

A method for language specific metaphorical conceptualization analysis

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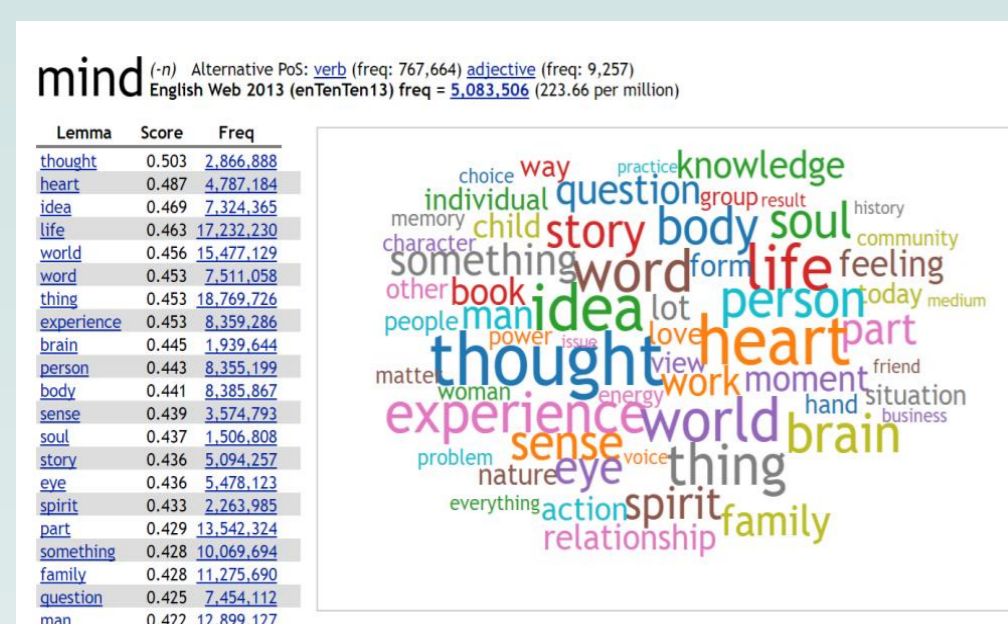
INTRODUCTION

MetaNet.HR is a repository of conceptual metaphors, semantic frames, image schemas, and cognitive primitives of the Croatian language (Despot et al., in press). It schematically shows the organization of complex metaphor systems, including experiences on which the metaphorical systems of the Croatian language are based. MetaNet.HR combines a theory-driven introspective top-down approach (Sweetser et al., in press; Dodge et al., 2015) that analyzes the system of conceptual metaphors in the Croatian language with a bottom-up corpus-based approach that analyzes how metaphors are used in discourse.

For each conceptual metaphor (CM), its *type* (primary, complex, and entailed metaphors) and *level* (general, specific) are determined, as well as its *family*, *source*, *target frame*, and *mappings*. The *relations* and the *types of relations* between the metaphor in question and other metaphors in the database (e.g., “is both a source and a target subcase of”, “is a source subcase of”, “is a target subcase of”, “is a mapping within” etc.) are also indicated. Finally, linguistic examples from the Croatian Web Corpus (hrWaC) are listed for each CM.

METHODOLOGY

The MetaNet.HR method for metaphorical conceptualization analysis is a bottom-up corpus based analysis that enables language-specific and English independent examination of conceptual systems. It complements the MetaNet’s method of defining conceptual metaphors (defining the metaphor family, the source and target frames, mappings and metaphor relations, and providing linguistic metaphors), but in order to ensure that the database reflects the metaphorical system of the Croatian language, it starts from the actual language use as reflected in web corpora.



The method involves the following steps:

- choosing metaphor families;
- creating a list of target words;
- linguistic metaphor identification and annotation;
- conceptual metaphor identification;
- data entry.

Figure 1. Thesaurus in Sketch Engine for the word *mind* in the English enTenTen13 corpus.

For each concept in the metaphor, a web corpus is analyzed using Sketch Engine (Kilgarriff et al., 2004). A list of target words for which the corpus is queried is compiled using the relevant word sketches and the thesaurus option. A word sketch and a random concordance sample of 300 lines per target word is analyzed for each of the target words. The samples are then annotated on the linguistic level using the MIPVU procedure (Steen et al., 2010), and on the conceptual level using more annotators and measuring the IAA. The main strength of this manual annotation procedure is that it enables a thorough and language-specific analysis of metaphor families.

Source	HJR
Note	
Example: text	Ta je ideja odbačena iz sigurnosnih razloga.
Literal translation	This idea was thrown away from security reasons.
English translation	This idea was rejected for security reasons.
Source	HJR
Note	
Example: text	Držim da je to pogrešno.
Literal translation	I am holding that this is false.
English translation	I think this is false.
Source	HJR
Note	
Example: text	Krade mi misao.
Literal translation	He is stealing my thought.
English translation	He is stealing my thought.
Source	HJR
Note	
Example: text	Dala si mi sjajnu ideju!
Literal translation	You gave me a shiny idea!
English translation	You gave me a great idea!

Figure 2. Examples of Croatian linguistic metaphors for the CM IDEA IS AN OBJECT.

CONCLUSIONS

ensuring the balanced and sustainable development of the territory of the Community... The strategic guidelines should contribute to the success of the European territorial objective which depends on shared development strategies of the territories concerned at national, regional, and local level and on networking especially to ensure the transfer of ideas to mainstream national and regional cohesion programmes.

BEING AWARE that cultural diversity is strengthened by the free flow of ideas, and that it is nurtured by constant exchanges and interaction between cultures,

RECOGNIZING that the diversity of cultural expressions, including traditional cultural expressions, is an important factor that allows individuals and peoples to express and to share with others their ideas and values,

BEING AWARE of Unesco's specific mandate to ensure respect for the diversity of cultures and to recommend such international agreements as may be necessary to promote the free flow of ideas by word and image,

measures aimed at encouraging non-profit organizations, as well as public and private institutions and artists and other cultural professionals, to develop and promote the free exchange and circulation of ideas, cultural expressions and cultural activities, goods and services, and to stimulate both the creative and entrepreneurial spirit in their activities,

promoting cooperation and innovation. Local initiatives such as Leader and support for diversification can play an essential role in connecting people to new ideas and approaches, encouraging innovation and entrepreneurship, and can promote inclusiveness and the provision of local services. On-line communities can help in the dissemination of knowledge, the exchange of good practices and innovation in rural products and services.

održivog razvoja na području Zajednice. Strateške smjernice trebale bi doprinijeti uspjehu cilja europske teritorijalne suradnje koji ovisi o zajedničkim strategijama razvoja predmetnih područja na nacionalnoj, regionalnoj i lokalnoj razini i umrežavanju, osobito kako bi se osigurao protok ideja radi promicanja nacionalnih i regionalnih kohezijskih programa.

UVIDAJUĆI da se kulturna raznolikost osnažuje slobodnim protokom ideja te da se promiče stalnim razmjenama i međusobnom interakcijom kultura,

PRIZNAVAJUĆI da je raznolikost kulturnih izričaja, uključujući tradicionalne kulturne izričaje, važan čimbenik koji omogućuje pojedincima i narodima da izraze i podijele s drugima svoje ideje i vrijednosti,

UVIDAJUĆI specifičnu zadaću UNESCO-a u osiguravanju poštivanja raznolikosti kultura te preporučivanju onih međunarodnih sporazuma koji mogu biti potrebni kako bi se promicao slobodni protok ideja putem riječi i slike,

mjere koje imaju za cilj poticanje neprofitnih organizacija, kao i javnih i privatnih institucija i umjetnika te drugih kulturnih djelatnika na razvijanje i promicanje slobodne razmjene i kretanja ideja, kulturnih izričaja i kulturnih aktivnosti, proizvoda i usluga te poticanje stvaralačkog i poduzetničkog duha u njihovim aktivnostima,

promicanje suradnje i inovacije. Lokalne inicijative poput koncepta Leader i potpore za diversifikaciju mogu imati bitnu ulogu u povezivanju ljudi novim idejama i pristupima, u poticanju inovacija i poduzetništva, te mogu promicati uključenošću i osiguravanje lokalnih usluga. On-line usluge mogu pomoći širenju znanja, razmjeni dobre prakse i inovacijama kod ruralnih proizvođača i seljaka.

Figure 3. Parallel concordances of the English word *idea* and its Croatian equivalent *ideja*.

When it comes to comparing linguistic manifestations of conceptual metaphors in two or more languages – which is a prerequisite for reaching conclusions about the universality of CM systems – parallel corpora prove to be an invaluable resource. Figure 3. shows the parallel concordances containing linguistic metaphors of the English and Croatian CMs IDEAS ARE GOODS.

The next step in the database development will include the visualization of metaphorical concepts, as shown in Figure 4.



Figure 4. Visualization of the concept *ljubav* ‘love’ and its related concepts.

Figure 5. List of conceptual metaphors in MetaNet.HR

This procedure is ready to be used for other languages in achieving the ultimate goal of creating a large-scale multilingual figurative thought and language repository. Such a repository has the potential to revolutionize the field by enabling further non-speculative comparative analyses and by answering many open questions concerning metaphor and linguistic diversity, most important of which is what is universal and what is culturally specific in the ways humans conceptualize.

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