TOWARDS A REPRESENTATION OF FIGURATIVE LANGUAGE AND SEMANTIC SHIFT IN COMPUTATIONAL LEXICA: A CASE STUDY IN OLD ENGLISH EMOTIONS

This poster deals with the representation of figurative language in lexical resources. More specifically, we are interested in the encoding of historical processes of extension or transference of meaning from one conceptual area (i.e., literal meaning) to another (i.e., figurative meaning) in computational lexical resources. These processes of **semantic extension** or **transference** illustrate two key mechanisms in semantic change, namely **metonymization** (i.e. referring to those cases where there exists a close conceptual connection between literal and the figurative meanings) and **metaphorization** (i.e., referring to those cases where two distinct conceptual domains are linked; Traugott and Dasher 2001, 27). The idea is to enable research in this and closely related fields to be published and shared as structured data using current standards and technologies for computational lexical resources (as far as is possible; we intend to propose new standards or extensions of standards when this is not the case), with a further view to making such research more accessible both within the field of the study (of metaphor/metonymy) and also to a broader audience. In particular we are interested on making such datasets more interoperable with each other, as well as with other, salient, kinds of data, by rendering the theoretical assumptions used to organise the data more explicit and potentially machine actionable.

Our focus will be on one specific use case which concerns a fine grained analysis of the set of emotion terms in Old English and which will look at the different kinds of semantic shift which took place over time amongst the words in this semantic field on the basis of the corpus of existing Old English texts (Díaz-Vera 2014). We will detail our proposal to produce a computational resource on the basis of data which have already been collected and which we intend to organise as a digital lexicon encoded in the Text Encoding Initiative (TEI)[1] and which is to be linked to a a reusable taxonomy in SKOS[2] of metaphor/metonymy organised. Broadly speaking, our methodology here follows these steps:

1º - Creation of a list of Old English lexical items for emotions;
2º - Classification of these lexical items into families of emotions;
3º - Further classification of these lexical items into *literal expressions* (i.e., monosemic items) and *figurative expressions* (i.e. polysemic items, where the historically later meaning illustrates a semantic extension from the historically earlier one);

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[1] In particular we make use of Chapter 9 of the TEI guidelines
https://tei-c.org/release/doc/tei-p5-doc/en/html
[2] https://www.w3.org/TR/skos-reference/

4º - Classification of the resulting figurative expressions into metonymic extensions and metaphoric extensions.

- 5º - Creation of a taxonomy of conceptual mappings in SKOS organising the metonymic and metaphoric mappings each of which has its own URI;
- 6º - Creation of a lexicon of Old English emotion terms in TEI which uses the URI's created as part of the 5th step in the description of each entry. We are also considering the creation of an additional lexicon in RDF based on the ontolex-lemon model.

On the basis of this use case, as well as our previous work, we will make a number of more general observations on the classification and representation of such diachronic processes in computational lexical resources.

References

Díaz-Vera, Javier E. (2014) "From Cognitive Linguistics to Historical Sociolinguistics: The evolution of Old English expressions of shame and guilt." *Cognitive Linguistic Studies* 1.1: 55-83.

Traugott, Elizabeth Cross and Richard B. Dasher (2001) *Regularity in Semantic Change.* Cambridge: Cambridge University Press.