <societa'> : [Institution])
Agentive:	*result_of* (<compagnia_3>, <fondare>: [Creation])
Constitutive:	<Nil>
Telic:	*telic* (<compagnia_3>, <attività_economica>: [Activity])
Synonymy:	<Nil>
Collocates:	*Collocates* (1, <Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<ditta_1> //company_1//
BC number:	*99*
Template_Type:	**[Institution]**
Unification_Path:	**[Abstract_entity | Agentive| Telic]**
Domain:	*General, Business*
Semantic Class:	*Agency*
Gloss:	azienda, impresa che svolge un'attività economica
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<ditta_1>, <impresa>: [Institution])
Agentive:	*result_of* (<ditta_1>, <fondare>: [Creation])
Constitutive:	*is_in* (<ditta_1>, <ditta_2>: [Building])
Telic:	*telic* (<ditta_1>, <attività_economica>: [Activity])
Synonymy:	<Nil>
Collocates:	*Collocates* (1, <Usem1>,…,<Usemn>)
Complex:	**[Institution] [Building]**

Convention

Linguistic tests:	
Examples:	*law, tax, bill, norm, regulations, agreement, contract, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Convention]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General*
Semantic Class:	*Abstract, Administrative*
Gloss:	//free//
Pred_Rep.:	Lex_Pred (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Institution] or [Human] arg1 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <convention> or <hyperonym>)
Agentive:	*result_of* (1, <Usem>: [Process])
Constitutive:	*concerns* (1, <Usem>) //optional//

	is_in (1, <Usem>:[Semiotic_artifact]) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Convention] [Semiotic_artifact]**

Examples

Usem:	<regolamento_1> //regulation//
BC number:	<Nil>
Template_Type:	**[Convention]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General*
Semantic Class	*Abstract, Administrative*
Gloss:	complesso di norme che regolano un settore di attivita' o il funzionamento di enti od organi pubblici o privati
Pred_Rep.:	regolamento (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Institution] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<regolamento_1>, <normativa>)
Agentive:	*result_of* (<regolamento_1>, <emanare>)
Constitutive:	*has_as_part* (<regolamento_1>, <regola>: [Convention]) *is_in* (<regolamento_1>, <regolamento_2>:[Semiotic_artifact])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Conventional] [Semiotic_artifact]**

Usem:	<tassa_1> //tax//
BC number:	<Nil>
Template_Type:	**[Convention]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General*
Semantic Class:	*Abstract, Administrative*
Gloss:	tributo imposto ai cittadini per l'uso di un servizio pubblico; imposta
Pred_Rep.:	tassa (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Institution] arg1 = [Entity]
Derivation:	*DenominalNounVerb* (<tassa>, <tassare >)
Formal:	*isa* (<tassa_1>, <tributo>)
Agentive:	*result_of* (<tassa_1>, <istituire>)
Constitutive:	*concerns* (<tassa_1>, <finanza>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<gioco_6> //game (rules)//
BC number:	*number*
Template_Type:	**[Convention]**
Unification_path:	**[Abstract_entity | Agentive]**
Domain:	*General*
Semantic Class:	*Abstract*

Gloss:	le regole di un gioco considerate nel loro insieme; il sistema seguito nel giocare
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	*DenominalNounVerb* (<gioco>, <giocare>)
Formal:	*isa* (<gioco_6>, <sistema>)
Agentive:	*result_of* (<gioco_6>, <convenzione>)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<contratto_1> //contract//
BC number:	<Nil>
Template_Type:	**[Convention]**
Template_Supertype:	**[Abstract_entity | Agentive]**
Domain:	*General*
Semantic Class:	*Administrative*
Gloss:	accordo fra due o piu' parti che regola un rapporto giuridico o economico
Pred_Rep.:	contratto (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<contratto_1>, <convenzione>)
Agentive:	*result_of* (<contratto_1>, <stipulare>:[Symbolic_creation]) *result_of* (<contratto_1>, <accordo>:[Cooperative_activity])
Constitutive:	*is_in* (<contratto_1>, <contratto_2>:[Semiotic_artifact])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Convention] [Semiotic_artifact]**

Representation

Linguistic tests:	X has a meaning; X represents something
Examples:	*representation, symbol, sign, number/2 BC:139, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Representation]**
Unification_path:	**[Entity | Agentive | Telic]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <representation> or <hyperonym>)
Agentive:	*result_of* (1, <convention>: [Cooperative_activity])
Constitutive:	<Nil>
Telic:	*indirect_telic* (1, <represent>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<segno_2> //punteggiatura_2, interpunzione_1// //mark_7//
BC number:	*277*
Template_Type:	**[Representation]**
Unification_path:	**[Entity | Agentive | Telic]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	qualunque espressione grafica convenzionalemente assunta a rappresentare ed esprimere un'entita'
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<segno_2>, <rappresentazione>)
Agentive:	*result_of* (<segno_2>, <convenzione>: [Cooperative_activity])
Constitutive:	<Nil>
Telic:	*indirect_telic* (<segno_2>, <rappresentare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<simbolo_2> //punteggiatura_2, interpunzione_1// //mark_7//
BC number:	*277*
Template_Type:	**[Representation]**

Unification_path:	**[Entity | Agentive | Telic]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	espressione grafica convenzionalemente assunta a rappresentare in modo sintetico un qualsiasi ente
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<simbolo_2>, <rappresentazione>)
Agentive:	*result_of* (<simbolo_2>, <convenzione>: [Cooperative_activity])
Constitutive:	<Nil>
Telic:	*indirect_telic* (<simbolo_2>, <rappresentare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Language

Linguistic tests:	John speaks/reads X John translates from X into Y
Examples:	*Language, tongue, English, Italian, French, Latin, Breton, etc.*
Comments:	The elements of this class denote the different languages. A polysemic link holds between the language name and the name of the community using it.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Language]**
Template_Supertype:	**[Representation]**
Domain:	*General, Linguistics*
Semantic Class:	*Abstract*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <language> or <hyperonym>)
Agentive:	*result_of* (1, <convention>: [Cooperative_activity]) //optional// *result_of* (1, <Usem>: [Acquire_knoweldge]) //optional//
Constitutive:	<Nil>

Telic:	*indirect_telic* (1, <represent>)
	object_of_the_activity (1, <speak>: [Speech_act]) //optional//
	object_of_the_activity (1, <write>: [Symbolic_creation]) //optional//
	used_for (1, <communicate>: [Cooperative_activity])
	used_by (<1>, <Usem>: [Human_group] or [People])

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[People] [Language]**

Examples

Usem:	<lingua_2> //tongue_2//

BC number:	*354*
Template_Type:	**[Language]**
Template_Supertype:	**[Representation]**
Domain:	*General, Linguistics*
Semantic Class:	*Abstract*
Gloss:	sistema fonematico, grammaticale e lessicale per mezzo del quale gli appartenenti a una comunita' comunicano tra loro
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<lingua_2>, <sistema>)
Agentive:	*result_of* (<lingua_2>, <convenzione>: [Cooperative_activity]) *result_of* (<lingua_2>, <apprendimento>: [Acquire_knoweldge])
Constitutive:	<Nil>
Telic:	*indirect_telic* (<lingua_2>, <rappresentare>) *object_of_the_activity* (<lingua_2>, <parlare>: [Speech_act]) *object_of_the_activity* (<lingua_2>, <scrivere>:[Symbolic_creation]) *used_for* (<lingua_2>, <comunicare>: [Cooperative_activity]) *used_by* (<lingua_2>, <comunita'>: [Human_group]
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	<Nil>

Usem:	<italiano_2> //Italian//
BC number:	<Nil>
Template_Type:	**[Language]**
Template_Supertype:	**[Representation]**
Domain:	*General, Linguistics*
Semantic Class:	*Abstract*
Gloss:	lingua romanza parlata in Italia
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<italiano_2>, <lingua>: [Language])
Agentive:	*result_of* (<italiano_2>, <convenzione>: [Cooperative_activity]) *result_of* (<italiano_2>, <apprendimento>: [Acquire_knoweldge])
Constitutive:	<Nil>
Telic:	*indirect_telic* (<italiano_2>, <rappresentare>) *object_of_the_activity* (<italiano_2>, <parlare>: [Speech_act]) *object_of_the_activity* (<italiano_2>, <scrivere>:[Symbolic_creation]) *used_for* (<italiano_2>, <comunicare>: [Cooperative_activity]) *used_by* (<italiano_2>, <italiano_1>: [People]
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,…,<Usemn>)
Complex:	**[People] [Language]**

Sign

Linguistic tests:	
Examples:	*Word, point, comma, brackets, sentence, letter, icon, etc.*
Comments:	The elements encoded in this template are used in order to convey an information, a meaning.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Sign]**
Template_Supertype:	**[Representation]**
Domain:	*General*
Semantic Class	*Abstract, Letter*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <sign> or <hyperonym>)
Agentive:	*result_of* (1, <convention>: [Cooperative_activity]) //optional//

Constitutive:	*is_a_part_of* (1, <Usem>) //optional//
	has_as_part (1, <Usem>) //optional//
	related_to (1, <Usem>) //optional//
	successor_of (1, <Usem>) //optional//

Telic:	*indirect_telic* (1, <represent>) *used_for* (1, <Usem>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<parola_1> //word_1//
BC number:	*184*
Template_Type:	**[Sign]**
Template_Supertype:	**[Representation]**
Domain:	*General*
Semantic Class	*Abstract, Letter*
Gloss:	ciascun elemento di una lingua che esprime un significato compiuto
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<parola_1>, <segno>)
Agentive:	*result_of* (<parola_1>, <convenzione>: [Cooperative_activity])
Constitutive:	*is_a_part_of* (<parola_1>, <frase>) *has_as_part* (<parola_1>, <significante>) *has_as_part* (<parola_1>, <significato>) *related_to* (<parola_1>, <lingua>:[Language])
Telic:	*indirect_telic* (<parola_1>, <rappresentare>) *used_for* (<parola_1>, <comunicare>: [Cooperative_activity])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<lettera_1> //graphic symbol_1//
BC number:	*362*
Template_Type:	**[Sign]**
Template_Supertype:	**[Representation]**
Domain:	*General*
Semantic Class	*Letter*

Gloss:	ciascuno dei segni dell'alfabeto
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<lettera_1>, <segno>)
Agentive:	*result_of* (<lettera_1>, <convenzione>: [Cooperative_activity])
Constitutive:	*is_a_part_of* (<lettera_1>, <alfabeto>) *related_to* (<lettera_1>, <lingua>)
Telic:	*indirect_telic* (<lettera_1>, <rappresentare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Information

Linguistic tests:	John read / interpreted / wrote X.
Examples:	*book, letter, document, message, etc.*
Comments:	The elements of this class denote the information contained in a support of information.

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Information]**
Template_Supertype:	**[Representation]**
Domain:	*General, Media, Law, Economics, etc.*
Semantic Class:	*Abstract*
Gloss:	//free//
Pred_Rep.:	Lex_Pred (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] or [Human_group] arg1 = [Human] or [Human_group]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>: [Information] or <hyperonym>)
Agentive:	*result_of* (1, <Usem>: [Symbolic_creation])
Constitutive:	*is_in* (1, <Usem>:[Semiotic_artifact]) //optional//
Telic:	*indirect_telic* (1, <inform>:[Give_knowledge]) *object_of_the_activity* (1, <Usem>) //optional//
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Information] [Semiotic_artifact]**

Examples

Usem:	<comunicato_1> //message_1//
BC number:	*384*
Template_Type:	**[Information]**
Template_Supertype:	**[Representation]**
Domain:	*General, Media*
Semantic Class:	*Abstract*
Glossa:	notizia d'interesse generale divulgata da un mezzo di informazione
Pred_Rep.:	comunicare (<arg0>, <arg1>)

Selectional Restr.:	arg0 = [Human] [Human_group] arg1 = [Human] [Human_group]
Derivation:	*Processverb* (<comunicato>, <comunicare>)
Formal:	*isa* (<comunicato_1>, <notizia>: [Information])
Agentive:	*result_of* (<comunicato_1>, <Usem>: [Symbolic_creation]) *result_of* (<comunicato_1>, <divulgare>:[Reporting_event])
Constitutive:	<Nil>
Telic:	*indirect_telic* (<comunicato_1>, <informare>:[Give_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<messaggio_2> //message_1//
BC number:	*384*
Template_Type:	**[Information]**
Template_Supertype:	**[Representation]**
Domain:	*General, Media*
Semantic Class:	*Abstract*
Gloss:	notizia trasmessa ad altri
Pred_Rep.:	messaggio (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] [Human_group] arg1 = [Human] [Human_group]
Derivation:	<Nil>
Formal:	*isa* (<messaggio_2>, <notizia>: [Information])
Agentive:	*result_of* (<messaggio_2>, <Usem>: [Symbolic_creation]) *result_of* (<messaggio_2>, <trasmettere>:[Reporting_event])
Constitutive:	<Nil>
Telic:	*indirect_telic* (<messaggio_2>, <informare>:[Give_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<menu_1> //menu_3//
BC number:	*177*
Template_Type:	**[Information]**
Template_Supertype:	**[Representation]**
Domain:	*General*
Semantic Class:	*Abstract*
Gloss:	lista delle vivande che viene presentata alla clientela nei ristoranti
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<menu_1>, <lista>)
Agentive:	*result_of* (<menu_1>, <redigere>: [Symbolic_creation])
Constitutive:	*is_in* (<menu_1>, <menu_2>:[Semiotic_artifact])
Telic:	*indirect_telic* (<menu_1>, <informare>:[Give_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Information] [Semiotic_artifact]**

Usem:	<libro_1> //book//
BC number:	<Nil>
Template_Type:	**[Information]**
Template_Supertype:	**[Representation]**
Domain:	*General*
Semantic Class:	*Abstract*

Gloss:	testo stampato o manoscritto contenuto in un libro
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<libro _1>, <testo>: [Information])
Agentive:	*result_of* (<libro _1>, <scrivere>: [Symbolic_creation])
Constitutive:	*is_in* (<libro _1>, < libro _2>:[Semiotic_artifact])
Telic:	*indirect_telic* (<libro _1>, <informare>:[Give_knowledge]) *indirect_telic* (<libro _1>, <narrare>:[Give_knowledge]) *object_of_the_activity* (<libro _1>, <leggere>: [Acquire_knoweldge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Information] [Semiotic_artifact]**

Number

Linguistic tests:	
Examples:	*One, second, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Number]**
Template_Supertype:	**[Representation]**
Domain:	*General, Mathematics*
Semantic Class	*Measure_unit*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <number> or <hyperonym>)
Agentive:	*result_of* (1, <convention>) //optional//
Constitutive:	*successor_of* (1, <Usem>) //for cardinal numbers// *related_to* (1, <Usem>) //for ordinal numbers//
Telic:	*indirect_telic* (1, <represent>) *used_for* (1, <count>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<due> //two//
BC number:	<Nil>
Template_Type:	**[Number]**
Template_Supertype:	**[Representation]**
Domain:	*General, Mathematics*
Semantic Class	*Measure_unit*
Gloss:	numero naturale che corrisponde a una unita' piu' uno
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>

Derivation:	<Nil>
Formal:	*isa* (<due>, <numero>)
Agentive:	*result_of* (<due>, <convenzione>)
Constitutive:	*successor_of* (<due>, <uno>)
Telic:	*indirect_telic* (<due>, <rappresentare>) *used_for* (<due>, <contare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<secondo_1> //second//
BC number:	<Nil>
Template_Type:	**[Number]**
Template_Supertype:	**[Representation]**
Domain:	*General, Mathematics*
Semantic Class	*Measure_unit*
Gloss:	chi o cio' che in una successione occupa il posto numero due
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<secondo_1>, <numero>)
Agentive:	*result_of* (<secondo_1>, <convenzione>)
Constitutive:	*related_to* (<secondo_1>, <due>)
Telic:	*indirect_telic* (<secondo_1>, <rappresentare>) *used_for* (<secondo_1>, <contare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Unit of measurement

Linguistic tests:	This quantifies / weights / lasts / costs n X Some of them can be used in the following construction: <Usem>:[Number] <Usem>:[Unit_of _measurement] Prep X , e.g.: *Two metres in height ; due metri di altezza; deux mètres de hauteur.*
Examples:	*Meter, mile, kilo, litre, degree, foot, hour, pound, year, month, day, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Unit_of_measurement]**
Template_Supertype:	**[Representation]**
Domain:	*General, Mathematics, Astronomy, Geometry, Physics*
Semantic Class	*Measure_unit*
Gloss:	//free//
Pred_Rep.:	Lex_pred (<arg>)
Selectional Restr.:	arg = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <measure_unit> or <hyperonym>)
Agentive:	*result_of* (1, <convention>: [Cooperative_activity])
Constitutive:	*has_as_part* (1, <Usem>) //optional// *is_a_part_of* (1, <Usem>) //optional//

	concerns (1, <Usem>) //optional// *quantifies* (1, <Usem>) //optional//
Telic:	*indirect_telic* (1, <measure>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<litro_1> //litre//
BC number:	<Nil>
Template_Type:	**[Unit_of_measurement]**
Template_Supertype:	**[Representation]**
Domain:	*General, Mathematics*
Semantic Class	*Measure_unit*
Gloss:	unita' di misura di capacita' e di volume per liquidi e aridi
Pred_Rep.::	litro (<arg0>)
Selectional Restr.:	arg0 = [Substance]
Derivation:	<Nil>
Formal:	*isa* (<litro_1>, <unità_di_misura>)
Agentive:	*result_of* (<litro_1>, <convenzione>: [Cooperative_activity])
Constitutive:	*has_as_part* (<litro_1>, <decilitro>) *is_a_part_of* (<litro_1>, <decalitro>) *concerns* (<litro_1>, <liquido>) *concerns* (<litro_1>, <aridi>) *quantifies* (<litro_1>, <capacita'>)
Telic:	*indirect_telic* (<litro_1>, <misurare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<grado_3> //degree//
BC number:	<Nil>
Template_Type:	**[Unit_of_measurement]**
Template_Supertype:	**[Representation]**
Domain:	*General, Geometry, Physics, Enology*
Semantic Class	*Measure_unit*
Gloss:	termine indicante varie unita' di misura; in particolare unita' di misura angolare, unita' di misura della temperatura, unita' di misura del contenuto di alcol
Pred_Rep.:	grado (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<grado_3>, <unità_di_misura>)
Agentive:	*result_of* (<grado_3>, <convenzione>: [Cooperative_activity])
Constitutive:	*quantifies* (<grado_3>, <angolo>) *quantifies* (<grado_3>, <temperatura>) *quantifies* (<grado_3>, <tasso_alcolico>)
Telic:	*indirect_telic* (<grado_3>, <misurare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<anno_1> //year_3//
BC number:	*22*

Template_Type:	**[Unit_of_measurement]**
Template_Supertype:	**[Representation]**
Domain:	*General*, *Astronomy*
Semantic Class	*Measure_unit*
Gloss:	tempo impiegato dal Sole per il suo ritorno apparente all'equinozio di primavera; periodo di dodici mesi, compreso tra un primo gennaio e il successivo, in base a cui si determinano le date
Pred_Rep.:	anno (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<anno_1>, <unità_di_misura>)
Agentive:	*result_of* (<anno_1>, <convenzione>: [Cooperative_activity])
Constitutive:	*has_as_part* (<anno_1>, <mese>: [Unit_of_measurement]) *concerns* (<anno_1>, <datazione>) *quantifies* (<anno_1>, <tempo>)
Telic:	*indirect_telic* (<anno_1>, <misurare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<giorno_1> // twenty-four hours_1//
BC number:	*36*
Template_Type:	**[Unit_of_measurement]**
Template_Supertype:	**[Representation]**
Domain:	*General*, *Astronomy*
Gloss:	periodo di tempo impiegato dalla terra a compiere una rotazione sul proprio asse
Semantic Class	*Measure_unit, Day*
Pred_Rep.:	giorno (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<giorno_1>, <unità_di_misura>)
Agentive:	*result_of* (<giorno_1>, <convenzione>: [Cooperative_activity])
Constitutive:	*has_as_part* (<giorno_1>, <ora>: [Unit_of_measurement]) *is_a_part_of* (<giorno_1>, <settimana>: [Unit_of_measurement]) *concerns* (<giorno_1>, <datazione>) *quantifies* (<giorno_1>, <tempo>)
Telic:	*indirect_telic* (<giorno_1>, <misurare>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<lira_1> //lira//
BC number:	<Nil>
Template_Type:	**[Unit_of_measurement]**
Template_Supertype:	**[Representation]**
Domain:	*General*
Semantic Class	*Measure_unit*
Gloss:	unita' monetaria italiana e di alcuni stati esteri
Pred_Rep.:	lira (<arg1>)
Selectional Restr.:	arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<lira_1>, <unità_di_misura>)
Agentive:	*result_of* (<lira_1>, <convenzione>: [Cooperative_activity])
Constitutive:	*concerns* (<lira_1>, <economia>)
Telic:	*indirect_telic* (<lira_1>, <misurare>)
Synonymy:	<Nil>

Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Event

Linguistic tests:	
Examples:	*occur, happen, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Event]**
Template_Supertype:	**[Entity]**
Domain:	*General*
Semantic Class	<Semantic class>
Gloss:	//free//
Pred_Rep.:	Lex_pred (<arg0>)
Selectional Restr.:	arg0 = [Event]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <event> or <hyperonym>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<succedere_1> //happen_1//
BC number:	*29*
Template_Type:	**[Event]**
Template_Supertype:	**[Entity]**
Domain:	*General*
Semantic Class	<Nil>
Gloss:	accadere
Pred_Rep.:	Lex_pred (<arg0>)
Selectional Restr.:	arg0 = [Event]
Derivation:	<Nil>
Formal:	*isa* (<succedere_1>, <evento>)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Phenomenon

Linguistic tests:	
Examples:	*Phenomenon, fever, storm, disease, wind, weather, light, rain, snow, hail, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Phenomenon]**
Template_Supertype:	**[Event]**
Domain:	*General, Meteorology, Medicine*
Semantic Class	*Phenomenon, Illness*
Gloss:	//free//
Pred_Rep.:	Lex_pred (<arg0>) //for predicative Usems//
Selectional Restr.:	arg0 = [entity] //for predicative Usems//
Derivation:	<Derivational relation>
Formal:	*isa* (1, <phenomenon> or <hyperonym>)
Agentive:	*caused_by* (1, <Usem>) //optional//
Constitutive:	*concerns* (1, <Usem>) //optional// *has_as_effect* (1, <Usem>) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<sintomo_1> //symptom//
BC number:	<Nil>
Template_Type:	**[Phenomenon]**
Template_Supertype:	**[Event]**
Domain:	*General, Medicine*
Semantic Class	*Illness*
Gloss:	fenomeno con cui si manifesta una malattia
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<sintomo_1>, <fenomeno>)
Agentive:	*caused_by* (<sintomo_1>, <malattia>)
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<temporale> //storm//
BC number:	<Nil>
Template_Type:	**[Phenomenon]**

Template_Supertype:	**[Event]**
Domain:	*General, Meteorology*
Semantic Class	*Phenomenon*
Gloss:	improvvisa e violente perturbazione dell'atmosfera accompagnata da lampi, tuoni e scrosci di pioggia
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<temporale>, <perturbazione>)
Agentive:	<Nil>
Constitutive:	*concerns* (<temporale>, <tempo_10>: [Phenomenon]) *has_as_effect* (<temporale>, <lampo>) *has_as_effect* (<temporale>, <tuono>) *has_as_effect* (<temporale>, <pioggia>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<vento_1> //wind_1//
BC number:	*436*
Template_Type:	**[Phenomenon]**
Template_Supertype:	**[Event]**
Domain:	*General, Meteorology*
Semantic Class	*Phenomenon*
Gloss:	spostamento di masse d'aria, dovuto a differenze di temperature e di pressione
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<vento_1>, <fenomeno>)
Agentive:	*caused_by* (<vento_1>, <perturbazione>)
Constitutive:	*concerns* (<vento_1>, <tempo_10>: [Phenomenon])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<tempo_10> //weather_2//
BC number:	*448*
Template_Type:	**[Phenomenon]**
Template_Supertype:	**[Event]**
Domain:	*General, Meteorology*
Semantic Class	*Phenomenon*
Gloss:	le condizioni meteorologiche su un certo luogo, in un determinato momento
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<tempo_10>, <fenomeno> o <condizione_meteorologica>)
Agentive:	<Nil>
Constitutive:	*concerns* (<tempo_10>, <meteorologia>: [Domain])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<febbre_1> //fever//
BC number:	<Nil>
Template_Type:	**[Phenomenon]**
Template_Supertype:	**[Event]**
Domain:	*General, Medicine*
Semantic Class	*Illness*
Gloss:	reazione di difesa dell'organismo che si manifesta nel corso di molte malattie con un innalzamento anomalo della temperatura corporea
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<febbre_1>, <sintomo>)
Agentive:	*caused_by* (<febbre_1>, <malattia>)
Constitutive:	*concerns* (<febbre_1>, <organismo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<miraggio_1> //mirage//
BC number:	<Nil>
Template_Type:	**[Phenomenon]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic Class	*Phenomenon*
Gloss:	fenomeno ottico per cui oggetti lontani possono apparire capovolti oppure librati nell'aria
Formal:	*isa* (<miraggio_1>, <fenomeno>)
Agentive:	*caused_by* (<miraggio_1>, <rifrazione>)
Constitutive:	*concerns* (<miraggio_1>, <visione>) *has_as_effect* (<miraggio_1>, <illusione_ottica>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Weather verbs

Linguistic Tests:	
Examples:	*rain, snow, hail, etc.*
Levin Class:	
Comments:	

Template

Usem:	1
BC Number:	
Template_Type:	**[Weather_verb]**
Template_Supertype:	**[Phenomenon]**
Domain:	*General*
Semantic Class:	Weather
Gloss:	//free//
Event type:	process

Pred _Rep.:	Lex_Pred (<arg0>)
Selectional Restr.:	arg0: shadow = [Phenomenon]
Derivation:	<Nil> or //Erli's Code//
Formal:	*isa* (1,<atmospheric_phenomenon >:[Phenomenon])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	<piovere_1> //rain//
BC Number:	<Nil>
Template_Type:	**[Weather_verb]**
Template_Supertype:	**[Phenomenon]**
Domain:	*General*
Semantic Class:	Weather
Gloss:	detto della pioggia, cadere giu'
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>)
Selectional Restr.:	arg0: shadow = **[Phenomenon]**
Derivation:	<Nil>
Formal:	*isa* (<piovere>,<fenomeno_atmosferico>:**[Phenomenon]**)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Disease

Linguistic tests:	
Examples:	*Flue, cold, measles, distemper, scabies, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Disease]**
Unification_path:	**[Phenomenon | Agentive]**
Domain:	*General, Medicine*
Semantic Class	*Illness, Affection*
Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <disease> or <hyperonym>)
Agentive:	*caused_by* (1, <Usem>)

Constitutive:	*concerns* (1, <Usem>) //optional//
	typical_of (1, <Usem>) //optional//
	has_as_effect (1, <Usem>) //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<rogna_1> //scabies//
BC number:	<Nil>
Template_Type:	**[Disease]**
Unification_path:	**[Phenomenon | Agentive]**
Domain:	*General, Medicine*
Semantic Class	*Illness*
Gloss:	infestazione contagiosa della cute di animali domestici, causata dalla femmina dell'acaro
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<rogna_1>, <malattia>)
Agentive:	*caused_by* (<rogna_1>, <acaro>)
Constitutive:	*typical_of* (<rogna_1>, <animale>) *concerns* (<rogna_1>, <cute>) *has_as_effect* (<rogna_1>, <prurito>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<rogna_2> //scabies//
BC number:	<Nil>
Template_Type:	**[Disease]**
Unification_path:	**[Phenomenon | Agentive]**
Domain:	*General, Botanic*
Semantic Class	*Illness*
Gloss:	malattia provocata da un fungo che intacca il tronco delle piante
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<rogna_2>, <malattia>)
Agentive:	*caused_by* (<rogna_2>, <fungo>)
Constitutive:	*typical_of* (<rogna_2>, <pianta>) *concerns* (<rogna_2>, <tronco>:[Part])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<morbillo> //measles//
BC number:	<Nil>
Template_Type:	**[Disease]**
Unification_path:	**[Phenomenon | Agentive]**

Domain:	*Medicine*
Semantic Class	*Illness*
Gloss:	malattia virale dell'infanzia caratterizzata da febbre alta, irritazione delle mucose e da un esantema a macchie piccole e rossastre
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<morbillo>, <malattia>)
Agentive:	*caused_by* (<morbillo>, <virus>)
Constitutive:	*typical_of* (<morbillo>, <bambino>) *concerns* (<morbillo>, <mucose>) *concerns* (<morbillo>, <pelle>) *has_as_effect* (<morbillo>, <esantema>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<claustrofobia> //claustrophobia//
BC number:	<Nil>
Template_Type:	**[Disease]**
Unification_path:	**[Phenomenon | Agentive]**
Domain:	*Medicine*
Semantic Class	*Affection*
Gloss:	paura patologica degli spazi chiusi
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<claustrofobia>, <affezione>)
Agentive:	*caused_by* (<claustrofobia> , <chiuso>)
Constitutive:	*typical_of* (<claustrofobia>, <uomo>) *concerns* (<claustrofobia>, <psiche>) *has_as_effect* (<claustrofobia>, <paura>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Stimuli

Linguistic tests:	
Examples:	*sound, smell, echo, stink, etc.*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[Stimulus]**
Unification_path:	**[Phenomenon | Agentive]**
Domain:	*General, Acoustics, Music*
Semantic Class	*Phenomenon*

Gloss:	//free//
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (1, <stimulus> or <hyperonym>)
Agentive:	*caused_by* (1, <Usem>)

Constitutive:	*concerns* (1, <Usem>) //optional//
	connotation = {positive, negative} //optional//
	causes (1, <Usem>) //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<rumore_1> //sound_4//
BC number:	*388*
Template_Type:	**[Stimulus]**
Unification_path:	**[Phenomenon | Agentive]**
Domain:	*General, Acoustics*
Semantic Class	*Phenomenon*
Gloss:	qualsiasi fenomeno acustico dovuto a vibrazioni irregolari e che produce una sensazione sgradevole
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<rumore_1>, <stimolo>)
Agentive:	*caused_by* (<rumore_1>, <vibrazione>)
	concerns (<rumore_1>, <udito>) *connotation* = {negative} *causes* (<rumore_1>, <sensazione>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<suono_1> //sound_4//
BC number:	*388*
Template_Type:	**[Stimulus]**
Unification_path:	**[Phenomenon | Agentive]**
Domain:	*General, Acoustics*
Semantic Class	*Phenomenon*
Gloss:	vibrazione prodotta da un corpo la quale da' una sensazione uditiva
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<suono_1>, <vibrazione>)
Agentive:	*caused_by* (<suono_1>, <corpo>)
Constitutive:	*concerns* (<suono_1>, <udito>) *causes* (<suono_1>, <sensazione>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<odore_1> //smell//
BC number:	<Nil>
Template_Type:	**[Stimulus]**
Unification_path:	**[Phenomenon | Agentive]**
Domain:	*General*
Semantic Class	*Phenomenon*
Gloss:	emanazione volatile di un corpo che provoca una sensazione olfattiva
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<odore_1>, <emanazione>)
Agentive:	*caused_by* (<odore _1>, <sostanza>)
Constitutive:	*concerns* (<odore _1>, <olfatto>) *causes* (<odore _1>, <sensazione>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Aspectual

Linguistic Tests:	
Examples:	*begin, start, continue, stop, cease, terminate, end, finish, etc.*
Levin Class:	55 (Aspectual: begin verbs, complete verbs)
Comments:	These are the aspectual verbs in the construction wherein the subject is usually an event. The value of the feature aspect determine whether they are inchoative, durative or terminative: *The movie began* (inchoative). *The rain continued all night* (durative). *The movie finished on time* (terminative).

Template

Usem:	1
BC Number:	*8, 9, 29, 101, 107, 154*
Template_Type:	**[Aspectual]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>)
Derivation:	<Derivational relation>
Selectional Restr.:	arg0 = [Event]
Formal:	*isa* (1, <Usem>)
Agentive:	<Nil>
Constitutive:	*aspect* = {inchoative, durative, terminative}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Aspectual][Cause_aspectual]**

Examples

Usem:	continuare_1 //continue
BC Number:	*8*
Template_Type:	**[Aspectual]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic Class:	Change
Gloss:	proseguire di un evento
Event type:	transition
Pred_Rep.:	continuare (<arg0>)
Selectional Restr.:	arg0 = [Event]
Derivation:	<Nil>
Formal:	*isa* (<continuare_1>, <essere>:[Exist])
Constitutive:	*aspect* = {durative}
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Aspectual][Cause_aspectual]**

Usem:	cominciare_1 //begin
BC Number:	<Nil>
Template_Type:	**[Aspectual]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic Class:	Change
Gloss:	l'iniziare di un evento
Event type:	transition
Pred_Rep.:	cominciare (<arg0>)
Selectional Restr.:	arg0 = [Event]
Derivation:	*Eventverb* (<cominciare>, <inizio>)
Formal:	*isa* (<cominciare_1>, <essere>:[Exist])
Constitutive:	*aspect* = {inchoative}
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates(<Usem1>,...<Usemn>)
Complex:	**[Aspectual][Cause_aspectual]**

Usem:	cessare_1 //cease
BC Number:	*9*
Template_Type:	**[Aspectual]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic Class:	Change
Gloss:	il finire di un evento
Event type:	transition
Pred_Rep.:	cessare (<arg0>)
Selectional Restr.:	arg0 = [Event]
Derivation:	<Nil>
Formal:	*isa* (<cessare_1>, <essere>:[Exist])
Constitutive:	*aspect* = {terminative}
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Cause aspectual

Linguistic Tests:	
Verb examples:	*begin, continue, stop, cease, terminate, etc.*
Noun examples:	*beginning, start, continuation, stop, end, etc.*
Levin Class:	55 (Aspectual: begin verbs, complete verbs)
Comments:	Causative version of the aspectual type. The value of the feature aspect determine whether these verbs are inchoative, durative or terminative: *John started a new business* *Mary continued the work* *Peter stopped working*

Template

Usem:	1
BC Number:	*9* (201515268), *72, 109, 113, 172*
Template_Type:	**[Cause_aspectual]**
Unification_Path:	**[Aspectual | Cause$_{\text{Agentive}}$]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred _Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[Aspectual])
Agentive:	*agentive_cause* (1,<Usem>:[Cause])
Constitutive:	*aspect* = {inchoative, durative, terminative}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Aspectual][Cause_aspectual]**

Examples

Usem:	cominciare_2 //begin
Usyn:	
BC Number:	
Template_Type:	**[Cause_aspectual]**
Unification_Path:	**[Aspectual | Cause$_{\text{Agentive}}$]**
Domain:	*General*
Semantic Class:	Change
Gloss:	iniziare qualche evento o atto
Event type:	transition
Pred _Rep.:	cominciare(<arg0>,<arg1>)
Derivation:	<Nil>
Selectional Restr.:	arg0 = **[Human]** arg1 = **[Event]**
Formal:	*isa* (<cominciare_2>,<cominciare_1>)
Agentive:	*agentive_cause* (<cominciare_2>,<fare>:[Cause])
Constitutive:	*aspect* = {inchoative}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Aspectual][Cause_aspectual]**

Usem:	cessare_2 //cease//
BC Number:	*9* (201515268)
Template_Type:	**[Cause_aspectual]**
Unification_Path:	**[Aspectual | Cause$_{\text{Agentive}}$]**
Domain:	*General*
Semantic Class:	Change
Gloss:	finire
Event type:	transition
Pred_Rep.:	cessare (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event]
Derivation:	<Nil>

Formal:	*isa* (<cessare_2>,<cessare_1>)
Agentive:	*agentive_cause* (<cessare_2>,<fare>:[Cause])
Constitutive:	*aspect* = {terminative}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Aspectual][Cause_aspectual]**

Usem:	<inizio_1> //start//
BC Number:	<Nil>
Template_Type:	**[Cause_aspectual]**
Template_Supertype:	**[Aspectual | Cause$_{\text{Agentive}}$]**
Domain:	*General*
Semantic Class:	Change
Gloss:	atto con cui si comincia
Event type:	transition
Pred_Rep.:	iniziare (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event]
Derivation:	EventVerb (<inizio>, <iniziare>)
Formal:	*isa* (<inizio_1>, <atto>)
Agentive:	*agentive_cause* (<inizio_1>,<iniziare_2>:[Cause_aspectual])
Constitutive:	*aspect* = {inchoative}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<fine_2> //end_7//
BC Number:	*84*
Template_Type:	**[Cause_aspectual]**
Template_Supertype:	**[Aspectual | Cause$_{\text{Agentive}}$]**
Domain:	*General*
Semantic Class:	Change
Gloss:	punto o momento in cui una cosa cessa di essere, la sua ultima fase
Event type:	transition
Pred_Rep.:	finire (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event]
Derivation:	EventVerb (<fine>, <finire>)
Formal:	*isa* (<fine_2>, <atto>)
Agentive:	*agentive_cause* (<fine_2>,<finire_2>:[Cause_aspectual])
Constitutive:	*aspect* = {terminative}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

State

Linguistic tests:	Tests for stativity for event type.
Verbs examples:	*be, stay, etc.*
Noun examples:	*State, success, situation, condition, crisis, health, illness, standstill, availability, tiredness, want, lack, etc*
Comments:	

Template

Usem:	1
BC number:	*number*
Template_Type:	**[State]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic class:	Stative
Gloss:	//free//
Event type:	state
Pred_Rep.:	Lex_pred (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (1, <state> : [State] or <hyperonym>)
Agentive:	<Nil>
Constitutive:	*connotation* = {positive, negative} //optional// *typical of* (1, <Usem>) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Examples

Usem:	<condizione_2> //condition_4//
BC number:	*297*
Template_Type:	**[State]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic class:	Stative
Gloss:	stato in cui si trova una persona, una cosa
Event type:	state
Pred_Rep.:	condizione (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<condizione_2>, <stato>: [State])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<situazione_1> //situation_2//
BC number:	*173*
Template_Type:	**[State]**
Template_Supertype:	**[Event]**

Domain:	*General*
Semantic class:	Stative
Gloss:	stato, condizione
Event type:	state
Pred_Rep.:	situazione (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<situazione_1>, <stato>: [State])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<crisi_1> //crisis//
BC number:	<Nil>
Template_Type:	**[State]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic class:	Stative
Gloss:	stato transitorio di particolare difficolta' o turbamento nella vita individuale o sociale
Event type:	state
Pred_Rep.:	crisi (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<crisi_1>, <stato>: [State])
Agentive:	<Nil>
Constitutive:	*connotation* = {negative} *typical_of* (<crisi_1>, <uomo>) *typical_of* (<crisi_1>, <societa'>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<mancanza_1> //want_1//
BC number:	*400*
Template_Type:	**[State]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic class:	Stative
Gloss:	il mancare, assenza, penuria
Event type:	state
Pred_Rep.:	mancanza (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<mancanza_1>, <stato>: [State])
Agentive:	<Nil>
Constitutive:	*connotation* = {negative}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Exist

Linguistic Tests:	Tests for stativity for event type.
Verb Examples:	*exist, be, live, thrive, tower, stagnate, etc.*
Noun Examples:	*existence, life, death, stagnation, etc.*
Levin Class:	39.6, Gorge verbs (exist), States in Levin 47.1, Exist verbs (dwell, flourish, etc.), \47.2, Verbs of Entity-Specific Modes of Being. (e.g. decay, foam, stream, etc.)
Comments:	Verbs expressing existence can be further subtyped according to the type of entity they describe the existence of. The Usems for each predicates are built by specifying which type of argument the existence predicate applies to. If there is no specific type, i.e. exist, then the argument is top.
Selectional Restrictions:	For what concerns entity existence (*live*) event selectional restriction are: arg0 = [Living_entity] For what concerns location existence (*tower*) event selectional restriction are: arg0 = [Concrete_entity] For what concerns material existence (*stagnate*) event selectional restriction are: arg0 = [Substance]

Template

Usem:	1
BC Number:	*15*
Template_Type:	**[Exist]**
Template_Supertype:	**[State]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	//free//
Event type:	state
Pred_Rep.:	Lex_Pred (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[State])
Agentive:	<Nil>
Constitutive:	*Connotation* = {positive, negative} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	esistere //exist//
BC Number:	*15*
Template_Type:	**[Exist]**
Template_Supertype:	**[State]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	l'essere
Event type:	State
Pred_Rep.:	esistere (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Nil>

Formal:	*isa* (<esistere>,<stato>: [State])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	vivere //live
BC Number:	*12*
Template_Type:	**[Exist]**
Template_Supertype:	**[State]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	essere in vita
Event type:	state
Pred_Rep.:	vivere (<arg0>)
Selectional Restr.:	arg0 = [Living_entity]
Derivation:	<Nil>
Formal:	*isa* (<vivere>, <esistere>:[Exist**]**)
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<vita_1> //life_8//
BC Number:	*79*
Template_Type:	**[Exist]**
Template_Supertype:	**[State]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	lo stato di attivita' naturale di un organismo che si conserva, si sviluppa, si riproduce
Event type:	state
Pred_Rep.:	vita (<arg0>)
Selectional Restr.:	arg0 = [Living_entity]
Derivation:	<Nil>
Formal:	*isa* (<vita_1>, <stato>:[State])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	prosperare //prosper, thrive//
BC Number:	*12*
Template_Type:	**[Exist]**
Template_Supertype:	**[State]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	essere florido
Event type:	state
Pred_Rep.:	prosperare (<arg0>)
Selectional Restr.:	arg0 = [Living_entity]

Derivation:	<Nil>
Formal:	*isa* (<prosperare>, <esistere>:[Exist])
Agentive:	<Nil>
Constitutive:	*Connotation* = {positive}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	stagnare //stagnate//
BC Number:	<Nil>
Template_Type:	**[Exist]**
Template_Supertype:	**[State]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	restare fermo, non circolare
Event type:	state
Pred_Rep.:	stagnare (<arg0>)
Selectional Restr.:	arg0 = [substance]
Derivation:	<Nil>
Formal:	*isa* (<stagnare>, <esistere>: [Exist])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Relational state

Linguistic Tests:	
Verb examples:	*Verbs expressing an underspecified stative relation (e.g. concern)*
Noun examples:	*relation, relationship, link, union, connection, etc.*
Levin Class:	<Nil>
Comments:	This class contains stative verbs and nouns expressing underspecified relations between two or more entities.

Template

Usem:	1
BC Number:	*11*
Template_Type:	**[Relational_state]**
Template_Supertype:	**[State]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	//free//
Event type:	state
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem:>:[State])

Agentive:	<Nil>
Constitutive:	*relates* (1, <Usem>) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	concernere //concern//
BC Number:	*11*
Template_Type:	**[Relational_state]**
Template_Supertype:	**[State]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	riguardare
Event type:	state
Pred_Rep.:	concernere(<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<concernere>,<relazione>:[Relational_state])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<relazione_2> //relation_1//
BC number:	*370*
Template_Type:	**[Relational_state]**
Template_Supertype:	**[State]**
Domain:	*General*
Semantic class:	Stative
Gloss:	modo d'essere di una cosa rispetto a un'altra; legame, rapporto tra due concetti
Pred_Rep.:	relazione (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<relazione_2>, <stato> : [State])
Agentive:	<Nil>
Constitutive:	*relates* (<relazione_2>, <Usem>: [Entity])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Identificational state

Linguistic Tests:	

Verb examples:	*equal, constitutes, be, represent, etc.*
Noun examples:	*equality, analogy, coincidence, resemblance, antagonism, harmony , understanding, affinity, etc.*
Levin Class:	<Nil>
Comments:	This terminology comes from Gruber (1965) and Jackendoff (1983), although we will use this term in a wider sense. Here, the term identificational corresponds to 7. states which ascribe a property to an entity (e.g. identity and resemblance with another entity); 8. states which specify the manner or the connotation of a relation between entities (feature: manner={yes}). The feature possible indicates whether the identification is actual, or it is only possible, e.g. seem. This can be very useful information for compositional purposes as well as inferences.

Template

Usem:	1
BC Number:	*2, 14, 137*
Template_Type:	**[Identificational_state]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	//free//
Event type:	state
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<relation>:[Relational _state] or <hyperonym>)
Agentive:	<Nil>

Constitutive:	*manner* ={yes }
	relates (1, <Usem>) //optional//
	connotation ={positive, negative} //optional//
	possible ={yes , no} //optional//
	property of (1, <Usem>) //optional, for deadjectival Usems//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	equivalere //equal, be equivalent to//
BC Number:	*2*
Template_Type:	**[Identificational_state]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	l'essere equivalente
Event type:	state
Pred_Rep.:	equivalere (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<equivalere>,<relazione>:[Relational _state])

Agentive:	<Nil>
Constitutive:	*relates* (<equivalere>, <Usem>:[Entity]) *manner* ={yes } *property_of* (<equivalere>,<equivalente>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	rappresentare //represent//
BC Number:	*137*
Template_Type:	**[Identificational_state]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	simboleggiare
Event type:	state
Pred_Rep.:	rappresentare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<rappresentare>,<relazione>:[Relational _state])
Agentive:	<Nil>
Constitutive:	*relates* (<rappresentare>, <Usem>:[Entity]) *manner* ={yes }
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<analogia_1> //analogy//
BC Number:	<Nil>
Template_Type:	**[Identificational_state]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	rapporto di somiglianza tra due o piu' cose
Event type:	state
Pred_Rep.:	analogia (<arg0>, < arg1>)
Selectional Restr.:	arg0 = arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<analogia_1>,<relazione>:[Relational_state])
Agentive:	<Nil>
Constitutive:	*relates* (<analogia_1>, <Usem>:[Entity]) *manner* ={yes } *property_of* (<analogia_1>, <analogo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Constitutive state

Linguistic Tests:	

Verb Examples:	*include, coincide, lack, belong, etc.*
Noun Examples:	*membership, belonging, inclusion, kinship, union, etc.*
Levin Class:	Levin Classes 22.1 (Mix verbs, with stative sense), 22.2 (Amalgamate verbs, with stative sense), 47.5.2 (Herd verbs, e.g. gather, etc.)
Comments:	The predicates express the information that two entities stand in a part of relation, (e.g. include, is made of). A constitutive feature *meronym* is used to mark the difference between include and exclude: *Meronym =Yes* - some kind of part_of / member_of relation holds between the 2 arguments *Meronym =No* - no relation holds between the 2 arguments.

Template

Usem:	1
BC Number:	<Nil>
Template_Type:	**[Constitutive_state]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	//free//
Event type:	state
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Relational_state])
Agentive:	<Nil>
Constitutive:	*relates* (1, <Usem>) //optional// *meronym* = {yes, no} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	includere //include//
BC Number:	<Nil>
Template_Type:	**[Constitutive_state]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	//free//
Event type:	avere qualcuno o qualcosa come propria parte o elemento
Pred_Rep.:	includere (<arg0>, <arg1>)
Derivation:	<Nil>
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Formal:	*isa* (<includere>, <relazione> : [Relational_state])
Agentive:	<Nil>
Constitutive:	*relates* (<includere>, <Usem> :[Entity]) *meronym* = {yes}

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<inclusione_1> //inclusion//
BC Number:	<Nil>
Template_Type:	**[Constitutive_state]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	l'essere incluso
Event type:	state
Pred_Rep.:	includere (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<inclusione_1>, <relazione>[Relational_state])
Agentive:	<Nil>
Constitutive:	*relates* (<inclusione_1>, <Usem> :[Entity]) *meronym* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	mancare //lack//
BC Number:	<Nil>
Template_Type:	**[Constitutive_state]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	essere privo di qualcosa o qualcuno
Event type:	state
Pred_Rep.:	mancare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<mancare>, <relazione>:[Relational_state])
Agentive:	<Nil>
Constitutive:	*meronym* = {no}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	appartenere //belong//
BC Number:	<Nil>
Template_Type:	**[Constitutive_state]**
Template_Supertype:	**[Stative_relation]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	//free//
Event type:	essere di qualcosa o qualcuno
Pred_Rep.:	appartenere (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Living_entity] arg1 = [group]
Derivation:	<Nil>

Formal:	*isa* (<appartenere>, <relazione>:[Relational_state])
Agentive:	<Nil>
Constitutive:	*meronym* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<parentela_1> //relationship_4//
BC number:	*19*
Template_Type:	**[Constitutive_state]**
Template_Supertype:	**[Stative_relation]**
Domain:	*General*
Semantic class:	Stative
Gloss:	vincolo naturale tra discendenti da un capostipite comune, o da affini
Event type:	state
Pred_Rep.:	parentela (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Human]
Derivation:	<Nil>
Formal:	*isa* (<parentela_1>, <relazione>:[Relational_state])
Agentive:	<Nil>
Constitutive:	*relates* (<parentela_1>, <persona>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Stative location

Linguistic Tests:	Tests for stativity. A subset of this class contains lexical items espressing reciprocal static location. The members of this class have a distinct syntactic behavior: *Italy borders France* (reciprocal) *Italy and France border* (reciprocal) *The sea surrounds the island* (non-reciprocal) **The sea and the island surround* (non-reciprocal) The second argument is always obligatory: **Italy borders* **The sea surrounds*
Verb Examples:	*stay, hang, lie, perch, sit, bivouac, camp, dwell, border, adjoin, intersect, touch* *bridge, cover, contain, enclose, fill, surround, etc.*
Noun Examples:	*bivouac, stay, border, intersection etc.*
Levin Class:	Levin 46 (Lodge verbs), 47.6 (Verbs of spatial configuration); 47.8 (Verbs of contiguous location); 50 (Stative verbs of assuming a position, e.g.: lie)
Comments:	Lexical items encoding static location can be of different types according to the type of the arguments. When they express the position of an individual (e.g., *hang, lie, sit*), <arg1> can be either a physical object or a location (both are subsumed by the type **[Concrete_entity]**); the event can also be characterized by a temporally bounded feature when the event is not persistent. Such feature is expressed in the Constitutive. They are often complex types: they alternate between a stative and a non-stative reading: *Mountains surround the lake*. (Stative) *The army surrounded the enemy*. (transition)

	They can express the spatial configuration between two individuals: in this case both participants are locations (e.g., adjoin, border, intersect). For what concerns the class of reciprocal verbs and corresponding deverbal nouns, the following generalization can be stated: *Reciprocal verbs*: - The arguments are of the same type: both 2-dimensional, both 3-dimensional, etc. - The constitutive feature contact is obligatory *Non-reciprocal verbs*: - Do not carry the same restrictions (1-2 above) - Tend to have a complex type which alternates with a non-stative reading.

Template

Usem:	1
BC Number:	*16*
Template_Type:	**[Stative_location]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	//free//
Event type:	state
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1 =[Concrete_entity]
Derivation:	<Nil> or //Erli's Code//
Formal:	*isa* (1, <Usem>:[Relational_state])
Agentive:	<Nil>
Constitutive:	*duration*={temporary, persistent} //optional// *contact*={yes, no} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Stative_location][Change_of_location]**

Examples

Usem:	stare //be//
BC Number:	*16*
Template_Type:	**[Stative_location]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	essere in qualche luogo o posizione
Event type:	state
Pred_Rep.:	stare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1 =[Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<stare>, <essere>: [State])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	giacere //lie//
BC Number:	<Nil>
Template_Type:	**[Stative_location]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	stare disteso, essere collocato
Event type:	state
Pred_Rep.:	giacere (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1 =[Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<giacere>, <stare>:[Stative_location])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	circondare_1 //surround//
BC Number:	*145*
Template_Type:	**[Stative_location]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	Chiudere tutt'intorno
Event type:	state
Pred_Rep.:	circondare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1 = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<circondare_1>, <stare>:[Stative_location])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Stative_location][Change_of_location]**

Usem:	<permanenza_2> //stay//
BC Number:	<Nil>
Template_Type:	**[Stative_location]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	il trattenersi in un luogo
Event type:	state
Pred_Rep.:	permanenza (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] or [Human_group] arg1 =[Concrete_entity]
Derivation:	<Nil>
Formal:	isa (<permanenza_2>, <stare>: [Stative_location])
Agentive:	<Nil>
Constitutive:	*duration*={persistent}
Telic:	<Nil>
Synonymy:	<Nil>

Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Stative possession

Linguistic Tests:	Tests for stativity for event type Tests for transititivity for argument structure
Verb examples:	*have, hold, keep, maintain, lack, etc.*
Noun examples:	*possession, etc.*
Levin Class:	15.1 (Hold verbs)
Comments:	Verbs encoding stative possession describe the relation between two entities. This relation is static and does not involve any transfer. It may be the case that certain verbs express whether the possession is persistent or temporary. This information is encoded as a feature in the constitutive role. The <arg1> selectional restriction: **[Entity]** is meant to cover both concrete and 'abstract' senses, i.e.: 'to possess a house' and 'to possess a quality, skill'

Template

Usem:	1
BC Number:	*17, 19, 104*
Template_Type:	**[Stative_possession]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	//free//
Event type:	state
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <have>: [Relational_state])
Constitutive:	*duration*={temporary, persistent} //optional//
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	avere //have_1//
BC Number:	*17*
Template_Type:	**[Stative_possession]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	possedere
Event type:	state
Pred_Rep.:	avere (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Concrete_entity]

Derivation:	<Nil>
Formal:	*isa* (<tenere_1>, <avere>:[Stative_possession])
Constitutive:	<Nil>
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<possesso> //possession//
BC Number:	<Nil>
Template_Type:	**[Stative_possession]**
Template_Supertype:	**[Relational_state]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	il possedere qlco.
Event type:	state
Pred_Rep.:	possedere (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<possesso>, <avere>:[Stative_possession])
Constitutive:	<Nil>
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Act

Linguistic Tests:	
Verbs Examples:	*act_2, etc.*
Nouns Examples:	*action, deed, agency, etc.*
Levin Class:	
Comments:	Verbs belonging to this type express general underspecified activities. Generally are 1-place predicates.

Template

Usem:	1
BC Number:	
Template_Type:	**[act]**
Template_Supertype:	**[event]**
Domain:	*General*
Semantic Class:	<Semantic class>
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>)
Selectional Restr.:	arg0 = [entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[event])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	agire //act//
BC Number:	<Nil>
Template_Type:	**[act]**
Template_Supertype:	**[event]**
Domain:	*General*
Semantic Class:	
Gloss:	compiere un atto
Event type:	process
Pred_Rep.:	agire (<arg0>)
Selectional Restr.:	arg0 = [entity]
Derivation:	<Nil>
Formal:	*isa* (<agire>,<evento>:[event])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Non relational act

Linguistic Tests:	
Verb Examples:	*smell, stink, radiate, existence of time (elapse), flower, bloom, hiccup, echo, resound, sound, etc.*
Noun Examples:	*hiccup, blossoming, blooming, drip, bleeding, barking, bark, etc.*
Levin Class:	43.3 (Verbs of Smell Emission, e.g. smell), 43.4 (Verbs of Substance Emission, e.g. drip), 40.1.2 (Breathe Verbs, e.g. bleed), 40.1.3 (Exhale Verbs, e.g. perspire), 47.2 (Verbs of Entity-Specific Modes of Being, e.g. bloom), 38 (Verbs of Sounds Made by Animals, e.g. bark), 30.3 (Peer Verbs, e.g. gaze, sniff), 43.1 (Verbs of Light Emission, e.g. flash), 47.5.1 (Swarm Verbs, e.g. crawl, creep), 47.5.2 (Herd Verbs, e.g. flock, gather)
Comments:	These verbs involve physical processes which relate to different kinds of concrete entities. The constitutive role may specify whether there is an instrument involved, usually a part of the entity (e.g. legs). As far as activities are concerned, different selectional restrictions on the arguments identify different kinds of activities. In this case the different instantiations of this template would vary along the encoding of the arguments: - *Time activity*: Verbs making reference to time as an argument, can be one place (*elapse*) or two place (a relation between an individual and time). Selectional Restr.: arg0 = [time] - *Living entity activity*: These verbs refer to activities involving living entities Selectional Restr.: arg0 = [living_entity] arg0 = [living_entity] - Sound activity: These verbs express emission of a sound. The latter is expressed as a shadow argument Selectional Restr.: arg0 = [concrete_entity] | [Stimuli]

Template

Usem:	1
BC Number:	*62*
Template_Type:	**[Non_relational_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	<Semantic class>
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>: [Act])
Agentive:	<Nil>

Constitutive:	*connotation* ={positive, negative} //optional//
	property_of(1, <Usem>) //optional//
	instrument (1,<Usem>) //optional//
	concerns (1,<Usem>) //optional//
	produces (1, <Usem>) //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	suonare_1 //sound//
BC Number:	*62*
Template_Type:	**[Non_relational_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	perception
Gloss:	emissione di suono
Event type:	process
Pred_Rep.:	suonare (<arg0>)
Selectional Restr.:	arg0 = [concrete_entity] arg1 : shadow = <suono> [Stimuli]
Derivation:	*DenominalVerbNoun* (<suonare>, <suono>)
Formal:	*isa* (<suonare_1>, <evento>: [event])
Agentive:	<Nil>
Constitutive:	*produces* (<singhiozzo>,<suono>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	echeggiare //echo//
BC Number:	*62*
Template_Type:	**[Non_relational_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	
Gloss:	il rumore dell'eco
Event type:	process
Pred_Rep.:	echeggiare (<arg0>)
Selectional Restr.:	arg0 = [Concrete_entity] or [Stimuli]
Derivation:	*DenominalVerbNoun* (<echeggiare>, <eco>)
Formal:	*isa* (<echeggiare>, <risuonare>: [Non_relational_act])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<emorragia> //bleeding//
BC Number:	<Nil>
Template_Type:	**[Non_relational_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Body
Gloss:	fuoriuscita di sangue dai vasi sanguigni
Event type:	process
Pred_Rep.:	emorragia (<arg0 >)
Selectional Restr.:	arg0 : = [Substance]
Derivation:	<Nil>
Formal:	*isa*(<emorragia>,<fuoriuscita>: [Act])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>

Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<singhiozzo> //hiccup//
Usyn:	
BC Number:	<Nil>
Template_Type:	**[Non_relational_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Body
Gloss:	rapida inspirazione per improvvisa contrazione del diaframma, accompagnata da un suono particolare
Event type:	process
Pred_Rep.:	<Nil>
Selectional Restr.:	<Nil>
Derivation:	<Nil>
Formal:	*isa* (<singhiozzo>,<evento>: [event])
Agentive:	<Nil>
Constitutive:	*concerns* (<singhiozzo>,<diaframma>) *produces* (<singhiozzo>,<suono>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<miagolio> //mewing //
BC Number:	<Nil>
Template_Type:	**[Non_relational_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Body
Gloss:	un miagolare insistente
Event type:	process
Pred_Rep.:	miagolio (<arg0 >)
Selectional Restr.:	arg0 : default = <gatto>: [Earth_animal])
Derivation:	<Nil>
Formal:	*isa* (<miagolio >,<verso>: [Non_relational_act])
Agentive:	<Nil>
Constitutive:	*concerns* (<miagolio >,< gatto>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Relational Act

Linguistic Tests:	
Verb examples:	*hit, handle, manipulate, do, make, etc.*
Noun examples:	*manipulation, etc.*
Levin Class:	18.1 (Hit Verbs, e.g. smack, smash), 18.2 (Swat Verbs, e.g. paw, shoot), 18.3 (Spank Verbs, e.g. bonk, cane), 18.4 (Non-Agentive Verbs of Contact by Impact, e.g. crash, hit), 19 (Poke Verbs, stick, pierce), 20 (Verbs of Contact, e.g. kiss, pat), 22.3 (Shake Verbs, e.g. whisk, roll), 39.1 (Eat Verbs, e.g. drink, eat), 39.2 (Chew Verbs, e.g. chomp, crunch), 39.3

	(Gobble Verbs, e.g. swallow), 39.4 (Devour Verbs, e.g. consume, ingest), 39.5 (Dine Verbs, e.g. brunch, lunch), 41.2 (Verbs of Caring for a Specific Body Part, e.g. floss, shave), 41.3 (Verbs of Dressing, e.g. wear)
Comments:	These verbs involve physical processes which relate to different kinds of concrete entities and express general underspecified activities involving two entities. The constitutive role may specify whether there is an instrument involved, usually a part of the entity. They involve semantic distinctions which are specified in the constitutive role, by means of the following features or relations: *Manner* *Connotation* *Contact* *Instrument*

Template

Usem:	1
BC Number:	*84,144*
Template_Type:	**[relational_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	<Semantic class>
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [entity] arg1 : default = [entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>: [Act])
Agentive:	<Nil>

Constitutive:	*connotation*={positive, negative} //optional//
	instrument (1,<Usem>) //optional//
	manner={yes, no} //optional//
	contact={yes, no} //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	mangiare //eat//
BC Number:	*84*
Template_Type:	**[relational_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Body
Gloss:	ingerire alimenti
Event type:	process
Pre _Rep.:	mangiare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [living_entity] arg1:default = [food]
Derivation:	<Nil>
Formal:	*isa (*<mangiare>,<consumare>: [relational_act])
Agentive:	<Nil>
Constitutive:	<Nil>

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	digerire //digest//
BC Number:	*84*
Template_Type:	**[relational_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Body
Gloss:	assimilare alimenti
Event type:	process
Pred_Rep.:	digerire (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [living_entity] arg1:default = [food]
Derivation:	<Nil>
Formal:	*isa (*<digerire>,<assimilare>: [relational_act])
Agentive:	<Nil>
Constitutive:	*instrument* (<digerire>,<stomaco>: [body_part])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	colpire //hit//
BC Number:	*1*
Template_Type:	**[relational_act]**
Template_Supertype:	**[event]**
Domain:	*General*
Semantic Class:	Contact
Gloss:	percuotere
Event type:	process
Pred_Rep.:	colpire (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [entity] arg1 = [entity]
Derivation:	<Nil>
Formal:	*isa (*<colpire>,<agire>: [act]>)
Agentive:	<Nil>
Constitutive:	*contact*={yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<manipolazione> //manipulation//
BC Number:	<Nil>
Template_Type:	**[relational_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Contact
Gloss:	il manipolare; l'essere manipolato
Event type:	process
Pred_Rep.:	manipolare (<arg0>,<arg1>)
Derivation:	*EventVerb* (<manipolazione>, <manipolare>)
Selectional Restr.:	arg0 = [entity] arg1 = [entity]
Formal:	*isa* (<manipolazione>,<fare>: [Relational_act])

Agentive:	<Nil>
Constitutive:	*connotation*={negative} *contact*={yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Cooperative activity

Linguistic Tests:	
Verb Examples:	*agree, disagree, fight, meet, etc.*
Noun Examples:	*agreement, disagreement, meeting, etc.*
Levin Class:	36.2 (Marry verbs, e.g. divorce, embrace), 36.3 (Meet verbs, e.g. fight, meet)
Comments:	Verbs belonging to this type express general activities that individual carry out together. Generally are 2-place (or 3-place) predicates with various modes for projecting arguments to syntax: *John and Mary met.* *John met with Mary.* *John met Mary.* John and Mary fight. John fought with Mary. John fought Mary. Differences between predicates are captured by the constitutive features: *Attitude, Legal*, etc. The agentive role of these verbs may variously specify the nature of the event in which the individuals are involved.

Template

Usem:	1
BC Number:	*24, 73, 93, 136, 149, 166, 173*
Template_Type:	**[cooperative_activity]**
Unification_Path:	**[relational_act | agentive]**
Domain:	*General*
Semantic Class:	<Semantic class>
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [entity] arg1 = [entity]
Derivation:	<derivational relation>
Formal:	*isa* (1, <Usem>:[cooperative_activity])
Agentive:	*agentive* (1, <Usem>: [event])
Constitutive:	*attitude* = {for, against} //optional// *legal* = {yes, no} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	incontrare //meet//
BC Number:	<Nil>
Template_Type:	**[cooperative_activity]**
Unification_Path:	**[relational_act | agentive]**
Domain:	*General*
Semantic Class:	Competition
Gloss:	riunirsi insieme
Event type:	process
Pred_Rep.:	incontrare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [human] arg1 = [human] arg2: default = [event]
Derivation:	<Nil>
Formal:	*isa* (<incontrare>,<evento>:[event])
Agentive:	*agentive (*<incontrare>, <agire>:[act])
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	combattere //fight_1//
BC Number:	*24*
Template_Type:	**[cooperative_activity]**
Unification_Path:	**[relational_act | agentive]**
Domain:	*General*
Semantic Class:	Competition
Gloss:	lottare
Event type:	process
Pred _Rep.:	combattere (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [human] arg1 = [human]
Derivation:	<Nil>
Formal:	*isa* (<combattere >,<fare>:[relational_act])
Agentive:	*agentive* (<combattere >, <essere_in_disaccordo>:[Relational_state])
Constitutive:	*Attitude*={against}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	sostenere_1 //support_1//
BC Number:	*93*
Template_Type:	**[cooperative_activity]**
Unification_Path:	**[relational_act | agentive]**
Domain:	*General*
Semantic Class:	
Gloss:	supportare, dare supporto
Event type:	process
Pred _Rep.:	sostenere (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [human] arg1 = [human]
Derivation:	<Nil>
Formal:	*isa* (<sostenere_1>,<collaborare>:[cooperative_activity])
Agentive:	*agentive* (<sostenere_1>, <Usem>:[psychological_state])
Constitutive:	*attitude*={for}
Telic:	<Nil>
Synonymy:	<Nil>

Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	condurre_1 //take_3//
BC Number:	*73*
Template_Type:	**[cooperative_activity]**
Template_Supertype:	**[relational_act | agentive]**
Domain:	*General*
Semantic Class:	
Gloss:	portare, guidare
Event type:	process
Pred _Rep.:	condurre (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [human] arg1 = [human] arg2 = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<condurre _1>,<agire>:[act])
Agentive:	*agentive* (<condurre_ 1>, <andare>:[Change_of_location])
Constitutive:	*attitude* = {for}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Purpose act

Linguistic Tests:	
Noun examples:	*apply, act, execute, chase, follow, pursue, etc.*
Verb examples:	*research, work, breeding, etc.*
Levin Class:	35 (Verbs of searching, e.g. hunt), 51.5 (Waltz Verbs, e.g. boogie, shuffle), 51.6 (Chase Verbs, e.g. pursue, track)
Comments:	Verbs belonging to this type express activities which are closely associated with a particular purpose. Different activities may be subspecified for different purposes.

Template

Usem:	1
BC Number:	*5, 32, 38, 42, 108, 117, 161, 180, 181*
Template_Type:	**[purpose_act]**
Unification_Path:	**[relational_act | telic]**
Domain:	*General*
Semantic Class:	<Semantic class>
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Derivation:	<Derivational relation>
Selectional Restr.:	arg0 = [entity] arg1 = [entity]
Formal:	*isa* (1,<Usem>:[relational_act])
Agentive:	<Nil>
Constitutive:	*concerns* (1, <Usem>) // optional//
Telic:	*telic* (1, <Usem>:[Event]) //or// *purpose* (1, <Usem>:[Event])

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Domain] [Purpose_act]**

Examples

Usem:	inseguire //follow, pursue//
BC number:	<Nil>
Template_Type:	**[purpose_act]**
Unification_path:	**[relational_act | telic]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	cercare di raggiungere qualcuno o qualchecosa
Event type:	process
Pred_Rep.:	inseguire (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [living_entity] arg1 = [concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<inseguire>, <muoversi>:[move])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*telic* (<inseguire>, <prendere>:[Change_of_possession])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	lavorare //work_1//
BC Number:	*117*
Template_Type:	**[purpose_act]**
Unification_Path:	**[relational_act | telic]**
Domain:	*General*
Semantic Class:	
Gloss:	essere impegnato in attività produttive
Event type:	process
Pred_Rep.:	lavorare (<arg0>)
Selectional Restr.:	arg0 = [human]
Formal:	*isa* (<lavorare>,<fare>:[Relational_act])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*telic* (<lavorare>, <guadagnare>:[Change_of_possession])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<lavoro_2> //work_3//
BC Number:	*60*
Template_Type:	**[Purpose_act]**
Unification_Path:	**[Relational_act | Telic]**
Domain:	*General*
Semantic Class:	*Occupation*
Gloss:	occupazione retribuita; attivita' svolta alle dipendenze di qualcuno in cambio di una retribuzione
Event type:	process
Pred_Rep.:	lavorare (<arg0>)
Selectional Restr.:	arg0 = [Human]

Derivation:	*EventVerb* (<lavoro>, <lavorare>)
Formal:	*isa* (<lavoro_2>,<attivita'_2>:[Purpose_act])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*telic (*<lavoro_2>, <guadagnare>:[Change_of_possession])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	giocare //play_1//
BC Number:	*5*
Template_Type:	**[purpose_act]**
Unification_Path:	**[relational_act | telic]**
Domain:	*General*
Semantic Class:	
Gloss:	essere impegnato in attività ludiche
Event type:	process
Pred_Rep.:	giocare (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [living_entity] arg1: default = [entity]
Derivation:	<Nil>
Formal:	*isa* (<giocare>,<fare>:[relational_act])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	*telic (*<giocare>, <divertirsi>: **[experience_event]**)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<ricerca_3> //research//
BC number:	<Nil>
Template_Type:	**[purpose_act]**
Unification_path:	**[relational_act | telic]**
Domain:	*General*
Semantic Class	*Occupation*
Gloss:	insieme delle attivita' pratiche, intellettuali, culturali che fondano e sviluppano il complesso del sapere dell'uomo
Event type:	process
Pred_Rep.:	ricercare (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	*EventVerb* (<ricerca>, <ricercare>)
Formal:	*isa* (<ricerca_3>,<attivita'_2>:[purpose_act])
Agentive:	<Nil>
Constitutive:	*concerns* (<ricerca_3>, <sapere>: [cognitive_event])
Telic:	*telic* (<ricerca_3>, <conoscere>: [acquire_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Domain] [Purpose_act]**

Usem:	<allevamento_2> //breeding//
BC number:	<Nil>
Template_Type:	**[purpose_act]**
Unification_path:	**[relational_act | telic]**
Domain:	*General, Livestock_farming*
Semantic Class	*Occupation*
Gloss:	attivita' volta a far crescere, riprodurre, migliorare le specie di animali utili

	all'uomo
Event type:	process
Pred_Rep.:	allevare (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Animal]
Derivation:	EventVerb (<allevamento>, <allevare>)
Formal:	*isa* (<allevamento_2>, <attivita'>)
Agentive:	<Nil>
Constitutive:	*concerns* (<allevamento_2>, <bestiame>)
Telic:	*purpose* (<allevamento_2>, <riproduzione>)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Domain] [Purpose_act]**

Move

Linguistic Tests:	
Verb Examples:	*move, foot, locomote, sled, ski, bicycle, jump, dance, turn, stand up, sit down, walk, climb, run, etc.*
Noun Examples:	*dance, walk, run, jump, etc.*
Levin Class:	11.2 (Slide verbs, e.g.: roll, float), 51.3 (Manner of motion verbs, e.g.: gallop, limp), 51.4.1 (verbs that are vehicle names e.g.: cycle, bike), 51.4.2 (verbs that are not vehicle names e.g.: ride, fly), 47.7 (Meander verbs, e.g. crawl)
Comments:	There are two templates for verbs of motion: **[Move]** and **[Change_of_location].** Obviously every verb of motion implies somehow a change of location. However, we encoded in the template **[Move]** those verbs for which the manner of motion (*climb* vs. *go up*; *take a walk* vs. *go*) seems more relevant than the change of location. In any case, when a direction is implied, the argument structure includes default source and goal location arguments. In the absence of the Prepositional Phrase specifying direction, none of these verbs indicates the direction of motion. The Constitutive may specify a particular manner of motion. This should be distinguished from motion with instrument. The latter is one where the instrument is lexicalized in the verb.

Template

Usem:	1
BC Number:	*34, 119*
Template_Type:	**[Move]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>, <arg2>) //or// Lex_Pred (<arg0>,<arg1>, <arg2>, <arg3>)
Selectional Restr.:	arg0 = [Entity] arg1: default = [Concrete_entity] //optional (source) location// arg2: default = [Concrete_entity] //optional target location// *for motion with instrument:* arg0 = [Human] arg1: shadow = <sci>:[Instrument]

	arg2: default = [Concrete_entity] //optional (source) location// arg3: default = [Concrete_entity] //optional target location//
Derivation:	<Derivational relation>
Formal:	*isa*(1,<Usem>:[Move])
Agentive:	<Nil>

Constitutive:	*manner* = {yes, no} //optional//
	instrument = (1, <Usem>) //optional//
	direction = {up, down, inward, outward, around, forward, backward} //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Move] [Cause_motion]**

Examples

Usem:	muoversi //move//
BC Number:	*119*
Template_Type:	**[Move]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	cambiare locazione
Event type:	process
Pred_Rep.:	muoversi (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Entity] arg1: default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<muoversi>,<agire>:[Act])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<rotolare_2> //roll//
BC Number:	
Template_Type:	**[Move]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	spostarsi girando su se stesso
Event type:	process
Pred_Rep.:	rotolare (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1: default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<rotolare_2>,<muoversi>:[Move])
Agentive:	<Nil>
Constitutive:	*manner* = {yes} *direction* = {down}
Telic:	*<Nil>*
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Move] [Cause_motion]**

Usem:	sciare //ski//
BC Number:	<Nil>
Template_Type:	**[Move]**
Unification_path:	**[Act]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	muoversi con la neve con gli sci
Event type:	process
Pred_Rep.:	sciare (<arg0>,<arg1>, <arg2>, <arg3>)
Selectional Restr.:	arg0 = [Human] arg1: shadow = <sci>:[Instrument] arg2: default = [Concrete_entity] arg3: default = [Concrete_entity]
Derivation:	*DenominalVerbNoun* (<sciare>, <sci>)
Formal:	*isa* (<sciare>,<muoversi>:[Move])
Agentive:	<Nil>
Constitutive:	*instrument* (<sciare>,<sci>: [Instrument]>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<salto> //jump//
BC Number:	<Nil>
Template_Type:	**[Move]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	il saltare, balzo
Event type:	process
Pred_Rep.:	saltare (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [concrete_entity] arg1: default = [concrete_entity] //location//
Derivation:	*EventVerb* (<salto>, <saltare>)
Formal:	*isa* (<salto>, <movimento>:[Move])
Agentive:	<Nil>
Constitutive:	*manner* = {yes} *instrument* = (<salto>, <gamba>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<girare_2> //to go round//
BC number:	<Nil>
Template_Type:	**[Move]**
Unification_path:	**[Act]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	percorrere in giro; es.: *girare l'isola, girare lo scoglio*
Event type:	process
Pred_Rep.:	girare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1 = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<girare_2>, <muoversi>:[Move])
Agentive:	<Nil>

Constitutive:	*direction* = {around}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Move] [Change_of_location]**

Usem:	<camminare_1> //walk//
BC Number:	<Nil>
Template_Type:	**[Move]**
Unification_path:	**[Act]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	muoversi, spostarsi da un punto ad un altro a piedi
Event type:	process
Pred_Rep.:	camminare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1: default = [Concrete_entity] arg2: default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<camminare_1>, <muoversi>:[Move])
Agentive:	<Nil>
Constitutive:	*direction* = {forward} *manner* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<passeggiata_1> //walk//
BC Number:	<Nil>
Template_Type:	**[Move]**
Unification_path:	**[Act]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	il passeggiare a piedi o su un mezzo di trasporto
Event type:	process
Pred_Rep.:	passeggiare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1: default = [Concrete_entity] //location// arg2: default = [Concrete_entity] //target location//
Derivation:	<Nil>
Formal:	*isa* (<passeggiata_1>, <camminare>:[Move])
Agentive:	<Nil>
Constitutive:	*direction* = { forward } *manner* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Cause motion

Linguistic Tests:	
Verb examples:	*move, push, throw, slide, skid, float, roll, bounce, walk, galop, trott, race, run, jump, drive, cycle, boat, etc.*
Noun examples	*throw, push, etc.*

Levin Class:	11.2 (Slide verbs), 11.4 (Carry verbs), 12 (Verbs of exerting force) , 17 (Verbs of Throwing)
Comments:	Processes which involve an individual causing motion.

Template

Usem:	1
BC Number:	*152*
Template_Type:	**[Cause_motion]**
Unification_Path:	**[Move | Cause$_{Agentive}$]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Living_entity] arg1 = [Concrete_entity] arg2: default = [Concrete_entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[Move])
Agentive	*agentive cause* (1,<Usem>:[Cause])
Constitutive:	*manner* = {yes, no} //optional// *direction* = {up, down, inward, outward, around, forward, backward} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Cause_motion] [Move]**

Examples

Usem:	tirare //pull//
BC Number:	<Nil>
Template_Type:	**[Cause_motion]**
Unification_Path:	**[Move | Cause$_{Agentive}$]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	far venire a sé
Event type:	process
Pred_Rep.:	tirare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Living_entity] arg1 = [Concrete_entity] arg2 : default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<tirare>,<muovere>)
Agentive	*agentive cause* (<tirare>,<fare>:[Cause])
Constitutive:	*direction* ={inward}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<spingere_2> //impel_2//
BC Number:	*152*

Template_Type:	**[Cause_motion]**
Unification_Path:	**[Move | Cause$_{Agentive}$]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	muovere allontanando da sé
Event type:	process
Pred_Rep.:	spingere (<arg0>,<arg1>, <arg2>)
Derivation:	<Nil>
Selectional Restr.:	arg0 = [Living_entity] arg1 = [Concrete_entity] arg2 : default = [Concrete_entity]
Formal:	*isa* (<spingere_2>,<muovere>)
Agentive	*agentive_cause* (<spingere_2>,<fare>:[Cause])
Constitutive:	*direction* = {forward}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<spinta_1> //push//
BC Number:	<Nil>
Template_Type:	**[Cause_motion]**
Unification_Path:	**[Move | Cause$_{Agentive}$]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	lo spingere; urto che provoca uno spostamento
Event type:	process
Pred_Rep.:	spingere (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Living_entity] arg1 = [Concrete_entity] arg2 : default = [Concrete_entity]
Derivation:	*EventVerb* (<spinta >,<spingere>)
Formal:	*isa* (<spinta_1>,<muovere>)
Agentive	*agentive_cause* (<spinta_1>,<spingere>:[Cause_motion])
Constitutive:	*direction* = {forward}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil> //process-result//

Usem:	<rotolare_1> //roll//
BC Number:	<Nil>
Template_Type:	**[Cause_motion]**
Unification_Path:	**[Move | Cause$_{Agentive}$]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	far muovere rotolando
Event type:	process
Pred_Rep.:	rotolare (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Living_entity] arg1 = [Concrete_entity] arg2: default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<rotolare_1>,<muovere >)
Agentive	*agentive_cause* (<rotolare_1>,<fare>:[Cause])
Constitutive:	*manner* = {yes} *direction* = {down}
Telic:	<Nil>

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Cause_motion] [Move]**

Cause act

Linguistic Tests:	
Verb examples:	*flash, bleed, spill, bang, buzz, ring,etc.*
Levin Class:	43.2 (Verbs of sound emission)
Comments:	This class includes verbs and nouns which are semantically causative, i.e. verbs in which an agent makes an event happen or induces something or somebody to act. For most of them, this event/action is expressed by the inchoative reading of the verb. Therefore, they undergo a syntactic inchoative/causative alternation. This template also encodes living entity activity and sound activity, in these cases, the selectional restrictions are, respectively: Selectional Restr.: arg1 = [Living_entity] arg0 = [Living_entity] Selectional Restr.: arg1 = [Concrete_entity]

Template

Usem:	1
BC Number:	*144, 10*
Template_Type:	**[Cause_act]**
Unification_path:	**[Act | CauseAgentive]**
Domain:	*General*
Semantic Class:	<Semantic Class>
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>) //or// Lex_Pred (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = **[Entity]** arg1 = **[Entity]** //the choice depends on particular type of verb.//
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Non_relational_act])
Agentive:	*agentive_cause* (1, <Usem>:[Cause])
Constitutive:	*connotation* ={positive, negative} //optional// *concerns* (1, <Usem>) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Cause_act] [Non_relational_act]**

Examples

Usem:	suonare_2 //sound//
BC Number:	*144*
Template_Type:	**[Cause_act]**
Unification_path:	**[Act | Cause$_{Agentive}$]**
Domain:	*General*
Semantic Class:	

Gloss:	far emettere un suono
Event type:	process
Pred _Rep.:	suonare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Concrete_entity] arg2:shadow = <sound>: [Stimuli]
Derivation:	DenominalNounVerb (<suono>, <suonare>)
Formal:	*result* (<suonare_2>, <suonare>:[Non_relational_act])
Agentive:	*agentive_cause* (<suonare_2>, <fare>:[Cause])
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Cause_act] [Non_relational_act]**

Speech act

Linguistic Tests:	
Verb Examples:	*say, speak, deny, talk, whisper, mutter, mumble, cry, enunciate, concede, shriek, groan, etc.*
Noun Examples:	*talk, utterance, etc.*
Levin Class:	37.5 (Talk verbs, e.g. speak), 37.3 (Verbs of manner of speaking, e.g. chatter), 37.2 (Tell verbs, e.g. tell), 37.7 (Some Say verbs, e.g. say, state)
Comments:	These verbs involve a speech act. They consist only in the utterance of an expression (e.g, *say, tell, whisper, mumble*, etc.) Following Bergler (1993), the main features along which these predicates vary concern the voice quality, which is expressed as a feature in the constitutive. We will limit the range to the following: *high* (for high volume, e.g. cry, and high pitch, e.g. shriek) *low* (for low volume, e.g. whisper, and low pitch, e.g. groan) *clear* (e.g. enunciate) *unclear* (e.g. mutter) The *polarity* feature expresses whether the speaker asserts the complement or its opposite. This is positive in the case of *insist*, and negative in the case of *deny*.

Template

Usem:	1
BC Number:	96, 123
Template_Type:	**[Speech_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1:default = [Entity] arg2:default =[Human]
Derivation:	<Nil> or //Erli's Code//
Formal:	*isa* (1,<speech_act>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*voice_quality* = {high, low, clear, unclear} //optional// *polarity* = {positive, negative} //optional//
Telic:	<Nil>

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	parlare_2 //talk_2//
BC Number:	123
Template_Type:	**[Speech_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	pronunciare parole
Event type:	process
Pred_Rep.:	parlare(<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1:default = [Entity] arg2:default =[Human]
Derivation:	<Nil>
Formal:	*isa* (<parlare_2>,<atto_linguistico>:[Speech_act])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	sussurrare //whisper//
BC Number:	<Nil>
Template_Type:	**[Speech_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	parlare sottovoce
Event type:	process
Pred_Rep.:	sussurrare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1:default = [Entity] arg2:default =[Human]
Derivation:	<Nil>
Formal:	*isa* (<sussurrare>,<parlare_2>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*voice_quality* ={low}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	borbottare //mumble//
BC Number:	<Nil>
Template_Type:	**[Speech_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	parlare sommessamente
Event type:	process
Pred_Rep.:	borbottare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human]

	arg1:default = [Entity] arg2:default =[Human]
Derivation:	<Nil>
Formal:	*isa* (<borbottare >,<parlare_2>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*voice_quality* ={low} *voice_quality* ={unclear}
Telic:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Synonymy:	<Nil>
Complex:	<Nil>

Usem:	negare //deny
BC Number:	165, 184
Template_Type:	**[Speech_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	dichiarare che una cosa non è vera
Event type:	process
Pred_Rep.:	negare (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1:default = [Entity] arg2:default =[Human]
Derivation:	<Nil>
Formal:	*isa* (<negare>,<dire>:[Speech_act])
Agentive:	<Nil>
Constitutive:	polarity = {*negative*}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<borbottio> //mumble//
BC Number:	<Nil>
Template_Type:	**[Speech_act]**
Template_Supertype:	**[Act]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	Un borbottare prolungato
Event type:	process
Pred_Rep.:	borbottare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human]
Derivation:	*EventVerb* (<borbottio>, <borbottare>)
Formal:	*isa* (<borbottio>, <parlare_2>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*voice_quality* ={low} *voice_quality* ={unclear}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Cooperative speech act

Linguistic Tests:	
Verb Examples:	*gossip, chitchat, discuss, etc.*
Noun Examples:	*discussion, dialogue, conversation, etc.*
Levin Class:	37.6 (Chitchat verbs, e.g. argue, converse)
Comments:	These verbs describe spoken interactions between two or more participants. They have the same constitutive features as **[speech_acts]**, plus the feature: *attitude* = {for, against}

Template

Usem:	1
BC Number:	*124*
Template_Type:	**[Cooperative_speech_act]**
Template_Supertype:	**[Speech_act]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1: default = [Abstract_entity] arg2 = [Human]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<speak>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*voice_quality* ={high, low, clear, unclear} //optional// *attitude* = {for, against} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	<dialogare_2> //speak_2//
BC Number:	<Nil>
Template_Type:	**[Cooperative_speech_act]**
Template_Supertype:	**[Speech_act]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	il conversare, colloquio, dialogo
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1: default = [Abstract_entity] arg2 = [Human]
Derivation:	<Nil>
Formal:	*isa* (<dialogare_2>,<parlare_3>:[Cooperative_speech_act])
Agentive:	<Nil>
Constitutive:	*attitude* = {for}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<conversazione_1> //conversation//
BC Number:	<Nil>
Template_Type:	**[Cooperative_speech_act]**
Template_Supertype:	**[Speech_act]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	il conversare, colloquio, dialogo
Event type:	process
Pred_Rep.:	conversare (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1: default = [Abstract_entity] arg2 = [Human]
Derivation:	*EventVer*b (<conversazione>, <conversare>)
Formal:	*isa* (<conversazione_1>,<parlare_3>:[Cooperative_speech_act])
Agentive:	<Nil>
Constitutive:	*attitude* = {for}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Reporting events

Linguistic Tests:	
Verb Examples:	*claim, inform, announce, report, allude, declare,etc.*
Noun Examples:	*announce, report, claim, etc.*
Levin Class:	37.7 (Some Say verbs, e.g. say, state)
Comments:	Reporting verbs are used to report the speech of others, to make claims, to provide information. They are very frequently used in newspaper texts. Reported speech is quite useful to establish the source and the accuracy of the information or commentaries on events. The main distinctions within the class involve the following: - *Polarity*: whether the speaker asserts the complement or its opposite. - *Presupposition*: whether the complement clause provides information which is new to the hearer - new (e.g. *announce*), or whether it is already known - presupposed (e.g. *insist*) - *Affectedness*: refers to the impact on the source in reporting the information. Can be positive, as in the case of *brag*, or negative as in the case of *confess*. - *Explicitness*: this binary feature expresses whether the utterance explicitely specifies or characterizes its propositional content: explicit with verbs such as *describe*, *say*, etc. and implicit with verbs such as allude. - *Strenght*: refers to the reliability of the information provided. It is high with announce, low with claim. - *Formality*: is a feature which is marked formal, informal. - *Audience*: also has two values: public (*announce*), private (*confide*).

Template

Usem:	1
BC Number:	91, 135, 165, 184
Template_Type:	**[Reporting_event]**
Template_Supertype:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication

Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event] or [Abstract_entity] arg2 : default = [Human]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<say>:[Speech_act])
Agentive:	<Nil>

Constitutive:	*polarity* = {*positive*, *negative*} //optional//
	presupposition = {*new*, *presupposed*} //optional//
	affectedness = {*positive*, *negative*} //optional//
	explicitness = {*explicit*, *implicit*} //optional//
	strenght = {*high*, *low*} //optional//
	formality = {*formal*, *informal}* //optional//
	audience= {*public*, *private* } //optional//

Telic:	*telic* (1, <Usem>:[Give_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	annunciare //announce//
BC Number:	*165*
Template_Type:	**[Reporting_event]**
Template_Supertype:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	dichiarare ufficialmente
Event type:	process
Pred_Rep.:	annunciare (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event] or [Abstract_entity] arg2: default = [Human]
Derivation:	<Nil>
Formal:	*isa* (<annunciare>,<dire>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*polarity* = {*positive*} *presupposition* ={*new*} *explicitness* = {*explicit*} *strenght* = {*high*} *audience* = {*public*}
Telic:	*telic* (<annunciare>, <informare>:[Give_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	dichiarare //declare
BC Number:	<Nil>
Template_Type:	**[Reporting_event]**
Template_Supertype:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	proclamare
Event type:	process

Pred_Rep.:	dichiarare(<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event] or [Abstract_entity] arg2 : default = [Human]
Derivation:	<Nil>
Formal:	*isa* (<dichiarare>,<dire>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*polarity* = {*positive*} *presupposition* = {*new*} *explicitness* = {*explicit*} *strenght* = {*high*} *formality* = {*formal*} *audience* = {*public*}
Telic:	*telic* (<dichiarare>, <informare>:[Give_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	alludere //allude
BC Number:	135, 165, 184
Template_Type:	**[Reporting_event]**
Template_Supertype:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	riferirsi a qualcosa in modo indiretto
Event type:	process
Pred_Rep.:	alludere (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event] or [Abstract_entity] arg2 : default = [Human]
Derivation:	<Nil>
Formal:	*isa* (<alludere>,<dire>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*polarity* ={*positive*} *presupposition* = {*new*} *explicitness* = {*implicit*} *strenght* = {*high*} *audience* = {*public*}
Telic:	*telic* (<alludere>, <informare>:[Give_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<annuncio_1> //announce//
BC Number:	<Nil>
Template_Type:	**[Reporting_event]**
Template_Supertype:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	l'annunciare
Event type:	process
Pred_Rep.:	annunciare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Abstract_entity] arg2 : default = [Human]
Derivation:	*EventVerb* (<annuncio>, <annunciare>)
Formal:	*isa* (<annuncio_1>,<dire>:[Speech_act])
Agentive:	<Nil>

Constitutive:	*polarity* = {*positive*} *presupposition* = {*new*} *explicitness* = {*explicit*} *strenght* = {*high*} *formality* = {*formal*} *audience*= {*public*}
Telic:	*telic* (<annuncio_1>, <informare>:[Give_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Commissives

Linguistic Tests:	
Verb Examples:	*promise, commit, threaten, vow, pledge, swear, refuse, consent, offer, bid, etc.*
Noun Examples:	*promise, commitment, etc.*
Levin Class:	
Comments:	This class encompasses the speech acts which involve the committment of the speaker to do something or not to do something. More specifically, these verbs carry a very strong component that refers to a future act by the speaker. Here, the commitment is interpreted as the purpose of the entire event, and it is thus encoded in the telic role. These verbs involve basically the same semantic distinctions in the constitutive as reporting verbs with the exception that *explicitness* does not apply here. Instead, we assume a feature *obligation*, which distinguishes different strength concerning how binding the commitment is for the speaker.

Template

Usem:	1
BC Number:	*number*
Template_Type:	**[Commissive_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event] or [Abstract_entity] arg2 = [Human]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<say>:[Speech_act])
Agentive:	<Nil>

Constitutive:	*polarity* = {*positive*, *negative*} //optional//
	presupposition = {*new*, *presupposed*} //optional//
	affectedness = {*positive*, *negative*} //optional//
	strenght = {*high*, *low*} //optional//
	formality = { *formal*, *informal}* //optional//
	audience = {*public*, *private*} //optional//
	obligation = {*weak, strong*}//optional//

Telic:	*Telic* (1, <Usem>:**[Event]**)
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)

Complex:	<Nil>

Examples

Usem:	promettere // promise
BC Number:	<Nil>
Template_Type:	**[Commissive_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	impegnarsi a fare qualcosa
Event type:	process
Pred_Rep.:	promettere (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event] or [Abstract_entity] arg2:default = [Human]
Derivation:	<Nil>
Formal:	*isa* (<promettere>,<dire>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*polarity* = {*positive*} *presupposition* = {*new*} *affectedness* = {*positive*} *strenght* = {*high*} *obligation* = {*weak*}
Telic:	*telic* (<promettere>, <Usem>:[Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	minacciare // threaten
BC Number:	<Nil>
Template_Type:	**[Commissive_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	impegnarsi a fare qualcosa di negativo per l'ascoltatore
Event type:	process
Pred_Rep.:	minacciare (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1: default = [Event] or [Abstract_entity] arg2 = [Human]
Derivation:	<Nil>
Formal:	*isa* (<minacciare>,<dire>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*polarity* = {positive} *affectedness* = {negative} *obligation* = {strong}
Telic:	*telic* (<minacciare>, <Usem>:[Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Directives

Linguistic Tests:	
Verb Examples:	*direct. request, ask. urge, require, forbid, prohibit, etc.*
Noun Examples:	*question, request, etc.*
Levin Class:	<Nil>
Comments:	This class encompasses the speech acts whereby the speaker expects the hearer to do or not to do something. More specifically, these verbs carry a very strong component that refers to a future act by the hearer, which is also encoded in the telic role. These verbs involve basically the same semantic distinctions in the constitutive as reporting verbs with the exception that *explicitness* does not apply here.

Template

Usem:	1
BC Number:	*20, 132*
Template_Type:	**[Directive_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event] or [Abstract_entity] arg2 = [Human]
Derivation:	<derivational relation>
Formal:	*isa* (1,<say>:[Speech_act])
Agentive:	<Nil>

Constitutive:	*polarity* = {positive, negative} //optional//
	presupposition = {new, presupposed} //optional//
	affectedness = {positive, negative} //optional//
	strenght = {high, low} //optional//
	formality = { formal, informal} //optional//
	audience = {public, private} //optional//

Telic:	*purpose* (1, <Usem>:[Act])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	<richiedere_1> //request_2//
BC Number:	*132*
Template_Type:	**[Directive_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	cercare di ottenere qualcosa da qualcuno
Event type:	process
Pred_Rep.:	richiedere(<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event] or [Abstract_entity] arg2: default = [Human]
Derivation:	<Nil>
Formal:	*isa* (<richiedere_2>,<domandare>:[Speech_act])
Agentive:	<Nil>

Constitutive:	*polarity* = {*positive*} *presupposition* = {*new*} *affectedness* = {*positive*} *formality* = {*formal*}
Telic:	*purpose* (<richiedere_2>, <esaudire>:[Relational_act])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	proibire //forbid
BC Number:	<Nil>
Template_Type:	**[Directive_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	impedire a qualcuno di fare qualchecosa
Event type:	process
Pred_Rep.:	proibire(<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Event] or [Abstract_entity] arg2:default = [Human]
Derivation:	<Nil>
Formal:	*isa* (<proibire>,<dire>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*polarity* = {*negative*} *presupposition* = {*presupposed*}
Telic:	*purpose* (<proibire>, <Usem>:[Act])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Expressives

Linguistic Tests:	
Verb Examples:	*thank, applaud, greet, praise, congratulate, welcome, denigrate, etc.*
Noun Examples:	*congratulation, thanks, greetings, etc.*
Levin Class:	33 (some members)
Comments:	This class encompasses the speech acts whereby the speaker expresses a psychological feeling towards something: an individual, an event or a proposition.

Template

Usem:	1
BC Number:	*131*
Template_Type:	**[Expressive_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>, <arg2>)

Selectional Restr.:	arg0 = [Human] arg1 = [Human] arg2 = [Event] or [Abstract_entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<say>:[Speech_act])
Agentive:	<Nil>

Constitutive:	*connotation* = {*positive*, *negative*} //optional//
	presupposition = {*new*, *presupposed*} //optional//
	affectedness = {*positive*, *negative*} //optional//
	strenght = {*high*, *low*} //optional//
	formality = {*formal*, *informal*} //optional//
	audience = {*public*, *private* } //optional//

Telic:	*telic* (1, <Usem>:[Act])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	ringraziare //thank
BC Number:	<Nil>
Template_Type:	**[Expressive_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	esprimere gratitudine
Event type:	process
Pred_Rep.:	ringraziare (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Human] arg2: default = [Event] or [Abstract_entity]
Derivation:	<Nil>
Formal:	*isa* (<ringraziare>,<dire>:[Speech_act])
Agentive:	<Nil>
Constitutive:	connotation = {*positive*} presupposition = {*presupposed*}
Telic:	*telic* (<ringraziare>, <compiacere>:[Relational_act])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<rimproverare_1> //reproach//
BC Number:	<Nil>
Template_Type:	**[Directive_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	riprendere con parole; sgridare
Event type:	process
Pred_Rep.:	rimproverare (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Human] arg2: default = [Event] or [Abstract_entity]
Derivation:	<Nil>
Formal:	*isa* (<rimproverare_1>,<dire>:[Speech_act])
Agentive:	<Nil>

Constitutive:	connotation = {*negative*} presupposition = {*presupposed*}
Telic:	*telic* (<rimproverare_1>, <Usem>:[Relational_act])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Declaratives

Linguistic Tests:	
Verb Examples:	*declare, name, call, christen, baptize, nominate, resign, adjourn, approve, confirm, etc.*
Noun Examples:	*nomination, declaration, approval, confirmation, etc.*
Levin Class:	Some verbs from 29.1 (Appoint verbs, e.g.: nominate),
Comments:	This class encompasses the speech acts which usually 'require an extralinguistic institution and a special position of the speaker and sometimes also of the hearer in that institution.' (p.205).

Template

Usem:	1
BC Number:	*number*
Template_Type:	**[Declarative_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] arg2: default = [Social_status] or [Proper_name]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<say>:[Speech_act])
Agentive:	<Nil>

Constitutive:	*polarity* = {*positive*, *negative*} //optional//
	strenght = {*high*, *low*} //optional//
	formality = {*formal*, *informal*} //optional//
	audience = {*public*, *private*} //optional//

Telic:	*telic* (1, <Usem>:[Act])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	<battezzare_3> //baptize//
BC Number:	<Nil>
Template_Type:	**[Declarative_speech_act]**
Unification_path:	**[Speech_act | Telic]**
Domain:	*General*
Semantic Class:	Communication

Gloss:	dare il nome
Event type:	process
Pred_Rep.:	battezzare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] arg2: default = [Proper_name]
Derivation:	<Nil>
Formal:	*isa* (<battezzare_3>,<atto_linguistico>:[Speech_act])
Agentive:	<Nil>
Constitutive:	*formality* = { *formal*} *audience* = {*public*}
Telic:	*telic* (<battezzare_3>,<nominare_1>:[Relational_act])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Psychological event

Linguistic Tests:	
Verb examples:	*be aware, feel, perceive, etc.*
Noun examples:	*awareness, (mental) disorder, consciousness, unconsciousness, etc.*
Levin Class:	
Comments:	Under this type we encode different types of events which are specific to the "human mind". This class encompasses both psychological and perception verbs. One could choose to encode all such events under this template. Verbs and nouns belonging to this class and to its subtypes differ with respect to the event type. Some of them are typically states (e.g. *love*, *hate*, *believe*, etc.), others are more process-like (e.g. *imagine*, *think*, etc.), others are borderline. In order to establish whether a verb expresses a state, the usual tests for stativity can be used: - state-denoting expressions usually resist to imperative: *?* Believe that Mary is ill!* - state-denoting expressions usually cannot occur felicitously with the progressive form: *?? John is believing that Mary is ill.*

Template

Usem:	1
BC Number:	*number*
Template_Type:	**[Psychological_event]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic Class:	Stative, Cognition, Perception, Emotion
Gloss:	//free//
Event type:	state, process
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>: [Psychological_event])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	<provare_7> //feel//
BC Number:	*<Nil>*
Template_Type:	**[Psychological_event]**
Unification_Path:	**[Event]**
Domain:	*General*
Semantic Class:	Emotion
Gloss:	provare in se stessi, sentire; es.: provare piacere, paura
Event type:	process

Pred_Rep.:	provare (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	isa (<provare_7>,<sentire>: [Psychological_event])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<sentire_1> //feel_3//
BC Number:	*114*
Template_Type:	**[Psychological_event]**
Unification_Path:	**[Event]**
Domain:	*General*
Semantic Class:	Emotion
Gloss:	provare in se stessi, sentire; es.: provare piacere, paura
Event type:	process
Pred_Rep.:	sentire (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	isa (<sentire_1>,<percepire>: [Psychological_event])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<consapevolezza> //awareness//
BC Number:	<Nil>
Template_Type:	**[Psychological_event]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic Class:	Stative
Gloss:	l'essere consapevole
Event type:	state
Pred_Rep.:	consapevolezza (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<consapevolezza>, <stato>:[State])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Cognitive event

Linguistic Tests:	

Verb examples:	*know, believe, ignore, be afraid, think, analyse, assess, audit, evaluate, etc.*
Noun examples:	*belief, knowledge, ignorance, analisi, critica, valutazione, scrutinio, ragionamento etc.*
Levin Class:	29.5 (Conjecture verbs), 34 (Assessment verbs)
Comments:	The members of this class involve mental activities. They relate an individual and a proposition. The feature *presupposed* (= presuppose the truth) is used to distinguish factive verbs like *know* (presupposed =yes) from non-factive ones like *believe* (presupposed=no). In fact they differ whether they presuppose the truth of the complement phrase.

Template

Usem:	1
BC Number:	*6, 54, 92, 128*
Template_Type:	**[Cognitive_event]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	//free//
Event type:	state, process
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Cognitive_event])
Agentive:	<Nil>
Constitutive:	*presupposed* = {yes, no} //optional //
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Cognitive_event] [Experience_ event]**

Examples

Usem:	<riflettere_2> //cerebrate_1//
BC Number:	*92*
Template_Type:	**[Cognitive_event]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	applicarsi con la mente; considerare con attenzione
Event type:	process
Pred_Rep.:	riflettere (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<riflettere_2>,<pensare>[Cognitive_event])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<analisi> //analysis//
BC Number:	<Nil>
Template_Type:	**[Cognitive_event]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	esame accurato
Event type:	process
Pred_Rep.:	analizzare (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	isa (<analisi>,<esame>[Cognitive_event])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	sapere_1 //know//
BC Number:	*84*
Template_Type:	**[Cognitive_event]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	//free//
Event type:	state
Pred_Rep.:	sapere (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Cognitive_fact]
Derivation:	<Nil>
Formal:	*isa* (<sapere_1>, <stato_cognitivo>: [Cognitive_event])
Agentive:	<Nil>
Constitutive:	*presupposed* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	ricordare_1 //remember//
BC Number:	*6*
Template_Type:	**[Cognitive_event]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	richiamare alla mente
Event type:	process, state
Pred_Rep.:	ricordare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<ricordare_1>, <sapere_1>:[Cognitive_event])
Agentive:	<Nil>
Constitutive:	*presupposed* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)

Complex:	<Nil>

Usem:	<credere_3> //believe_2//
BC Number:	*83*
Template_Type:	**[Cognitive_event]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	credere tutto cio' che si dice; - a tutto; credere che Gianni abbia ragione
Event type:	state
Pred_Rep.:	credere (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<credere_3>, <stato_cognitivo>: [Cognitive_event])
Agentive:	<Nil>
Constitutive:	*presupposed* = {no}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	ignorare_1 //ignore//
BC Number:	<Nil>
Template_Type:	**[Cognitive_event]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	non sapere
Event type:	state
Pred_Rep.:	ignorare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<ignorare_1>, <stato_cognitivo>:[Cognitive_event])
Agentive:	<Nil>
Constitutive:	*presupposed* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<ignoranza_1> //ignorance//
BC number:	<Nil>
Template_Type:	**[Cognitive_event]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic class:	Cognition
Gloss:	l'essere ignorante, il non sapere, il non conoscere
Event type:	state
Pred_Rep.:	ignoranza (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<ignoranza_1>, <stato_cognitivo>:[Cognitive_event])
Agentive:	<Nil>

Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<temere_1> //fear//
BC Number:	<Nil>
Template_Type:	**[Cognitive_event]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	avere timore che qlco avvenga o non avvenga , es.: temo che questo non si possa fare
Event type:	state
Pred_Rep.:	temere (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<temere_1>, <stato_cognitivo>:[Cognitive_event])
Agentive:	<Nil>
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Cognitive_event] [Experience_ event]**

Judgment

Linguistic Tests:	
Verb examples:	*believe, think, evaluate, regard, find, judge, etc.*
Levin Class:	29.5 (Conjecture verbs), 34 (Assessment verbs), 29.4 (Declare verbs, e.g.: presume, assume, fancy)
Comments:	These verbs have three arguments and may take a predicative argument, e.g. "Mary judged John innocent (= that John is innocent) ". In syntax, the function of the third argument is object predicate. They have a Telic dimension. The second argument of the telic relation is an **[Identificational_state]**: in the subject's view, the object is identified with the property of the small clause.

Template

Usem:	1
BC Number:	*44, 52, 155*
Template_Type:	**[Judgment]**
Unification_path:	**[Cognitive_event | Telic]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	//free//
Event type:	state, process
Pred_Rep.:	Lex_Pred (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]

	arg2 = [Property]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>: [Cognitive_ event])
Agentive:	<Nil>
Constitutive:	*presupposed* = {yes}
Telic:	*purpose* (1, <Usem>: [Identificational_state])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	<giudicare_2> //judge_2//
BC Number:	*155*
Template_Type:	**[Judgment]**
Unification_path:	**[Cognitive_event | Telic]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	ritenere, reputare; es.: *giudicare qlcu. onesto*
Event type:	state, process
Pred_Rep.:	Lex_Pred (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] arg2 = [Property]
Derivation:	<Nil>
Formal:	*isa* (<giudicare_2>, <pensare>: [Cognitive_ event])
Agentive:	<Nil>
Constitutive:	*presupposed* = {yes}
Telic:	*purpose* (<giudicare_2>, <Usem>: [Identificational_state])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<credere_4> //believe_2//
BC Number:	*83*
Template_Type:	**[Judgment]**
Unification_path:	**[Cognitive_event | Telic]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	credere che qlcu. sia onesto
Event type:	state, process
Pred_Rep.:	credere (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] arg2 = [Property]
Derivation:	<Nil>
Formal:	*isa* (<credere_4>, <pensare>: [Cognitive_ event])
Agentive:	<Nil>
Constitutive:	*presupposed* = {yes}
Telic:	*purpose* (<credere_4>, <Usem>: [Identificational_state])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Experience event

Linguistic Tests:	
Verb examples:	*love, hate,respect, detest, etc.*
Noun examples:	*feeling, anxiety, anger, love, happiness, shyness, shame, etc.*
Levin Class:	31.2 (Admire verbs) 31.3 (Marvel verbs)
Comments:	Under this type we encode those events which are brought about as the result of the subject experiencing some other event. The members of this class are transitive verbs with an experiencer subject.

Template

Usem:	1
BC Number:	*number*
Template_Type:	**[Experience_ event]**
Unification_Path:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic Class:	Emotion
Gloss:	//free//
Event type:	state, process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0= [Human] arg1= [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>: [Experience_event])
Agentive:	*agentive_experience* (1, <feel> : [Psychological_event])

Constitutive:	*connotation* = {positive, negative} //optional//
	strength= {high, low} //optional//
	property_of (1, <Adj_Usem>) //optional, for deadjectival nouns//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Cognitive_event] [Experience_ event]**

Examples

Usem:	<spaventarsi> //to be frighten//
BC Number:	<Nil>
Template_Type:	**[Experience_ event]**
Unification_Path:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic Class:	Emotion
Gloss:	essere preso da spavento; impaurirsi
Event type:	state, process
Pred_Rep.:	spaventarsi (<arg0>)
Selectional Restr.:	arg0= [Human]
Derivation:	<Nil>
Formal:	*isa* (<spaventarsi>, <emozione>: [Experience_event])
Agentive:	*agentive_experience* (<spaventarsi>, <provare> : [Psychological_event])
Constitutive:	*connotation* = {negative} *strength*= {high}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<piacere_1> //pleasure//
BC number:	<Nil>
Template_Type:	**[Experience_ event]**
Template_Supertype:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic class:	Emotion
Gloss:	sensazione gradevole derivante da una soddisfazione; godimento, diletto
Event type:	state
Pred_Rep.:	piacere (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Human]
Derivation:	EventVerb (<piacere>, <piacere>)
Formal:	*isa* (<piacere_1>, <sensazione>: [Experience_event])
Agentive:	*agentive_experience* (<piacere_1>, <provare> : [Psychological_event])
Constitutive:	*connotation* = {positive}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<sentimento_1> //feeling_1//
BC number:	*348*
Template_Type:	**[Experience_ event]**
Unification_path:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic class:	Emotion
Gloss:	stato o moto affettivo dell'anima
Event type:	state
Pred_Rep.:	sentimento (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1 : default = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<sentimento_1>, <stato_psicologico>: [Psychological_event])
Agentive:	*agentive_experience* (<sentimento_1>, <provare> : [Psychological_event])
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<passione_2> //passion//
BC number:	<Nil>
Template_Type:	**[Experience_ event]**
Unification_path:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic class:	Emotion
Gloss:	qualsiasi sentimento capace di dominare l'intera personalita'
Event type:	state
Pred_Rep.:	Passione (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1: default = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<passione_2>, <sentimento_1>: [Experience_ event])
Agentive:	*agentive_experience* (<passione_2>, <provare> : [Psychological_event])
Constitutive:	*strength* = {high}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)

Complex:	<Nil>

Usem:	<felicita'_1> //happiness //
BC number:	<Nil>
Template_Type:	**[Experience_ event]**
Unification_path:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic class:	Emotion
Gloss:	stato di chi e' felice, di chi ritiene soddisfatto ogni suo desiderio
Event type:	state
Pred_Rep.:	felicita' (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1: default = [Entity]
Derivation:	Nounadjective (<felicita'>, <felice>)
Formal:	*isa* (<felicita'_1>, <sentimento_1>: [Experience_event])
Agentive:	*agentive_ experience* (<felicita'_1>, <provare> : [Psychological_event])
Constitutive:	*connotation* = {positive} *strength*= {high} *property_ of* (<felicita'_1>, <felice>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<rabbia_2> //anger//
BC number:	<Nil>
Template_Type:	**[Experience_ event]**
Unification_path:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic class:	Emotion
Gloss:	violenta irritazione provocata da gravi contrarieta'
Event type:	state
Pred_Rep.:	rabbia (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1:default = [Human] arg2 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<rabbia_2>, <sentimento_1>: [Experience_ event])
Agentive:	*agentive_ experience* (<rabbia_2>, <provare> : [Psychological_event])
Constitutive:	*connotation* = {negative} *strength*= {high}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<nervosismo> //nervousness//
BC number:	<Nil>
Template_Type:	**[Experience_ event]**
Unification_path:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic class:	Emotion
Gloss:	stato di agitazione, tensione nervosa
Event type:	state
Pred_Rep.:	nervosismo (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1: default = [Entity]
Derivation:	Nounadjective (<nervosismo >, <nervoso>)

Formal:	*isa* (<nervosismo>, <stato_psicologico>: [Psychological_event])
Agentive:	*agentive_experience* (<nervosismo>, <provare> : [Psychological_event])
Constitutive:	*connotation* = {negative} *property_of* (<nervosismo>, <nervoso>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<sensazione_3> //feeling//
BC number:	<Nil>
Template_Type:	**[Experience_ event]**
Unification_path:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic class:	Emotion
Gloss:	l'avvertire, il presentire qualcosa; impressione
Event type:	state, process
Pred_Rep.:	sensazione (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [Human] arg1: default = [Entity]
Derivation:	EventVerb (<sensazione>, <sentire>)
Formal:	*isa* (<sensazione_3>, <stato_psicologico>: [Psychological_event])
Agentive:	*agentive_experience* (<sensazione_3>, <provare> : [Psychological_event])
Constitutive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	<Nil>

Usem:	<temere_2> //fear//
BC Number:	<Nil>
Template_Type:	**[Experience_ event]**
Unification_path:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic Class:	Emotion
Gloss:	avere timore di qlco, es.: temo il buio
Event type:	state
Pred_Rep.:	temere (<arg0>, < arg1>)
Derivation:	<Nil>
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Formal:	*isa* (<temere_2>, <sentimento_1>:[Experience_ event])
Agentive:	*agentive_experience* (<temere_2>, <provare> : [Psychological_event])
Constitutive:	*connotation* = {negative}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Cognitive_event] [Experience_ event]**

Usem:	<terrore_2> //dread//
BC number:	<Nil>
Template_Type:	**[Experience_ event]**
Unification_path:	**[Psychological_ event |Agentive]**
Domain:	*General, Psychology*
Semantic class:	Emotion
Gloss:	sentimento di forte paura
Event type:	state
Pred_Rep.:	terrore (<arg0>, <arg1>)

Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<terrore_2>, <sentimento_1>:[Experience_ event])
Agentive:	*agentive_ experience* (<terrore_2>, <provare> : [Psychological_event])
Constitutive:	*strength* = {high} *connotation* = {negative}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...,<Usemn>)
Complex:	**[Cognitive_event] [Experience_ event]**

Cause experience event

Linguistic Tests:	
Verb examples:	*frighten, bother,amuse, afflict, astonish, impress, shock, etc.*
Noun examples:	*affliction, etc.*
Levin Class:	31.1 (Amuse verbs, e.g.: afflict, alarm)
Comments:	The members of this class are transitive verbs whose object is the experiencer of the emotion and whose subject is the cause of the change in psychological state.

Template

Usem:	1
BC Number:	*number*
Template_Type:	**[Cause_experience_ event]**
Unification_Path:	**[Psychological_ event | Cause$_{\text{Agentive}}$]**
Domain:	*General, Psychology*
Semantic Class:	Emotion
Gloss:	//free//
Event type:	process, state
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0= [Entity] arg1= [Animal] [Human]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Psychological_event])
Agentive:	*agentive_cause* (1, <Usem>:[Cause])
Constitutive:	*connotation* = {positive, negative} //optional// *strength*= {high, low} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	<spaventare> //frighten//
BC Number:	<Nil>
Template_Type:	**[Cause_experience_event]**
Unification_Path:	**[Experience_event | Cause$_{\text{Agentive}}$]**
Domain:	*General, Psychology*

Semantic Class:	Emotion
Gloss:	incutere spavento
Event type:	process
Pred_Rep.:	spaventare (<arg0>,<arg1>)
Selectional Restr.:	arg0= [Entity] arg1= [Animal] [Human]
Derivation:	<Nil>
Formal:	*isa* (<spaventare>, <suscitare_emozioni>:[Cause_experience_event])
Agentive:	*agentive_cause* (<spaventare>, <incutere>:[Cause])
Constitutive:	*connotation* = {negative} *strength*= {high}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<spavento> //fright//
BC Number:	<Nil>
Template_Type:	**[Cause_experience_ event]**
Unification_Path:	**[Experience_ event | CauseAgentive]**
Domain:	*General, Psychology*
Semantic Class:	Emotion
Gloss:	paura violenta e improvvisa causata dalla sensazione o dalla vista di un pericolo o di un danno
Event type:	process, state
Pred_Rep.:	spaventare (<arg0>, <arg1>)
Selectional Restr.:	arg0= [Human] arg1:default = [Entity]
Derivation:	EventVerb (<spavento>, <spaventare>)
Formal:	*isa* (<spavento>, <paura>: [Experience_event])
Agentive:	*agentive_cause* (<spavento>, <incutere>:[Cause])
Constitutive:	*connotation* = { negative } *strength*= {high}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Perception

Linguistic Tests:	
Verb Examples:	*hear, smell, etc.*
Noun Examples:	*sight, look, etc.*
Levin Class:	30.1 (See verb, e.g. detect, see, notice), 30.4 (Stimulus subject, e.g. look, smell)
Comments:	Processes involving an experiencing relation, whereby the perception involves the senses of a living entity. The instrument of perception (e.g. eyes for see is encoded in the Constitutive quale). Under this template we include both volitional (e.g. look) and non-volitional (e.g. see) events. The difference is expressed as a constitutive feature.

Template

Usem:	1
BC Number:	*105*

Template_Type:	**[Perception]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic Class:	Perception
Gloss:	//free//
Event type:	process
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Animal] [Human] arg1:default = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[Perception]>)
Agentive:	<Nil>
Constitutive:	*instrument* (1, <Usem>:[Body_part]) //optional// *intentionality* ={yes,no} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	<guardare_2> //look_2//
BC Number:	*105*
Template_Type:	**[Perception]**
Template_Supertype:	**[Psychological_event]**
Domain:	*General*
Semantic Class:	Perception
Gloss:	osservare con attenzione
Event type:	process
Pred_Rep.:	guardare (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Animal] [Human] arg1:default = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<guardare_2>,<percepire>: [Psychological_event])
Agentive:	<Nil>
Constitutive:	*instrument* (<guardare_2>, <occhio>:[body_part]) *intentionality* ={yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Modal event

Linguistic Tests:	
Verb examples:	*want, need, desire, etc.*
Noun examples:	*want, need, desire, intention, will, wish, determination, etc.*
Levin Class:	32 (verbs of Desire)
Comments:	Two place relation between an individual and an event. The latter is modally subordinated.

Template

Usem:	1
BC Number:	*59, 86, 103, 130, 146*
Template_Type:	**[Modal_event]**
Unification Path:	**[Psychological_event |Telic]**
Domain:	*General*
Semantic Class:	stative
Gloss:	//free//
Event type:	state
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[Psychological_event])
Agentive:	<Nil>
Constitutive:	*possible* = {yes} *strength* = {high, low} //optional//
Telic:	*telic* (1,<Usem>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	aspettarsi //expect//
BC Number:	*59*
Template_Type:	**[Modal_event]**
Unification Path:	**[Psychological_event |Telic]**
Domain:	*General*
Semantic Class:	stative
Gloss:	prevedere qualcosa
Event type:	state
Pred_Rep.:	aspettarsi (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<aspettarsi>,<prevedere>:[Cognitive_event])
Agentive:	<Nil>
Constitutive:	*possible* = {yes}
Telic:	*telic* (<aspettarsi>,<Usem>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<desiderio_1> //desire//
BC Number:	<Nil>
Template_Type:	**[Modal_event]**
Unification Path:	**[Psychological_event |Telic]**
Domain:	*General*
Semantic Class:	stative
Gloss:	il desiderare
Event type:	state
Pred_Rep.:	desiderio (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	EventVerb (<desiderio>,<desiderare>)
Formal:	*isa* (<desiderio_1>,<aspirazione>:[Modal_event])

Agentive:	<Nil>
Constitutive:	*possible* = {yes}
Telic:	*telic* (<desiderio_1>,<Usem>: [Event])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Change

Linguistic Tests:	
Verb Examples:	*change, become*
Levin Class:	26.6 (Turn verbs, e.g.: alter, change, transform)
Comments:	Verbs belonging to this type express a basic transition from one state to another. The agentive role encodes a basic event which brings about the resulting state, encoded in the formal with the relation result.

Template

Usem:	1
BC Number:	*28, 115, 164*
Template_Type:	**[Change]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [entity] arg1 : default = [entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[Change])
Agentive:	<nil>
Constitutive:	*resulting_state* (1,<Usem>:[State])
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	*Collocates*(<Usem1>,...<Usemn>)
Complex:	**[Change] [Cause_change]**

Examples

Usem:	<cambiare> //change//
BC Number:	*164*
Template_Type:	**[Change]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic Class:	Change
Gloss:	mutare
Event type:	transition
Pred_Rep.:	cambiare (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [entity] arg1 : default = [entity]
Derivation:	<Nil>
Formal:	*isa* (<cambiare>,<evento>:[Event])
Agentive:	<nil>
Constitutive:	*resulting_state* (<cambiare>,<diverso>:[State])
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	*Collocates*(<Usem1>,...<Usemn>)
Complex:	**[Change] [Cause_change]**

Usem:	diventare //become
BC Number:	*28*
Template_Type:	**[Change]**
Template_Supertype:	**[Event]**
Domain:	*General*
Semantic Class:	Change
Gloss:	mutare un attributo
Event type:	transition
Pred_Rep.:	diventare (<arg0>, <arg1>)
Selectional Restr.:	arg0 = [entity] arg1 = [entity]
Derivation:	<nil>
Formal:	*isa* (<diventare>,<evento>:[Event])
Agentive:	<nil>
Constitutive:	*resulting_state* (<diventare>,<diverso>:[State])
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<nil>

Relational change

Linguistic Tests:	
Examples:	*link, join, unit, connect, etc.*
Levin Class:	22.1 (Mix verbs, e.g.: join, link, only unaccusative), 29.1, 29.3 for verbs that apply only to living entities
Comments:	

Template

Usem:	1
BC Number:	*number*
Template_Type:	**[Relational_change]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Entity] arg1:default = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Change])
Agentive:	*agentive* (1, <Usem>:[Change])
Constitutive:	*resulting_state* (1, <Usem>:[Relational_state]) *duration*={temporary, persistent}//optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Relational_change] [Cause_relational_change]**

Examples

Usem:	<unire > //(unirsi) join//
BC Number:	<Nil>
Template_Type:	**[Relational_change]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	congiungersi con qualcuno; legarsi reciprocamente con vincoli di natura morale o legale
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Entity] arg1:default = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<unire>, <cambiare>:[Change])
Agentive:	*agentive* (<unire>, <Usem>:[Change])
Constitutive:	*resulting_state* (<unire>, <unito>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Relational_change] [Cause_relational_change]**

Constitutive change

Linguistic Tests:	
Verb Examples:	*attach, merge, blend, combine, detach, etc.*
Levin Class:	
Comments:	They are related to create verbs, whereby two entities which are related in a part-of relation produce a new entitity (e.g. *merge*, *blend*, *combine*). These verbs indicate that an individual becomes a member of something, or ceases to be a member of something. A constitutive feature *meronym* is used as in Constitutive_state: *Meronym* =Yes - some kind of part_of / member_of relation holds between the 2 arguments *Meronym* =No - no relation holds between the 2 arguments.

Template

Usem:	1
BC Number:	*116*
Template_Type:	**[Constitutive_change]**
Unification_path:	**[Relational_change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Entity] arg1: default = [Entity]
Derivation:	<derivational relation>
Formal:	*isa* (1, <Usem>:[Change])
Agentive:	*agentive* (1, <Usem>:[Event])
Constitutive:	*resulting_state* (1, <Usem>:[Constitutive_state]) *meronym* = {yes, no} *instrument* (1,<Usem>) //optional//
Telic:	<Nil>

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Constitutive_change] [Cause_constitutive_change]**

Examples

Usem:	iscrivere //(iscriversi) enroll//
BC Number:	<Nil>
Template_Type:	**[Constitutive_change]**
Unification_path:	**[Relational_change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	entrare a far parte di un gruppo mediante iscrizione
Event type:	transition
Pred_Rep.:	iscrivere (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1:default = [Human_group] | [Institution]
Derivation:	<Nil>
Formal:	*isa* (<iscriversi>, <aderire>:[Relational_change])
Agentive:	*agentive* (<iscriversi>, <azione>:[Act])
Constitutive:	*resulting_state* (<iscriversi>, <appartenza>:[Constitutive_state]) *meronym* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<licenziare> // (licenziarsi) resign//
BC Number:	<Nil>
Template_Type:	**[Constitutive_change]**
Unification_path:	**[Relational_change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	dimettersi da un gruppo o istituzione
Event type:	transition
Pred_Rep.:	licenziare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1:default = [Human_group] | [Institution]
Derivation:	<Nil>
Formal:	*isa* (<licenziare>, <cambiare>:[Change])
Agentive:	*agentive* (<licenziare>, <azione>:[Act])
Constitutive:	*resulting_state* (<licenziare>, <disoccupato>:[Constitutive_state]) *meronym* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<attaccarsi_1> //stick//
BC Number:	<Nil>
Template_Type:	**[Constitutive_change]**
Unification_path:	**[Relational_change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	unirsi di due o più cose
Event type:	transition
Pred_Rep.:	attaccare (<arg0>, < arg1>)

Selectional Restr.:	arg0 = [Entity] arg1: default = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<attaccarsi_1>, <unirsi>:[Relational_change])
Agentive:	*agentive* (<attaccarsi_1>, <attaccare>:[Cause_constitutive_change])
Constitutive:	*resulting_state* (<attaccarsi_1>, <attaccato>:[Relative]) *meronym* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Constitutive_change] [Cause_constitutive_change]**

Usem:	scollarsi //unglue
BC Number:	<Nil>
Template_Type:	**[Constitutive_change]**
Unification_path:	**[Relational_change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	separarsi
Event type:	transition
Pred_Rep.:	scollare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1: default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<scollarsi>, <separarsi>:[Change])
Agentive:	*agentive* (<scollarsi>, <scollare>:[Cause_constitutive_change])
Constitutive:	*resulting_state* (<scollarsi>, <scollato>:[Constitutive_state]) *meronym* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Constitutive_change] [Cause_constitutive_change]**

Change of state

Linguistic Tests:	
Examples:	*break, improve*
Levin Class:	45.1 (break verbs, e.g.: crash, fracture), 45.2 (bend verbs, e.g.: fold, wrinkle), 45.3 (cooking verbs, e.g.: bake, fry), 45.4 (other verbs, e.g.: empty, dry, brown), (only unaccusatives)
Comments:	These verbs involve a change in the state of an entity. The specification of which specific state is achieved as a result may be provided by an adjective. The constitutive features *connotation* and *partitive* indicate respectively whether the connotation is positive or negative, and whether the change of state concerns part of the object (*break*), or the entire integrity (*burn to ashes*).

Template

Usem:	1
BC Number:	*31, 70, 71, 80, 151, 163, 168, 187*
Template_Type:	**[Change_of_state]**
Unification_Path:	**[Relational_change | Agentive]**
Domain:	*General*

Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>)
Selectional Restr.:	arg0 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa (1,*<Usem>:[Change])
Agentive:	*agentive (1,*<Usem>:[Event])

Constitutive:	*resulting_state* (1,<Usem>)
	Connotation={positive, negative} //optional//
	Partitive={yes,no} //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Change_of_state] [Cause_change_of_state]**

Examples

Usem:	rompersi //break
BC Number:	*3*
Template_Type:	**[Change_of_state]**
Unification_Path:	**[Relational_change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	cessare di essere integro
Event type:	transition
Pred_Rep.:	rompere (<arg0>)
Selectional Restr.:	arg0 = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<rompersi>,<cambiare>:[Change])
Agentive:	*agentive (*<rompersi>,<succedere>:[Event])
Constitutive:	*resulting_state* (<rompersi>,<rotto>) *connotation*={negative} *partitive*={yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Change_of_state] [Cause_change_of_state]**

Change of value

Linguistic Tests:	
Examples:	*increase, decrease, etc.*
Levin Class:	45.6 (calibratable change of state verbs, eg.: appreciate, gain, grow, differ, diminish) unaccusatives only.
Comments:	These verbs involve a change in the value of an entity. The direction of the value change is expressed in the constitutive role.

Template

Usem:	1
BC Number:	*10, 41, 127, 157*
Template_Type:	**[Change_of_value]**
Unification_Path:	**[Relational_change | Agentive]**

Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 : default = [Unit_of_measurement] or [Amount]
Derivation:	<derivational relation>
Formal:	*isa* (1,<Usem>:[Change])
Agentive:	*agentive* (1,<Usem>:[Event])
Constitutive:	*resulting_state* (1,<Usem>) *direction*= {up, down}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Change_of_value] [Cause_change_of_value]**

Examples

Usem:	aumentare_3 //increase_1//
BC Number:	*10* (200093597)
Template_Type:	**[Change_of_value]**
Unification_Path:	**[Relational_change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	accrescersi
Event type:	transition
Pred_Rep.:	aumentare (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 : default = [Unit_of_measurement]
Derivation:	<Nil>
Formal:	*isa* (<aumentare_3>,<cambiare>:[Change])
Agentive:	*agentive* (<aumentare_3>,<cambiamento>:[Change])
Constitutive:	*resulting_state* (<aumentare_3>,<maggiore>) *direction*={up}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Change_of_value] [Cause_change_of_value]**

Change of possession

Linguistic Tests:	Tests for di-transititivity for argument structure.
Verb examples:	*acquire, find, get rid of, lose, etc.*
Noun examples:	*loss, acquisition, etc.*
Levin Class:	10.5 Possessional deprivation (Steal verbs, e.g.: capture, extort)
Comments:	Verbs of change of possession describe a transfer which can be specified as to whether the individual acquires the possession of a concrete entity. The consistutive may indicate various features: *legal* (yes, no), *temporary* (yes, no). Many of these verbs are cross-classified with **[Acquire_knoweldge]**.

Template

Usem:	1
BC Number:	*23, 35, 40, 61, 4, 48, 79*
Template_Type:	**[Change_of_possession]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Possession
Gloss:	//free//
Event type:	transition
Pre_Rep.:	Lex_Pred(<arg0>, < arg1>) Lex_Pred(<arg0>, < arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Concrete_entity] arg2:default = [Concrete_entity]
Derivation:	<derivational relation>
Formal:	*isa* (1, <Usem>: [Change])
Agentive:	*agentive* (1, <Usem>: [Event])

Constitutive:	*resulting_state* (1, <have>: [Stative_possession])
	legal ={yes, no} //optional//
	duration ={temporary, persistent} //optional//

Telic:	<nil>
Synonymy:	<Nil>
Collocates:	Collocates(<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	trovare_1 //find
BC Number:	*35*
Template_Type:	**[Change_of_possession]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Possession
Gloss:	entrare in possesso di qualcosa
Event type:	transition
Pred_Rep.:	trovare (<arg0>, < arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Concrete_entity] arg2:default = [Concrete_entity]
Derivation:	<nil>
Formal:	*isa* (<trovare_1>, <ottenere>: [Change_of_possession])
Agentive:	*agentive* (<trovare_1>, <cercare>:[Purpose_act])
Constitutive:	*resulting_state* (<trovare_1>, <avere>: [Stative_possession])
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	Collocates(<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	perdere //loose//
BC Number:	*4*
Template_Type:	**[Change_of_possession]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Possession
Gloss:	restare privo
Event type:	transition
Pred_Rep.:	perdere (<arg0>, < arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human]

	arg1 = [Concrete_entity] arg2:default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<perdere>, <restare_privo>: [Change_of_possession])
Agentive:	*agentive* (<perdere>, <succedere>: [Event])
Constitutive:	*resulting_state* (<perdere>, <avere> [Stative_possession])
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	Collocates(<Usem1>,...<Usemn>)
Complex:	<nil>

Usem:	<perdita_1> //loss//
BC Number:	
Template_Type:	**[Change_of_possession]**
Unification_path:	**[Stative_possession | Agentive]**
Domain:	*General*
Semantic Class:	Possession
Gloss:	il perdere
Event type:	transition
Pred_Rep.:	perdere (<arg0>, < arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Concrete_entity] arg2:default = [Concrete_entity]
Derivation:	*EventVerb* (<perdita>, <perdere>)
Formal:	*isa* (<perdita_1>, <evento> [Event])
Agentive:	*agentive*(<perdita_1>, <perdere>:[Change_of_possession])
Constitutive:	*resulting_state* (<perdita_1>, <possesso>: [Stative_possession])
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	Collocates(<Usem1>,...<Usemn>)
Complex:	<nil>

Transaction

Linguistic Tests:	
Verb examples:	*take, borrow, give, lend, sell, trade, exchange, swap, etc.*
Noun examples:	*trade, exchange, swap, sale, etc.*
Levin Class:	13.1 (Give verbs, e.g.: lend, sell, rent), 13.5.1(Get verbs e.g.: buy, order), 13.5.2 (Obtain verbs e.g.: accept, acquire), 13.2 (Contribute verbs e.g.: donate, submit, transfer)
Comments:	Verbs encoding give change of possession describe a transfer from the agent to another individual (e.g., give, transfer, sell). The resulting state allows to make an inference relative to the subject, namely the individual has or does not have possession of the object. Test for reciprocal verbs: - *John exchanged books with Mary*. - *John and Mary exchanged books*. Verbs encoding reciprocal change of possession describe a transfer from the agent to another individual and a symmetric transfer from the other individual to the agent. They are marked with a four position argument structure and a feature *reciprocal* ={yes} in the Constitutive role.

Template

Usem:	1
BC Number:	*37, 66, 63, 99, 147, 159*
Template_Type:	**[Transaction]**
Template_Supertype:	**[Change_of_possession]**
Domain:	*General*
Semantic Class:	Possession
Gloss:	//free//
Event type:	transition
Derivation:	<derivational relation>

Selectional Restr.:	arg0 = [Living_entity]
	arg1 = [Concrete_entity]
	arg2:default = [Living_entity]
	arg3:default = [Money] //for monetary transfers only//
	// or for reciprocal verbs//
	arg0 = [Living_entity]
	arg1: default = [Living_entity]
	arg2 = [Concrete_entity]
	arg3: default = [Concrete_entity]

Pred_Rep.:	Lex_Pred(<arg0>, < arg1>,<arg2>,<arg3>) //or//
	Lex_Pred(<arg0>, < arg1>,<arg2>)

Formal:	*isa* (1,<Usem>: [Change_of_possession])
Agentive:	agentive (1, <Usem>:[Act])

Constitutive:	*resulting_state* (1,<Usem>:[Stative_possession])
	legal ={yes, no}//optional//
	duration ={persistent, temporary}//optional//
	instrument (1,<Usem1>) // optional//
	reciprocal ={yes} //optional//

Telic:	<nil>
Synonymy:	<Nil>
Collocates:	Collocates(<Usem1>,...<Usemn>)
Complex:	<nil>

Examples

Usem:	dare_1 // give//
BC Number:	*37*
Template_Type:	**[Transaction]**
Template_Supertype:	**[Change_of_possession]**
Domain:	*General*
Semantic Class:	Possession
Gloss:	trasferire qualcosa a qualcuno
Event type:	transition
Pred_Rep.:	dare (<arg0>, < arg1>,<arg2>,<arg3>)
Selectional Restr.:	arg0 = [Living_entity] arg1 = [Concrete_entity] arg2:default = [Living_entity] arg3:default = [Money]
Derivation:	<Nil>
Formal:	*isa* (<dare_1>,<cedere>:[Change_of_possession] >)
Agentive:	*agentive* (<dare_1>,<agire>[Act])
Constitutive:	*resulting_state* (<dare_1>,<avere>:[Stative_possession]>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates(<Usem1>,...<Usemn>)
Complex:	<nil>

Usem:	scambiare_1 //to exchange//
BC Number:	*<Nil>*

Template_Type:	**[Transaction]**
Template_Supertype:	**[Change_of_possession]**
Domain:	*General*
Semantic Class:	Possession
Gloss:	trasferimento reciproco di beni
Event type:	transition
Pred_Rep.:	scambiare(<arg0>, <arg1>,<arg2>, <arg3>)
Selectional Restr.:	arg0 = [Living_entity] arg1: default = [Living_entity] arg2 = [Concrete_entity] arg3: default = [Concrete_entity]
Derivation:	<nil>
Formal:	*isa* (<scambiare_1>,<acquisire>:[Change_of_possession])
Agentive:	*agentive* (<scambiare_1>,<agire>:[Act])
Constitutive:	*resulting_state* (<scambiare_1>,<avere>:[Stative_possession]) *reciprocal*={yes}
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<scambio_1> //exchange//
BC Number:	<Nil>
Template_Type:	**[Transaction]**
Template_Supertype:	**[Change_of_possession]**
Domain:	*General*
Semantic Class:	Possession
Gloss:	lo scambiare, lo scambiarsi, l'essere scambiato
Event type:	transition
Pred_Rep.:	scambiare(<arg0>, <arg1>,<arg2>, <arg3>)
Selectional Restr.:	arg0 = [Living_entity] arg1: default = [Living_entity] arg2 = [Concrete_entity] arg3: default = [Concrete_entity]
Derivation:	EventVerb (<scambio>, <scambiare>)
Formal:	*isa* (<scambio_1>,<avere>:[Change_of_possession])
Agentive:	*agentive* (<scambio_1>,<scambiare>:[Transaction])
Constitutive:	*resulting_state* (<scambio_1>,<avere>:[Stative_possession]) *reciprocal* ={yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates(<Usem1>,...<Usemn>)
Complex:	<Nil>

Change of location

Linguistic Tests:	
Verb examples:	*arrive, fall, enter, leave, exit, recede, shift, go, go up, go down, etc.*
Noun examples:	*arrival, fall, etc.*
Levin Class:	51.1. (Verbs of Inherently directed motion, e.g.: arrive, fall); 51.2. (Leave verbs, e.g.: abandon, leave)
Comments:	In this template, we encode those verbs for which the resulting state of the change of location seems more relevant than manner of motion. The target Usem of the resulting state relation is of type **[Stative_location]**. The feature *direction* differentiates the movement implied in the change of location and marked in the *agentive_cause* relation.

Template

Usem:	1
Usyn:	
BC number:	*26, 46, 33, 36, 140*
Template_Type:	**[Change_of_location]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>) //or// Lex_Pred (<arg0>, < arg1>, < arg2>)

Selectional Restr.:	arg0 = [Concrete_entity]
	arg1: default = [Concrete_entity]
	//or//
	arg0 = [Concrete_entity]
	arg1: default = [concrete_entity] // source location//
	arg2: default = [concrete_entity] // target location//

Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>: [Change])
Agentive:	*agentive* (1,<Usem>: [Move])

Constitutive:	*resulting state* (1,<Usem>:[Stative_location])
	direction = {up, down, inward, outward, around, forward, backward, underspecified}
	duration = {persistent, temporary} //optional //
	contact = {yes, no} //optional //
	manner = {yes, no} //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	arrivare //arrive
BC number:	*46*
Template_Type:	**[Change_of_location]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	giungere in un luogo
Event type:	transition
Pred_Rep.:	arrivare (<arg0>, < arg1>, <arg2>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1: default = [Concrete_entity] arg2: default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<arrivare>, <raggiungere>:[Change_of_location])
Agentive:	*agentive* (<arrivare>, <muoversi>:[Move])
Constitutive:	*resulting state* (<arrivare>, <stare>:[Stative_location]) direction = {underspecified}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	entrare //go in//
BC number:	*26*
Template_Type:	**[Change_of_location]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	muoversi dentro un luogo
Event type:	transition
Pred_Rep.:	entrare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1:default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<entrare>,<spostarsi>:[Move])
Agentive:	*agentive* (<entrare>,<muoversi>:[Move])
Constitutive:	*resulting state* (<entrare>,<stare >:[Stative_location]) *direction* = {inward}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	uscire //leave, exit//
BC number:	*33*
Template_Type:	**[Change_of_location]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	muoversi fuori da un luogo
Event type:	transition
Pred_Rep.:	uscire (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1 : default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<uscire>,<spostarsi>:[Move])
Agentive:	*agentive*(<uscire>, <muoversi>:[Move])
Constitutive:	*resulting state* (<uscire>,<stare>:[stative_location]) *direction* = {outward}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	partire //depart_1//
BC number:	*36*
Template_Type:	**[Change_of_location]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	lasciare un luogo
Event type:	transition
Pred_Rep.:	partire (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1: default = [Concrete_entity] //source location// arg2: default = [Concrete_entity] //goal location//
Derivation:	<Nil>
Formal:	*isa* (<partire>,<spostarsi>:[Move])

Agentive:	*agentive* (<partire>,<muoversi>:[Move])
Constitutive:	*resulting state* (<partire>,<stare>:[Stative_location]) *direction* = {outward}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<circondare_2> //surround//
BC number:	<Nil>
Template_Type:	**[Change_of_location]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	muoversi intorno a qualcosa
Event type:	transition
Pred_Rep.:	circondare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Concrete_entity] arg1 = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<circondare_2>,<spostarsi>:[Move])
Agentive:	*agentive* (<circondare_2>, <muoversi>:[Move])
Constitutive:	*resulting state* (<circondare_2>,<stare>:[Stative_location]) *direction* = {around} *temporary* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	andare_1 //come_1//
BC Number:	*50*
Template_Type:	**[Change_of_location]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	spostarsi in un luogo
Event type:	transition
Pred_Rep.:	andare (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [concrete_entity] arg1: default = [concrete_entity] //source location// arg2: default = [concrete_entity] //target location//
Derivation:	<Nil>
Formal:	*isa* (<andare_1>,<spostarsi>:[Move])
Agentive:	*agentive* (<andare_1>,<muoversi>:[Move])
Constitutive:	*resulting state* (<andare_1>,<stare>:[Stative_location]) *direction* = {outward}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Natural transition

Linguistic Tests:	
Verb examples:	*born, die, perish, etc.*

Noun examples:	*birth, death, etc.*
Levin Class:	48.1.1 (Appear verbs, e.g.: burst, emerge) , 48.2 (Verbs of disappearance, e.g.: vanish, disappear)
Comments:	Verbs belonging to this type express a primitive transition from one state to another. Members of this class may vary according to specific argument types.

Template

Usem:	1
BC Number:	*Number*
Template_Type:	**[Natural_transition]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Living_entity] arg1: default = [Living_entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Change])
Agentive:	*agentive* (1, <Usem>:[Event])
Constitutive:	*resulting state* (1, <Usem>:[Exist])
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<nil>

Examples

Usem:	nascere //be born, come into being//
BC Number:	<Nil>
Template_Type:	**[Natural_transition]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	Venire alla luce/
Event type:	transition
Pred_Rep.:	nascere (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Living_entity] arg1: default = [Living_entity]
Derivation:	<Nil>
Formal:	*isa* (<nascere>,<diventare>:[Change])
Agentive:	*agentive* (<nascere>,<procreare>:[Cause_natural_transition])
Constitutive:	*resulting state* (1, <esistere>:[Exist])
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<nil>

Usem:	morire //die
BC Number:	*56*
Template_Type:	**[Natural_transition]**
Unification_path:	**[Change | Agentive]**

Domain:	*General*
Semantic Class:	Change
Gloss:	cessare di esistere
Event type:	transition
Pred _Rep.:	morire (<arg0>)
Selectional Restr.:	arg0 = [Living_entity]
Derivation:	<Nil>
Formal:	*isa* (<morire>,<cambiare>:[Change])
Agentive:	*agentive* (<morire>, <succedere>:[Event])
Constitutive:	*resulting state* (<morire>,<esistere>:[Exist])
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<nil>

Usem:	<nascita_1> //birth//
BC Number:	<Nil>
Template_Type:	**[Natural_transition]**
Unification_path:	**[Change | Agentive]**
Domain:	*General*
Semantic Class:	Change
Gloss:	il nascere, l'essere nato
Event type:	transition
Pred_Rep.:	nascere (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Living_entity] arg1: default = [Living_entity]
Derivation:	<Nil>
Formal:	*isa* (<nascita_1>,<evento>:[Event])
Agentive:	*agentive* (<nascita_1>,<procreare>:[Cause_natural_transition])
Constitutive:	*resulting state* (<nascita_1>,<esistere>:[Exist])
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<nil>

Acquire knowledge

Linguistic Tests:	
Examples:	*come to understand, figure out, find out, find, resolve, forget*
Levin Class:	14 (Learn verbs, e.g. acquire, study, memorize), 29.5 (Conjecture verbs, e.g.: discover)
Comments:	This template is for event indicating that an individual reaches a certain mental state as the result of some event. The instances of the type may optionally be 3-place predicates, where arg2 indicates the source: *John discovered something* *John learnt French (from Mary)* The second argument can either be an proposition (e.g. abstract_entity) or an event: *John forgot that he should have had dinner with Mary*. *John forgot his date with Mary*. The constitutive feature *presupposition* = {new, presupposed} indicates whether the information acquired is new

Template

Usem:	1
BC Number:	*35, 40, 61, 102, 179, 57, 82, 89, 125, 150*
Template_Type:	**[Acquire_knowledge]**
Unification_path:	**[Change| Agentive]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	//free//
Event type:	transition

Pred_Rep.:	Lex_Pred(<arg0>, < arg1>) //or//
	Lex_Pred(<arg0>, < arg1>,<arg2>)

Selectional Restr.:	arg0 = [Human] arg1 = [Entity] arg2 : default = [Human] OR [Representation]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Change])
Agentive:	*agentive* (1, <Usem>:[Event])

Constitutive:	*resulting state* (1, <know>:[Cognitive_event])
	presupposition = {new, presupposed} //optional//
	instrument (1,<Usem1>) //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	scoprire_1 //discover
BC Number:	*102*
Template_Type:	**[acquire_knoweldge]**
Unification_path:	**[Change| Agentive]**
Domain:	*General*
Semantic Class:	cognition
Gloss:	giungere alla conoscenza di fatti
Event type:	transition
Pred_Rep.:	scoprire (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<scoprire_1>, <conoscere>:[Cognitive_event])
Agentive:	*agentive* (<scoprire_1>, <succedere>:[Event])
Constitutive:	*resulting state* (<scoprire_1>, <sapere>:[Cognitive_event]) presupposition = {*new*}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<imparare_1> //learn//
BC Number:	<Nil>
Template_Type:	**[Acquire_knoweldge]**
Unification_path:	**[Change| Agentive]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	acquisire conoscenze
Event type:	transition
Pred_Rep.:	imparare (<arg0>, < arg1>,<arg2>)

Selectional Restr.:	arg0 = [Human] arg1 = [Entity] arg2 : default = [Human] OR [Representation]
Derivation:	<Nil>
Formal:	*isa* (<imparare_1>, <apprendere>:[Acquire_knowledge])
Agentive:	*agentive* (<imparare_1>, <studiare>:[Purpose_act])
Constitutive:	*resulting state* (<imparare_1>, <sapere>:[Cognitive_event]) presupposition = {*new*}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	dimenticare //forget
BC Number:	<Nil>
Template_Type:	**[Acquire_knoweldge]**
Unification_path:	**[Change| Agentive]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	perdere informazioni
Event type:	transition
Pred_Rep.:	dimenticare (<arg0>, < arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Representation] | [Event]
Derivation:	<Nil>
Formal:	*isa* (<dimenticare>, <perdere>:[Change])
Agentive:	*agentive* (<dimenticare>, <succedere>:[Event])
Constitutive:	*resulting state* (<dimenticare>, <sapere>:[Cognitive_event]) presupposition = {presupposed}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Cause change

Linguistic Tests:	
Verb Examples:	*change, modify, etc.*
Noun Examples:	*change, modification, transformation*
Levin Class:	26.6 (Turn verbs, e.g.: alter, change, transform)
Comments:	

Template

Usem:	1
BC Number:	*number*
Template_Type:	**[Cause_change]**
Unification_path:	**[Event | Cause$_{Agentive}$]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred _Rep.:	Lex_Pred (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] | [Institution] arg1 = [Entity] arg2: default = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Cause_change])
Agentive:	*agentive_cause* (1, <Usem>:[Cause])
Constitutive:	*resulting_state* (1, <Usem>:[Relational_state])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Change] [Cause_change]**

Examples

Usem:	<cambiare> //change//
BC Number:	*164*
Template_Type:	**[Cause_change]**
Template_Supertype:	**[Event | Cause$_{Agentive}$]**
Domain:	*General*
Semantic Class:	Change
Gloss:	modificare
Event type:	transition
Pred_Rep.:	cambiare (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] | [Institution] arg1 = [Entity] arg2: default = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<cambiare>,<agire>:[Act])
Agentive:	*agentive_cause* (<cambiare>,<fare>:[Cause])
Constitutive:	*resulting_state* (<cambiare>,<diverso>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Change] [Cause_change]**

Usem:	<cambiamento> //change//
BC Number:	*164*
Template_Type:	**[Cause_change]**
Template_Supertype:	**[Event | Cause$_{Agentive}$]**
Domain:	*General*
Semantic Class:	Change
Gloss:	il cambiare
Event type:	transition
Pred_Rep.:	cambiare (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [entity] arg1 : default = [entity]
Derivation:	EventVerb (<cambiamento >, <cambiare>)
Formal:	*isa* (<cambiamento>,<evento>:[Event])
Agentive:	*agentive_cause* (<cambiamento>,<cambiare >:[Cause])
Constitutive:	*resulting_state* (<cambiamento>,<diverso>)
Telic:	<nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<nil>

Cause relational change

Linguistic Tests:	
Verb Examples:	*join, link, connect, etc.*
Noun Examples:	*union, etc.*
Levin Class:	22.1(Mix verbs, e.g.: join, link, only causative)
Comments:	Since human individuals are involved, the type of the agentive subsumes more specific instances such as (communication, agreement, etc.).

Template

Usem:	1
BC Number:	*116*
Template_Type:	**[Cause_relational_change]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] OR [Institution] arg1 = [Entity] arg2: default = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Cause_change])
Agentive:	*agentive_cause* (1, <Usem>:[Cause])
Constitutive:	*resulting_state* (1, <Usem>:[Relational_state])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Relational_change] [Cause_relational_change]**

Examples

Usem:	<unire_2> //join//
BC Number:	<Nil>
Template_Type:	**[Cause_relational_change]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	legare due o piu' persone con un vincolo di natura morale o legale
Event type:	transition
Pred_Rep.:	unire (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Human] arg2 = [Human]
Derivation:	<Nil>
Formal:	*isa* (<unire_2>, <cambiare>:[Cause_change])
Agentive:	*agentive_cause* (<unire_2>, <fare>:[Cause])
Constitutive:	*resulting_state* (<unire_2>, <unione>:[Relational_state])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Relational_change] [Cause_relational_change]**

Cause constitutive change

Linguistic Tests:	
Verb Examples:	*combine, blend, fuse, tape, anchor, debone, scalp, peel, deflesh, debug, hire*
Noun Examples:	*combination, separation, merging etc.*
Levin Class:	22,2 (Amalgamate verbs, e.g.: associate, incorporate, only causative), 22.4 (Tape verbs, e.g.: glue, paste, only causative), 10.7 (Pit verbs, e.g.: bone, scalp), 10.8 (Debone verbs, e.g.: degrease, debug), 29.2 (Characterize verbs, e.g.: employ)
Comments:	These verbs indicate that an individual causes another individual to become (or to cease to be) a member of something. The Constitutive role may express a specific instrument which is used, e.g. *tape*, *anchor*, etc. These verbs are the causative variant of **[Constitutive_change]**. They are often derived from a noun.

Template

Usem:	1
Usyn:	
BC Number:	*169, 78, 167*
Template_Type:	**[Cause_constitutive_change]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>**,<**arg2>)
Selectional Restr.:	arg0 = [Human]

	arg1 = [Entity] arg2: default = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Cause_relational_change])
Agentive:	*agentive_cause* (1, <Usem>:[Cause])
Constitutive:	*resulting_state* (1, <Usem>:[Constitutive_state]) *meronym* = {yes, no} *instrument* = (1,<Usem>) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Constitutive_change] [Cause_constitutive_change]**

Examples

Usem:	assumere_2 //hire
BC Number:	<Nil>
Template_Type:	**[Cause_constitutive_change]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	prendere in servizio
Event type:	transition
Pred_Rep.:	assumere (<arg0>, <arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Human] arg2: default = [Institution]
Derivation:	<Nil>
Formal:	*isa* (<assumere_2>, <includere>:[Cause_relational_change])
Agentive:	*agentive_cause* (<assumere_2>, <fare>:[Cause])
Constitutive:	*resulting_state* (<assumere_2>, <appartenenza>:[Constitutive_state]) *meronym* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<attaccare_2> //attach_1//
BC Number:	*169*
Template_Type:	**[Cause_constitutive_change]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	unire due cose insieme
Event type:	transition
Pred_Rep.:	attaccare (<arg0>, < arg1>,<arg2>)
Selectional Restr.:	arg0 = [human] arg1 = [Concrete_entity] arg2:default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<attaccare_2>, <unire>:[Cause_relational_change])
Agentive:	*agentive_cause* (<attaccare_2>, <fare>:[Cause])
Constitutive:	*resulting_state* (<attaccare_2>, <unione>:[Constitutive_state]) *meronym* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)

Complex:	**[Constitutive_change] [Cause_constitutive_change]**

Usem:	<combinazione> //combination//
BC Number:	<Nil>
Template_Type:	**[Cause_constitutive_change]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	il combinare, il combinarsi, l'essere combinato
Event type:	transition
Pred_Rep.:	combinare (<arg0>, < arg1>,< arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Concrete_entity] arg2:default = [Concrete_entity]
Derivation:	EventVerb (<combinazione>, <combinare>)
Formal:	*isa* (<combinazione>, <unione>:[Cause_relational_change])
Agentive:	*agentive_cause* (<combinazione>, <combinare>:[Cause_constitutive_change])
Constitutive:	*resulting_state* (<combinazione>, <unione>:[Constitutive_state]) *meronym* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<dividere_2> //divide_6//
BC Number:	*78*
Template_Type:	**[Cause_constitutive_change]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	separare, disgiungere (e.g.: separare un foglio dall'altro / separare i due fogli)
Event type:	transition
Pred_Rep.:	dividere (<arg0>, <arg1>,<arg2>)
Selectional Restr.:	arg0 = [human] arg1 = [Concrete_entity] arg2:default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<dividere_2>, <unire>:[Cause_relational_change])
Agentive:	*agentive_cause* (<dividere_2>, <fare>:[Cause])
Constitutive:	*resulting_state* (<dividere_2>, <appartenenza>:[Constitutive_state]) *meronym* = {yes}
Telic:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<tagliare_1> //cut_1//
BC Number:	167
Template_Type:	**[Cause_constitutive_change]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	separare
Event type:	transition
Pred_Rep.:	tagliare(<arg0>, <arg1>,<arg2>)
Selectional Restr.:	arg0 = [human]

	arg1 = [Concrete_entity] arg2:default = [Concrete_entity] //resulting_state//
Derivation:	<Nil>
Formal:	*isa* (<tagliare_1>, <unire>:[Cause_relational_change])
Agentive:	*agentive_cause* (<tagliare_1>, <fare>:[Cause])
Constitutive:	*resulting_state* (<tagliare_1>, <appartenenza>:[Constitutive_state]) *meronym* = {no} *instrument* (<tagliare_1>,<coltello>) *instrument* (<tagliare_1>,<forbici>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<distacco> //detaching//
BC Number:	<Nil>
Template_Type:	**[Cause_constitutive_change]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	il distaccare, il distaccarsi, l'essere distaccato
Event type:	transition
Pred_Rep.:	distaccare (<arg0>, < arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Concrete_entity] arg2: default = [Concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<distacco>, <unire>:[Cause_relational_change])
Agentive:	*agentive* (<distacco>, <distaccare>:[Cause_constitutive_change])
Constitutive:	*resulting_state* (<distacco>, <appartenenza>:[Constitutive_state]) *meronym* = {yes}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Cause change of state

Linguistic Tests:	
Verb examples:	*improve, amend, break, dry, darken, etc.*
Noun examples:	*improvement, amendment, cooking, etc.*
Levin Class:	45.1 (break verbs, e.g.: crash, fracture), 45.2 (bend verbs, e.g.: fold, wrinkle), 45.3 (cooking verbs, e.g.: bake, fry), 45.4 (other verbs, e.g.: empty, dry, brown), (only causatives).
Comments:	These verbs involve a change in the state of an entity caused by another entity. These specification for which specific state is achieved as a result may be provided by an adjective.

Template

Usem:	1
BC Number:	*3, 51, 71, 74, 75, 94, 139, 151, 153, 156, 168, 174, 186, 187*
Template_Type:	**[Cause_change_of_state]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*

Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[Cause_change])
Agentive:	*agentive_cause* (1,<Usem>:[Cause])

Constitutive:	*resulting_state* (1,<Usem>)
	connotation={positive, negative} //optional//
	partitive={yes,no} //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Change_of_state] [Cause_change_of_state]**

Examples

Usem:	asciugare //dry
BC Number:	<Nil>
Template_Type:	**[Cause_change_of_state]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	rendere qualcosa asciutto
Event type:	transition
Pred_Rep.:	asciugare (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa (*<asciugare>, <cambiare>:[Cause_change])
Agentive:	*agentive_cause* (<asciugare>,<fare>:[Cause])
Constitutive:	*resulting_state (*<asciugare>, <asciutto>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Change_of_state] [Cause_change_of_state]**

Usem:	<cottura> //cooking//
BC Number:	<Nil>
Template_Type:	**[Cause_change_of_state]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	esposizione di un alimento all'azione di una fonte di calore
Event type:	transition
Pred_Rep.:	cuocere (<arg0>,<arg1>)
Selectional Restr.:	arg0: default = [Entity] arg1 = [Concret_entity]
Derivation:	EventVerb (<cottura>, <cuocere>)
Formal:	*isa* (<cottura>, <processo>:[Event])
Agentive:	*agentive_cause* (<cottura>, <fare>:[Cause])
Constitutive:	*resulting_state* (<cottura>, <cotto>)
Telic:	<Nil>
Synonymy:	<Nil>

Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Cause change of value

Linguistic Tests:	
Verb examples:	*increase, decrease, etc.*
Noun examples:	*increase, decrease, etc.*
Levin Class:	45.6 (calibratable change of state verbs, eg.: appreciate, gain, grow, differ, diminish) (causatives only)
Comments:	These verbs involve a change in the value of an entity caused by another entity. The alternate with change of value. These specification for which specific value is achieved as a result may be provided by an adjective. Similarly, as a parameter these verbs involve thedirection of the value change (e.g. up or down). This is expressed in the constitutive.

Template

Usem:	1
BC Number:	*10, 77*
Template_Type:	**[Cause_change_of_value]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity] arg2 : default = [Unit_of_measurement] OR [Amount]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[Cause_change])
Agentive:	*agentive_cause* (1,<Usem>:[Cause])
Constitutive:	*resulting_state* (1,<Usem>:[Identificational_state]) *direction*={up, down} *connotation*={positive, negative} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Change_of_value] [Cause_change_of_value]**

Examples

Usem:	aumentare_1 //increase//
BC Number:	*10* (00091455)
Template_Type:	**[Cause_change_of_value]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	far crescere di valore
Event type:	transition
Pred_Rep.:	aumentare (<arg0>,<arg1>,<arg2>)

Selectional Restr.:	arg0 = [Human] or [Institution] arg1 = [Entity] arg2 : default = [Unit_of_measurement] OR [Amount]
Derivation:	<Nil>
Formal:	*isa* (<aumentare_2>,<cambiare>:[Cause_change])
Agentive:	*agentive_cause (*<aumentare_2>,<fare>:[Cause])
Constitutive:	*resulting_state* (<aumentare_2>,<maggiore>) *direction*={up}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Change_of_value] [Cause_change_of_value]**

Usem:	<aumento_2> //step-up_1; increase_1//
BC Number:	*382, 381*
Template_Type:	**[Cause_change_of_value]**
Template_supertype:	**[Cause_relational_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	l'aumentare, l'essere aumentato; crescita, accrescimento
Event type:	transition
Pred_Rep.:	aumentare (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] or [Institution] arg1 = [Entity] arg2 : default = [Unit_of_measurement] OR [Amount]
Derivation:	EventVerb (<aumento>, <aumentare>)
Formal:	*isa* (<aumento_2>,<cambiamento>:[Cause_change])
Agentive:	*agentive_cause (*<aumento_2>,<fare>:[Cause])
Constitutive:	*resulting_state* (<aumento_2>,<maggiore>) *direction*={up}
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Cause change location

Linguistic Tests:	
Verb examples:	*bring, displace, remove,ship, transport, etc.*
Noun examples:	*removal, displacement, etc.*
Levin Class:	11.3 (bring and take verbs) 10.1 (remove verbs, e.g.: delete), 10.2 (banish verbs, e.g.: expell), 10.3 (clear verbs, e.g.: clean), 10.4 (wipe verbs, e.g.: erase, polish), 11.1(send verbs, e.g.: airmail), 11.5 (drive verbs, e.g.: fly)
Comments:	These verbs are similar to **[change_of_location]**, they only differ in that the agentive role expresses a causative predicate.

Template

Usem:	1
BC number:	*64, 76, 106, 142*
Template_Type:	**[Cause_change_location]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Motion

Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred(<arg0>, < arg1>,<arg2>, <arg3>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity] arg2: default = [concrete_entity] //source location// arg3: default = [concrete_entity] //goal location//
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[Cause_change])
Agentive:	*agentive_cause* (1,<Usem>: [cause])
Constitutive:	*resulting state* (1,<Usem>:[stative_location]) *instrument* (1, <Usem1>) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	spostare //displace
BC number:	*64*
Template_Type:	**[Cause_change_location]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	muovere qualcosa in un'altra locazione
Event type:	transition
Pred_Rep.:	spostare (<arg0>, < arg1>,<arg2>, <arg3>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity] arg2: default = [concrete_entity] arg3: default = [concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<spostare>,<cambiare>:[Cause_change])
Agentive:	*agentive_cause* (<spostare>,<fare>: [cause])
Constitutive:	*resulting state* (<spostare>,<stare>:[stative_location])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	portare //bring
BC number:	*76*
Template_Type:	**[Cause_change_location]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	mettere qualcosa in un'altra locazione
Event type:	transition
Pred_Rep.:	portare (<arg0>, < arg1>,<arg2>, <arg3>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity] arg2: default = [concrete_entity] arg3: default = [concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<portare>, <spostare>:[Cause_change_location])
Agentive:	*agentive_cause* (<portare>, <fare>:[Cause])

Constitutive:	*resulting state* (<portare>, <stare>:[stative_location])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	rimuovere //remove
BC number:	*<Nil>*
Template_Type:	**[Cause_change_location]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	togliere da un luogo
Event type:	transition
Pred_Rep.:	rimuovere (<arg0>, < arg1>,<arg2>, <arg3>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity] arg2: default = [concrete_entity] arg3: default = [concrete_entity]
Derivation:	<Nil>
Formal:	isa (<rimuovere>,<spostare>:[Cause_change_location])
Agentive:	*agentive_cause* (<rimuovere>,<fare>: [cause])
Constitutive:	*resulting state* (<rimuovere>,<stare>:[stative_location])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates(<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	trasportare //transport
BC number:	*<Nil>*
Template_Type:	**[Cause_change_location]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Motion
Gloss:	portare in qualche luogo
Event type:	transition
Pred_Rep.:	trasportare (<arg0>, < arg1>,<arg2>, <arg3>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity] arg2: default = [concrete_entity] arg3: default = [concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<trasportare>,<spostare>:[Cause_change_location])
Agentive:	*agentive_cause* (<trasportare>,<portare>: [Cause_change_location])
Constitutive:	*resulting state* (<trasportare>,<stare>:[stative_location]) *instrument* (<trasportare>, <veicolo>)
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates(<Usem1>,...<Usemn>)
Complex:	<Nil>

Cause natural transition

Linguistic Tests:	
Verb examples:	*conceive, procreate, seed, kill, destroy, etc.*
Noun examples:	*procreation, murder, destruction, etc.*

Levin Class:	42 (verbs of killing, e.g.: assassinate, poison), 44 (destroy verbs, e.g.: extirpate, devastate)
Comments:	

Template

Usem:	1
BC Number:	*number*
Template_Type:	**[Cause_natural_transition]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<derivational relation>
Formal:	*isa* (1,<Usem>:[Cause_change])
Agentive:	*agentive_cause* (1,<Usem>:[Cause])
Constitutive:	*resulting state* (1,<Usem>:[Exist]) *instrument* (1, <Usem>:[Instrument]) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	uccidere //kill
BC Number:	*171*
Template_Type:	**[Cause_natural_ transition]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Change
Gloss:	togliere la vita
Event type:	transition
Pred_Rep.:	uccidere (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	<Nil>
Formal:	*isa* (<uccidere>, <agire>:[Act])
Agentive:	*agentive_cause* (<uccidere>,<fare>:[Cause])
Constitutive:	*resulting state* (<uccidere>, <esistere>:[Exist])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<distruzione> //destruction//
BC Number:	<Nil>
Template_Type:	**[Cause_natural_transition]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Change

Gloss:	il distruggere, l'essere distrutto; rovina
Event type:	transition
Pred_Rep.:	distruggere (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Entity] arg1 = [Entity]
Derivation:	*EventVerb* <distruzione>,<distruggere>)
Formal:	*isa* (<distruzione>, <cambiamento>:[Cause_change])
Agentive:	*agentive_cause* (<distruzione>,<distruggere>:[Cause_natural_transition])
Constitutive:	*resulting state* (<distruzione>, <esistere>:[State])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Creation

Linguistic Tests:	
Verb examples:	*create, produce, etc.*
Noun examples:	*creation, production, etc.*
Levin Class:	26.4 (Some Create verbs, e.g.: produce)
Comments:	These verbs express an event in which an entity is brought into being.

Template

Usem:	1
BC Number:	*176*
Template_Type:	**[Creation]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[Change])
Agentive:	*agentive_cause* (1, <Usem>:[Cause])
Constitutive:	*resulting state* (1,<Usem>:[Entity])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	<creare_1> //create_1//
BC Number:	*176*
Template_Type:	**[Creation]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	fare, produrre dal nulla; ideare, inventare; dare forma

Event type:	transition
Pred_Rep.:	creare (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity]
Derivation:	<Nil>
Formal:	*isa* (<creare_1>,<fare>:[Relational_act])
Agentive:	*agentive_cause* (<creare_1>,<fare>:[Cause])
Constitutive:	*resulting state* (<creare_1>,<creazione_1>:[Entity])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<creazione_1> //creation//
BC Number:	<Nil>
Template_Type:	**[Creation]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	il creare, l'essere creato, la cosa creata
Event type:	transition
Pred_Rep.:	creare (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity]
Derivation:	EventVerb (<creazione>, <creare>)
Formal:	*isa* (<creazione_1>,<atto>:[Act])
Agentive:	*agentive_cause* (<creazione_1>,<fare>:[Cause])
Constitutive:	*resulting state* (<creazione_1>,<esistere>:[Exist])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Physical creation

Linguistic Tests:	
Verb examples:	*build, construct, fabricate, manufacture, etc.*
Noun examples:	*construction, etc.*
Levin Class:	26.1 (Build verbs, e.g. forge, assemble), 26.4 (Some Create verbs, e.g.: fabricate, manufacture)
Comments:	These verbs express an event in which a physical object is brought into being. In the template below, there is also an optional argument (<arg2>) which indicates the material which the entity is made of (cf. Pustejovsky, 1995): *John build a house out of wood.* *John carved a statue out of cedar.* This argument can also be expressed as an adjective - which also refers to the material constitution of the object. *John built a wooden house.*

Template

Usem:	1
BC Number:	*182, 67*

Template_Type:	**[Physical_creation]**
Template_Supertype:	**[Creation]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity] arg2 : default = [material] OR [substance]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>:[Creation])
Agentive:	*agentive_cause* (1, <Usem>:[Cause])
Constitutive:	*resulting state* (1,<Usem>:[Entity])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Physical_creation] [Artifact]**

Examples

Usem:	costruire //build//
BC Number:	<Nil>
Template_Type:	**[Physical_creation]**
Template_Supertype:	**[Creation]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	fabbricare
Event type:	transition
Pred_Rep.:	costruire (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity] arg2 : default = [material] or [substance]
Derivation:	<Nil>
Formal:	*isa* (<costruire>,<creare>: [Creation])
Agentive:	*agentive_cause* (<costruire>,<fare>:[Cause])
Constitutive:	*resulting state* (<costruire>,<costruzione>: [Artifact])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<costruzione_1> //building//
BC Number:	<Nil>
Template_Type:	**[Physical_creation]**
Template_Supertype:	**[Creation]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	l'operazione del costruire; edificazione, fabbricazione
Event type:	transition
Pred_Rep.:	costruire (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [human] arg1 = [concrete_entity] arg2 : default = [material] OR [substance]
Derivation:	EventVerb (<costruzione>, <costruire>)
Formal:	*isa* (<costruzione_1>,<creazione>[Creation])
Agentive:	*agentive_cause* (<costruzione_1>,<fare>:[Cause])
Constitutive:	*resulting state* (<costruzione_1>,<costruzione>[Artifact])

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	**[Physical_creation] [Artifact]**

Mental creation

Linguistic Tests:	
Verb Examples:	*conceive, devise, invent, plan, etc.*
Noun Examples:	*conception, devising, invention, plan, etc.*
Levin Class:	26.4 (Some Create verbs, e.g.: invent)
Comments:	These verbs express an event in which an abstract entity is brought into being by means of mental activity. In other words, this is a specialization of the [Creation] type, where the second argument is specialized to a non-concrete entity and the agentive role is specialized to a mental process. Some of these verbs involve mental creation, where the object is not directly brought into being, but the goal is to bring it into existence. These predicates involve also specification of the telic role.

Template

Usem:	1
BC Number:	*90*
Template_Type:	**[Mental_creation]**
Template_Supertype:	**[Creation]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [human] arg1 = [Abstract_entity] [Representation]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>: [Creation])
Agentive:	*agentive_cause* (1, <Usem>:[Cause])
Constitutive:	*resulting state* (1,<Usem>: [Cognitive_fact]) *connotation* = {positive, negative} //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	concepire_1 //conceive//
BC Number:	<Nil>
Template_Type:	**[Mental_creation]**
Template_Supertype:	**[Creation]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	ideare qualcosa
Event type:	transition

Pred_Rep.:	concepire (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [human] arg1 = [Abstract_entity] [Representation]
Derivation:	<Nil>
Formal:	*isa* (<concepire_1>,<creare>: [Creation])
Agentive:	*agentive_cause* (<concepire_1>,<fare>:[Cause])
Constitutive:	*resulting state* (<concepire_1>,<concezione>: [Cognitive_fact])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	Collocates (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	pianificare //plan
BC Number:	*90*
Template_Type:	**[Mental_creation]**
Template_Supertype:	**[Creation]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	progettare e organizzare qualcosa mediante un piano preciso
Event type:	transition
Derivation:	<Nil>
Pred_Rep.:	pianificare (<arg0>,<arg1>)
Selectional Restr.:	arg0 = [Human] arg1 = [Abstract_entity] [Representation]
Formal:	*isa* (<pianificare>,<creare>: [Creation])
Agentive:	*agentive_cause* (<pianificare >,<fare>:[Cause])
Constitutive:	*resulting state* (<pianificare>,<piano>: [Cognitive_fact])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Symbolic creation

Linguistic Tests:	
Verb Examples:	*write, compose, play, sing, etc.*
Noun Examples:	*writing, composition, play, song, etc.*
Levin Class:	25.1 (verbs of image impression, e.g.: engrave, imprint, tattoo), 25.2 (Scribble verbs, e.g.: copy, draw, write), 25.3 (Illustrate verbs, e.g.: tag, illustrate, autograph), 26.7 (Performance verbs, e.g.: play, compose, paint, recite, sing)
Comments:	These verbs combines aspects of physical and mental creation. Infact, the object which is created is a complex type embodying both a physical and an abstract sense (e.g. *letter, book, symphony*, etc.). The second argument is conventionally restricted to **[Semiotic_artifact]**. The instrument in the constitutive role expresses the specific tool which is used to carry out the event.

Template

Usem:	1
BC Number:	*49, 129*
Template_Type:	**[Symbolic_creation]**
Template_Supertype:	**[Creation]**

Domain:	*General*
Semantic Class:	Creation
Gloss:	//free//
Event type:	transition
Derivation:	<Derivational relation>
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Semiotic_artifact] arg2: default = [Instrument]
Formal:	*isa* (1,<Usem>:[Creation])
Agentive:	*agentive_cause* (1, <Usem>:[Cause])
Constitutive:	*resulting state* (1,<Usem>:[Semiotic_artifact]) *instrument* (1, <Usem>: [Instrument]) //optional//
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	scrivere //write_2//
BC Number:	*129*
Template_Type:	**[Symbolic_creation]**
Template_Supertype:	**[Creation]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	creare qulcosa di scritto
Event type:	transition
Pred_Rep.:	scrivere (<arg0>,<arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Semiotic_artifact] arg2: default = [Instrument]
Derivation:	<Nil>
Formal:	*isa* (<scrivere>,<creare>:[Creation])
Agentive:	*agentive_cause* (<scrivere>,<fare>:[Cause])
Constitutive:	*resulting state* (<scrivere>,<scritto>:[Semiotic_artifact]) *instrument* (<scrivere>, <penna>:[Instrument])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Copy creation

Linguistic Tests:	
Verb Examples:	*copy, forge (counterfeit), plagiarize, duplicate, clone, etc.*
Noun Examples:	*counterfeiting, plagiarism, imitation, clone, etc.*
Levin Class:	25.4 (Transcribe verbs, e.g.: photocopy)
Comments:	These verbs involve a symbolic creation, where the resulting state is one where the object which is created is identical or similar to another one. This information is captured by using the type **[Identificational_state]** in the constitutive role. The constitutive may also express a feature specifying whether the action is positive or negative to distinguish between *plagiarize* which is marked negative, and others which may either be positive or unmarked.

Template

Usem:	1
BC Number:	*Number*
Template_Type:	**[Copy_creation]**
Template_Supertype:	**[Creation]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] arg2 : default = [Artifact]
Derivation:	<Derivational relation>
Formal:	*isa* (1,<Usem>: [Creation])
Agentive:	*agentive_cause* (1, <Usem>:[Cause])

Constitutive:	*resulting state* (1,<Usem>: [Identificational_state])
	instrument (1, <Usem>) //optional//
	connotation = {positive, negative} //optional//

Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	copiare //copy
BC Number:	*175*
Template_Type:	**[Copy_creation]**
Template_Supertype:	**[Creation]**
Domain:	*General*
Semantic Class:	Creation
Gloss:	fare una copia di qualcosa
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>,<arg1>, <arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Entity] arg2 : default = [Artifact]
Derivation:	<Nil>
Formal:	*isa* (<copiare>,<creare>: [Creation])
Agentive:	*agentive_cause* (<copiare>, <fare>:[Cause])
Constitutive:	*resulting state* (<copiare>,<copia>: [Identificational_state])
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Give knowledge

Linguistic Tests:	
Examples:	*teach, explain, show, illustrate, etc.*
Levin Class:	37.1 (verbs of transfer of a message, e.g.: explain, show)

Comments:	This type is the causative counterpart of **[Acquire_knowledge]**, where an individual acts in order to give knowledge to another individual. In general this type is one that expresses a transfer of knowledge. The instrument may indicate the medium which is used to transfer information. Since this class is closely related to [Speech_acts] (in the agentive role), then the constitutive shares most features with this type. The value new for the constitutive feature presupposition indicates that the information provided is new.

Template

Usem:	1
BC Number:	*Number*
Template_Type:	**[Give_knoweldge]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	//free//
Event type:	transition
Pred_Rep.:	Lex_Pred (<arg0>, < arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Representation] arg2 : default = [Human]
Derivation:	<Derivational relation>
Formal:	*isa* (1, <Usem>:[Cause_change])
Agentive:	*agentive_cause* (1, <Usem>:[Speech_act])

Constitutive:	*resulting state* (1, <know>:[Cognitive_event])
	instrument (1,<Usem1>) // optional//
	presupposition = {new, presupposed} //optional//
	audience = {public, private} // optional//

Telic:	purpose (1, <Usem>:[Acquire_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Examples

Usem:	<insegnare_1> //teach//
BC Number:	*NA*
Template_Type:	**[Give_knoweldge]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	far apprendere una disciplina o un'arte
Event type:	transition
Pred_Rep.:	insegnare (<arg0>, < arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Representation] arg2 : default = [Human]
Derivation:	<Nil>
Formal:	*isa* (<insegnare_1>, <spiegare>:[Give_knowledge])
Agentive:	*agentive_cause* (<insegnare_1>, <informare>:[Reporting_event])
Constitutive:	*resulting state* (<insegnare_1>, <sapere>:[Cognitive_event]) *presupposition* = {new} *audience* = {public}
Telic:	*purpose* (<insegnare_1>, <apprendere>:[Acquire_knowledge])

Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<insegnamento_1> //teaching//
BC Number:	<Nil>
Template_Type:	**[Give_knoweldge]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	l'attivita' dell'insegnare
Event type:	transition
Pred_Rep.:	insegnare (<arg0>, < arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Representation] arg2 : default = [Human]
Derivation:	<Nil>
Formal:	*isa* (<insegnamento_1>, <attivita'>:[Act])
Constitutive:	*resulting state* (<insegnamento_1>, <sapere>:[Cognitive_event]) *presupposition* = {new} *audience* = {public}
Agentive:	*agentive_cause* (<insegnamento_1>, <informare>:[Reporting_event])
Telic:	*purpose* (<insegnamento_1>, <apprendimento>:[Acquire_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Usem:	<spiegare_2> //explain//
BC Number:	<Nil>
Template_Type:	**[Give_knoweldge]**
Template_supertype:	**[Cause_change]**
Domain:	*General*
Semantic Class:	Cognition
Gloss:	far comprendere, rendere chiaro cio' che e' oscuro o difficile
Event type:	transition
Pred_Rep.:	spiegare (<arg0>, < arg1>,<arg2>)
Selectional Restr.:	arg0 = [Human] arg1 = [Representation] arg2 : default = [Human]
Derivation:	<Nil>
Formal:	*isa* (<spiegare_2>, <informare>:[Reporting_event])
Constitutive:	*resulting state* (<spiegare_2>, <sapere>:[Cognitive_event])
Agentive:	*agentive_cause* (<spiegare_2>, <informare>:[Reporting_event])
Telic:	*purpose* (<spiegare_2>, <capire>:[Acquire_knowledge])
Synonymy:	<Nil>
Collocates:	*Collocates* (<Usem1>,...<Usemn>)
Complex:	<Nil>

Intensional

Examples:	*true* scholar, *poor* liar, *polar* bear
Linguistic Tests:	(1) N is A (2) * a very A N
Comments:	This template is provided for intensional adjectives that do not clearly belong to any of the subgroups given above. They are generally *stative*, *nongradable* and *attributive* only.

Template

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Intensional]**
Template_Supertype:	**[Top]**
Domain:	
Semantic Class:	
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attr*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU >
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={persistent} *Meaning_component* (meaning component,location on scale) *Scalar*={no}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	<Nil>
Collocates:	Collocates (< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Modal

Examples:	*possible outcome, necessary measures*
Linguistic Tests:	(1) The A N has become the N (2)
Comments:	**modal adjectives** express some kind of predication over the ontological status of the nouns they combine with. They reflect the speaker's judgement of the likelihood of the proposition it expresses being true. *The Modality Type* is obligatory, the *Modality Feature* is optional.

Template

SemU:	//1//

SynU:	//SynU list//
BC Number:	
Template_Type:	**[Modal]**
Template_Supertype:	**[Intensional]**
Domain:	
Semantic Class:	*Cognition*
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attr*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU >
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={temporary, persistent, underspecified} *Modality_type*={Epistemic, Deontic, Possible} *Modality_feature*={intrinsic, extrinsic} //optional// *Meaning_component* (meaning component,location on scale) *Scalar*={no}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	< SemU >
Collocates:	Collocates(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< likely_1 >
SynU:	ÄDJNADJ1647 ITVADJTHATCLADJ1647 ITVADJINFCLADJ1647"
BC Number:	
Template_Type:	**[Modal]**
Template_Supertype:	**[Intensional]**
Domain:	NOT AVAILABLE
Semantic Class:	*Cognition* //taken from verbs//
Gloss:	"has a good chance of being the case or of coming about; "these services are likely to be available to us all before long"; she is likely to forget"; a likely place for a restaurant"; "rain is likely to fall"; "likely candidates for the job"
Derivation:	
Syntactic Type:	*Attrpred*
Pred_Rep.:	pred_LIKELY_1 (< arg0 >) Master = yes argument1=ARG0predLIKELY1
Selectional Restr.:	Arg0: < entity_1 >
Formal:	*Antonym_grad* (1, < unlikely_1 >)
Constitutive:	*Duration*={persistent} *Modality_type*={Possible} *Modality_feature*={extrinsic} *Meaning_component*={Possibility,Pos} *Scalar*={yes}
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	< possible_1 >
Collocates:	<Nil>
Complexity_Type:	<Nil>

Temporal

Examples:	*the former president*
Linguistic Tests:	(1) * N is A (2)
Comments:	**Temporal adjectives** indicate that the entity referred to by the modified noun does not yet, or no longer, belong to the ontological class lexicalized by the noun in question. An exception to this is *present wife*.

Template

SemU:	//1//
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Temporal]**
Template_Supertype:	**[Intensional]**
Domain:	
Semantic Class:	
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attr*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU >
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)

Constitutive:	*Temporality_type*={Past, Present, Future}
	Aspect={Inchoative, Durative, Terminative} //optional//
	Duration={temporary, persistent, underspecified} //optional//
	Meaning_component={meaning component,location on scale}
	Scalar={no}

Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	< SemU >
Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< former_1 >
SynU:	ADJNADJ1081
BC Number:	
Template_Type:	**[Temporal]**
Template_Supertype:	**[Intensional]**
Domain:	NOT AVAILABLE
Semantic Class:	TIME_PERIOD (taken from nouns)
Gloss:	(esp. of persons) belonging to the immediate past
Derivation:	
Syntactic Type:	*Attr*
Pred_Rep:	pred_FORMER_1 (< arg0 >) Master = yes argument1=ARG0predFORMER1
Selectional Restr.:	Arg0: < person_1 >
Formal:	*Antonym_grad* (1, < future_1 >)
Constitutive:	*Temporality_type*={past} *Aspect*={durative}

	Duration={persistent} *Meaning_component*={temporal,Neg} *Scalar*={no}
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	< previous_1 >
Collocates:	<Nil>
Complexity_Type:	<Nil>

Emotive

Examples:	*poor* man, *dear* lady, *beloved* husband
Linguistic Tests:	(1) * N is A (2) * a very A N
Comments:	This group contains adjectives that have a strong emotive value. They are stative, nongradable and cannot be used predicatively without a change in meaning.

Template

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Emotive]**
Template_Supertype:	**[Intensional]**
Domain:	NOT AVAILABLE
Semantic Class:	Emotion (taken from verbs)
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	attributive
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU >
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={persistent} *Meaning_component*={feeling,location on scale} *Scalar*={no}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	< SemU >
Collocates:	*Collocates* (< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< dear_1 >
SynU:	ADJNADJ0627
BC Number:	
Template_Type:	**[Emotive]**
Template_Supertype:	**[Intensional]**
Domain:	NOT AVAILABLE
Semantic Class:	Emotion (taken from verbs)
Gloss:	dearly loved

Derivation:	
Syntactic Type:	Attr
Pred_Rep.:	pred_DEAR_1 (< arg0 >) Master = yes argument1=ARG0predDEAR1
Selectional Restr.:	Arg0: < Animal_1 > or < Human_1 >
Formal:	*Antonym_grad* (1, < unloved_1 >) *Isa* (1, < loved_1 >)
Constitutive:	*Duration*={persistent} *Meaning_component*={feeling,Pos} *Scalar*={no}
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	< beloved_1 >
Collocates:	<Nil>
Complexity_Type:	<Nil>

Manner

Examples:	*poor* liar, *beautiful* dancer, *heavy* drinker, *rapid* calculations
Linguistic Tests:	(1) * N is A (2) * a very A N (3) A[v]N - > N Vs A+ly
Comments:	Adjectives that belong to this group modify the event associated with the noun rather than the noun itself. The event does not necessarily have to be related morphologically to the nominal. They are *stative*, *nongradable* and *cannot be used predicatively* without a change in meaning

Template

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Manner]**
Template_Supertype:	**[Intensional]**
Domain:	
Semantic Class:	
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attr*
Pred_Rep.	//representation//
Selectional Restr.:	Arg0: < SemU >
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={persistent} *Meaning_component*={meaning component,location on scale} *Scalar*={no}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	< SemU >
Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< beautiful_1 >

SynU:	ADJNULLADJ0242
BC Number:	
Template_Type:	**[Manner]**
Template_Supertype:	**[Intensional]**
Domain:	NOT AVAILABLE
Semantic Class:	social (taken from verbs)
Gloss:	you can describe something that someone does as beautiful when they do it very skilfully
Derivation:	< beauty_1 >
Syntactic Type:	*Attr*
Pred_Rep.:	pred_BEAUTIFUL_1 (< arg0 >) Master = yes argument1=ARG0predBEAUTIFUL1
Selectional Restr.:	Arg0: < Entity_1 >
Formal:	*Antonym_grad* (1, < awful_1 >)
Constitutive:	*Duration*={persistent} *Meaning_component*={evaluation,Pos} *Scalar*={no}
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	*Synonym* (1, < pleasing_1 >)
Collocates:	<Nil>
Complexity_Type:	<Nil>

Object-Related

Examples:	*atomic scientist, chemical engineer, medical school*
Linguistic Tests:	(1) * N is A (2) * a very A N
Comments:	This group contains adjectives which in most cases are morphologically derived from nouns or sometimes are related to nouns without a morphological link. They always express a semantically underspecified **Related_to** relation.

Templates

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Object-related]**
Template_Supertype:	**[Intensional]**
Domain:	
Semantic Class:	Attribute (taken from nouns)
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attr*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU >
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Related_to* (1, < SemU >) *Duration*={persistent} *Meaning_component*={meaning component,location on scale} *Scalar*={no}
Agentive:	< Nil >

Telic:	< Nil >
Synonymy:	< Nil >
Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	criminal_1
Usyn:	ADJNADJ0576
BC Number:	
Template_Type:	**[Object-related]**
Template_Supertype:	**[Intensional]**
Domain:	Crime
Semantic Class:	Attribute (taken from nouns)
Gloss:	relating to crime or its punishment; ``criminal court''
Derivation:	<crime_1>
Syntactic Type:	*Attr*
Pred_Rep.:	pred_CRIMINAL_1 (< arg0 >) Master = yes argument1=ARG0predCRIMINAL1
Selectional Restr.:	Arg0 = < entity_1 >
Formal:	<Nil>
Constitutive:	*Related_to* (1, <crime_1>) *Duration*={persistent} *Meaning_component*={law,U} *Scalar*={no}
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	<Nil>
Collocates:	*Collocates* (< law_1 > , < court_1 >)
Complexity_Type:	<Nil>

Emphasizer

Examples:	*true* scholar, *plain* nonsense, *outright* lie, *complete* fool, *firm* friend
Linguistic Tests:	(1) * N is A (2) * a very A N
Comments:	Emphasizers have a general heightening effect. They are *stative*, *nongradable* and are generally *attributive* only.

Template

SemU:	1_
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Emphasizer]**
Template_Supertype:	**[Intensional]**
Domain:	
Semantic Class:	Attribute (taken from nouns)
Gloss:	//free//
Derivation:	< Derivational relation>
Syntactic Type:	*Attr*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU >

Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={persistent} *Meaning_component*={attitude,location on scale} *Scalar*={no}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	<Nil>
Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< great_3 >
SynU:	ADJNULLADJ1196//
BC Number:	
Template_Type:	**[Emphasizer]**
Template_Supertype:	**[Intensional]**
Domain:	NOT AVAILABLE
Semantic Class:	Attribute (taken from nouns)
Gloss:	(used of persons) standing above others in characters
	or attainmment or reputation; ``a great statesman''
Derivation:	<Nil>
Syntactic Type:	*Attr*
Pred_Rep.:	pred_GREAT_3 (< arg0 >) Master = yes argument1=ARG0predGREAT3
Selectional Restr.:	Arg0: < Human_1 >
Formal:	*Antonym_grad* (1, < unimportant_1 >)
Constitutive:	*Duration*={persistent} *Meaning_component*={evaluation,Pos} *Meaning_component*={salience,Pos} *Scalar*={no}
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	*Synonym* (1, < chief_1 >) *Synonym* (1, < big_4 >)
Collocates:	<Nil>
Complexity_Type:	<Nil>

Extensional

Examples:	
Comments:	This template is provided for extensional adjectives that do not clearly belong to any of the subgroups given above. They are generally *gradable* and can be used *attributively* and *predicatively*

Template

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Extensional]**
Template_Supertype:	**[Top]**

Inter-/Subsective:	//Intersective, Subsective//
Domain:	
Semantic Class:	
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attrpred*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU > etc.
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={temporary, persistent, underspecified} *Meaning_component*={meaning component,location on scale} *Scalar*={yes}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	<Nil>
Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Physical Property

Examples:	*plastic cup, thirsty boy*
Comments:	Physical property is the umbrella template for the following meaning components: `body`, `perception`, `movement`, `space` and `substance`. It is obligatory to select at least one meaning component in the appropriate slot.

Template

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Phys_property]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	//Intersective, Subsective//
Domain:	
Semantic Class:	Attribute (taken from nouns)
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attrpred*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU > etc.
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={temporary, persistent, underspecified} *Meaning_component*={meaning component,location on scale} *Scalar*={yes}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	<Nil>
Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< wet_1 >
SynU:	ADJNULLADJ3166
BC Number:	
Template_Type:	**[Phys_property]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	*Intersective*
Domain:	NOT AVAILABLE
Semantic Class:	Attribute (taken from nouns)
Gloss:	covered or soaked with a liquid such as water
Derivation:	<Nil>
Syntactic Type:	*Attrpred*
Pred_Rep.:	pred_WET_1 (< arg0 >) Master = yes argument1=ARG0predWET1
Selectional Restr.:	Arg0: < entity_1 >
Formal:	*Antonym_grad* (1, < dry_1 >)
Constitutive:	*Duration*= {underspecified} *Meaning_component*={wetness,Pos} *Scalar*={yes}
Synonymy:	Synonym (1, < moist_1 >)
Collocates:	<Nil>
Complexity_Type:	<Nil>

Psychological Property

Examples:	*sad thoughts, stupid move*
Comments:	Psychological property is the umbrella template for the following meaning components: `feeling/experience, psych. state, cognition, attitude_salience and attitude_evaluation`. It is obligatory to select at least one meaning component in the appropriate slot.

Template

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Psych_property]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	//Intersective, Subsective//
Domain:	
Semantic Class:	Psychological_feature
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attrpred*
Predicative	
Representation:	//representation//
Selectional Restr.:	Arg0: < SemU > etc.
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={temporary, persistent, underspecified} *Meaning_component*={meaning component,location on scale} *Scalar*={yes}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	<Nil>

Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< sad_1 >
SynU:	ADJNULLADJ5242 ADJABOUTNADJ5242
BC Number:	
Template_Type:	**[Psych_property]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	*Intersective*
Domain:	NOT AVAILABLE
Semantic Class:	Psychological_feature
Gloss:	experiencing or showing or causing sorrow or unhappiness; ``he's sad about his sick dog''
Derivation:	<Nil>
Syntactic Type:	*Attrpred*
Pred_Rep.:	pred_SAD_1 (< arg0 > , < arg1 >) Master = yes argument1=ARG0predSAD1 argument2=ARG1predSAD1
Selectional Restr.:	Arg0: < entity_1 > Arg1: < entity_1 >
Formal:	*Antonym_grad* (1, < glad_1 >)
Constitutive:	*Duration*= {temporary} *Meaning_component*={phychological_state,Neg} *Scalar*={yes}
Synonymy:	<Nil>
Collocates:	<Nil>
Complexity_Type:	<Nil>

Social Property

Examples:	
Comments:	We have distinguished the following meaning components to further specifiy the meaning of the `social property` adjective: `religion`, `political`, `military`, `economy`, `law` and `nationality`

Template

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Social_property]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	//Intersective, Subsective//
Domain:	
Semantic Class:	Attribute (taken from nouns)
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attrpred*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU > etc.

Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={temporary, persistent, underspecified} *Meaning_component*={meaning component,location on scale} *Scalar*={yes}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	<Nil>
Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< rich_1 >
SynU:	ADJNULLADJ2404
BC Number:	
Template_Type:	**[Social_property]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	*Subsective*
Domain:	NOT AVAILABLE
Semantic Class:	Attribute (taken from nouns)
Gloss:	possessing material wealth
Derivation:	<Nil>
Syntactic Type:	*Attrpred*
Pred_Rep.:	pred_RICH_1 (< arg0 >) Master = yes argument1=ARG0predRICH1
Selectional Restr.:	Arg0: < HUMAN >
Formal:	*Antonym_grad* (1, < poor_1 >)
Constitutive:	*Duration*= {temporary} *Meaning_component*={economy,Pos} *Scalar*={yes}
Synonymy:	*Synonym* (1, < abundant_1 >) *Synonym*(1, < privileged_1 >)
Collocates:	<Nil>
Complexity_Type:	<Nil>

Temporal Property

Examples:	*an early start*
Linguistic Tests:	(1) * N is A (2)
Comments:	**Temporal Properties** predicate as their prime semantic function over the temporal aspects of the (actualisation of the) nouns they modify. This class is much broader than the intensional Temporals. Lexicographers are to select one meaning component out of the following list: `temporal`, `temp_distribution`, `aspect` and `age`

Template

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Temporal_property]**

Template_Supertype:	**[Extensional]**
Inter-/Subsective:	//Intersective, Subsective//
Domain:	
Semantic Class:	
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attrpred*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU >
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={temporary, persistent, underspecified} *Meaning_component*={meaning component,location on scale} *Scalar*={yes}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	<Nil>
Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< early_1 >
SynU:	ADJNULLADJ0807 ADJNADJ0807
BC Number:	
Template_Type:	**[Temporal_property]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	*Subsective*
Domain:	NOT AVAILABLE
Semantic Class:	TIME_PERIOD (taken from nouns)
Gloss:	arriving, developing, happening etc. before the usual arranged, or expected time
Derivation:	<Nil>
Syntactic Type:	*Attrpred*
Pred_Rep.:	pred_EARLY_1(< arg0 >) Master = yes argument1=ARG0predEARLY1
Selectional Restr.:	Arg0: < entity_1 >
Formal:	*Antonym_grad* (1, < late_1 >)
Constitutive:	*Duration*= {temporary} *Meaning_component*={temporal,U} *Scalar*={yes}
Synonymy:	<Nil>
Collocates:	<Nil>
Complexity_Type:	<Nil>

Intensifying Property

Examples:	*heavy rain, complete destruction*
Linguistic Tests:	(1) N is A (2) A N
Comments:	**Intensifiers** scale upwards from an assumed norm that are gradable and can be used both predicatively and attributively. It can be compared to Mel'cuk's lexical function *Magn* [Mel'cuk et al., 1988] and is the extensional variant of the intensional Emphasizers. If possible, extensional intensity adjectives should be further subdivided by means of the meaning components `frequency` and `power`.

Template

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Intensity]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	//Intersective, Subsective//
Domain:	
Semantic Class:	Attribute (taken from nouns)
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attrpred*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU >
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={temporary, persistent, underspecified} *Meaning_component*={meaning component,location on scale} *Scalar*={yes}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	<Nil>
Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< strong_1 >
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Intensity]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	*Subsective*
Domain:	Medicine AND Chemistry
Semantic Class:	Attribute (taken from nouns)
Gloss:	Chemicals, drugs, etc that are strong are very effective for a particular purpose and contain a large amoung of a particular substance in proportion to the amount of water and other substances.
Derivation:	<Nil>
Syntactic Type:	*Attrpred*
Pred_Rep.:	pred_STRONG_1 (< arg0 >) Master = yes argument1=ARG0predSTRONG1
Selectional Restr.:	Arg0: < SemU >
Formal:	*Antonym_grad* (1, < mild_1 >)
Constitutive:	*Duration*= {persistent} *Meaning_component*={power,Pos} *Scalar*={yes}
Agentive:	<Nil>
Telic:	<Nil>
Synonymy:	*Synonym* (1, < powerful_1 >)
Collocates:	<Nil>
Complexity_Type:	<Nil>

Relational Property

Examples:	
Linguistic Tests:	(1) * N is A (2)
Comments:	**Relational Property** expresses a relation between entities which do not necessarily need to be realised syntactically. Meaning components can be taken from the following list: `possession`, `set membership`, `comparison` and `normalcy`

Template

SemU:	1
SynU:	//SynU list//
BC Number:	
Template_Type:	**[Relation]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	//Intersective, Subsective//
Domain:	
Semantic Class:	Attribute (taken from nouns)
Gloss:	//free//
Derivation:	<Derivational relation>
Syntactic Type:	*Attrpred*
Pred_Rep.:	//representation//
Selectional Restr.:	Arg0: < SemU >
Formal:	*Antonym* (1, < SemU >) *Isa* (1, < SemU >)
Constitutive:	*Duration*={temporary, persistent, underspecified} *Meaning_component*={meaning component,location on scale} *Scalar*={yes}
Agentive:	< Nil >
Telic:	< Nil >
Synonymy:	<Nil>
Collocates:	*Collocates*(< SemU1 > ,... < SemUn >)
Complexity_Type:	< Nil >

Examples

SemU:	< similar_1 >
SynU:	ADJTONADJ2576
BC Number:	
Template_Type:	**[Relation]**
Template_Supertype:	**[Extensional]**
Inter-/Subsective:	*Intersective*
Domain:	NOT AVAILABLE
Semantic Class:	Attribute (taken from nouns)
Gloss:	marked by correspondence or resemblance; ``problems similar to mine''
Derivation:	<Nil>
Syntactic Type:	*Attrpred*
Pred_Rep.:	pred_SIMILAR_1 (< arg0 > , < arg1 >) Master = yes argument1=ARG0predSIMILAR1 argument1=ARG1predSIMILAR1
Selectional Restr.:	Arg0: < entity_1 > Arg1: < entity_1 >
Formal:	*Antonym_grad* (1, < dissimilar_1 >)

	Antonym_grad (1, < different_1 >)
Constitutive:	*Duration*= {persistent} *Meaning_component*={comparison,Pos} *Scalar*={yes}
Agentive:	<Nil>
Telic:	<NIl
Synonymy:	*Synonym* (1, < same_1 >)
Collocates:	<Nil>
Complexity_Type:	<Nil>

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