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Modelling Emotion Concepts Across Languages

The goal of my talk is twofold: (1) I will promote a context-sensitive analysis of emotion concepts across languages and (2) I will argue that a quantitative methodology is much needed in order to generalize results obtained in cross-linguistic corpus-based studies.

(1) Emotion concepts such as ANGER or JOY have received much attention (Kövecses 2000; Lakoff 1987) also from a contrastive perspective (Cislaru 2014; Constantinou 2014; Lewandowska-Tomascyk/Wilson 2010; Wierzbicka 2009). As has been stated recently, however, many approaches in the field of emotion research suffer from a “methodological flaw of decontextualization” (Constantinou 2014: 159). In my talk, I can show that the cognitive (corpus) linguistics framework (Lewandowska-Tomascyk/Dziwirek 2009) of Emotion Events (Langacker 1987, 1991; Lewandowska-Tomascyk/Wilson 2010), which are defined as the immediate contextual use of emotion lexemes and their sub-unit parameters such as intensifying adverbs (Fronhofer 2015) or adverbs of modal certainty / uncertainty (Fronhofer, in prep.), provides deeper insights into the display of emotion concepts, i.e. their actual use in discourse, and may therefore “serve as” suitable “*tertia comparationis* in cross-linguistic analyses” (Lewandowska-Tomascyk/Wilson 2010: 324). In other words, emotion lexemes pattern with language-specific sets of sub-unit-parameters, which themselves may function as contextualization cues (Gumperz 1992), and form language-specific emergent and salient discourse patterns (Ariel 2008) (see examples below). This frequency-based pattern analysis, and results obtained thereof, shed light on different degrees of entrenchment (Langacker 1987) of the emotion concepts and their contextual cues in the respective languages.

(2) In order to discover patterns in large data sets or corpora, quantitative data analysis – going of course hand in hand with qualitative considerations – is indispensable (Levshina 2015). In my talk, I present how statistical models, more specifically, generalized linear mixed models (GLMM), can enrich the outcome of corpus-based experimental studies (Baayen 2008; Gries 2013). My study is based on the *AWE-Corpus*, a corpus of 248 written emotion narratives (approx. 500 words each), which were experimentally elicited from university students, native speakers of English and German. The corpus is balanced with respect to languages, gender and elicitation tasks (one positive and one negative topic). The linguistic data was manually annotated for emotion nouns, adjectives, adverbs and verbs and their contextual patterns, e.g. co-occurring adverbial subjuncts (forms) cueing intensity (upgrading and downgrading) or co-occurring adverbial content disjuncts (forms) cueing different degrees of probability (certainty and uncertainty). The experimental design of the study allows for modelling the frequency-based between-group variation in the linguistic representation and hence conceptualization of emotion concepts (usage-based methodology; e.g. Langacker 1987), while taking individual differences into account. Moreover, the mixed design of the GLM grasps both fixed effects (e.g. language, gender) and random effects (e.g. task, age, number of words). The tasks have been considered as within-subject variable.

All in all, the results corroborate cross-linguistic differences in English and German emotion concepts in form of a formal and functional differential display of emotion patterns. Moreover, I show that a context-sensitive frequency-based pattern analysis with subsequent statistical (inferential) modelling is complementary to the more traditional

corpus-based (descriptive and analytic) analyses.

Corpus examples

- (a) [...] and even though some of them were *upset*, and *I think probably a bit jealous*, they were still *very happy* for me and we all cheered. (e_f_033_2)
- '[...] und obwohl einige von ihnen *sauer* waren, und *ich denke wahrscheinlich auch ein bisschen neidisch*, freuten sie sich trotzdem sehr für mich und wir jubelten gemeinsam.'
- (b) Dabei *bin ich mir sicher*, dass sie ebenfalls viel auf die Prüfung gelernt haben und jetzt einfach *ein wenig neidisch* sind. (g_m_014_2)
- '*I am sure* that they have learnt a lot for the exam as well and that they are *just a bit jealous* now.'

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