A cross-linguistic empirical approach to emotion lexis and syntax

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1 Introduction

A central issue in the comparative study of the patterns of linguistic category is choosing specific exponents in the target languages. A common solution is the translation of lexemes from an arbitrary language (usually English) via native speaker inquiry and/or dictionaries (cf. the methods in e.g. Russell 1983; Hupka et al. 1999; Nichols et al. 2004). Shared semantics functions as the *tertium comparationis* in such cases. However, most studies acknowledge that this approach, while advantageous due to its accessibility and economy, is problematic: It imposes specific taxonomies onto conceptual spaces whose lexical and morphosyntactic boundaries cannot be assumed to line up a priori. In fact, the reification of English emotion lexemes has been widely criticized in recent years (Wierzbicka, 2009; Haspelmath, 2010). We introduce a survey method directly addressing this issue. Developed for an ongoing typological project on the interrelation of structural alternations in emotion predicates (e.g. Icelandic *gleðja* 'gladden' $\sim$ *gleðjast* 'be glad'; Korean *pwukkulepta* 'be ashamed' $\sim$ *pwukkulepkey hata* 'make ashamed') and effects of non-canonical syntax (Belletti & Rizzi, 1988), our approach leverages insights from psychology and anthropology in order to eschew the need of perspective-taking on the part of the researcher. We present a detailed account of the method. As proof of concept, we also discuss some initial observations from the first cohort of surveyed languages.

2 Background & Method

Emotions arise from human social plans (Oatley & Johnson-Laird, 1987). They are necessitated by the intermediate position of humans as systems between simplistic fixed action stimulus-response patterns and absolute rationality (Simon, 1967). Anthropological, sociological and psychological research has yielded a number of Universal Antecedent Events which can be shown to elicit uniform basic emotional responses across cultures (Boucher & Brandt, 1981), with physiological correlates in facial expression (Ekman, 1973) and the autonomous nervous system (Ekman et al., 1983). These correspond to five coarse modes which we circumscribe broadly using the following labels (Oatley & Johnson-Laird, 1987; Johnson-Laird & Oatley, 1989; Turner, 2007):

(1) a. HAPPINESS: goal achieved
b. SADNESS: failure of plan; loss of object
c. ANGER: interference with plan
d. FEAR: self-preservation goal threatened
e. DISGUST: violation of gustatory goal; contact with noxious matter

The pervasive culture-specificity observed in emotional expression (Frijda & Mesquita, 1998) is a function of ontogeny. Social plans grow in complexity from infant-caregiver relations to mutual commitments with other individuals (Oatley & Johnson-Laird, 1987). Complex emotions at the adult stage can thus be construed as arising from (1) via acquired cognitive evaluation and reference to a model of self (Scherer et al., 1988). The more an emotion is characterized by active cognition, the stronger it is thus bound to be culturally informed (Wallbott & Scherer, 1986). Following pilot tests, we operationalized this layer as follows:

(2) a. NEUTRAL: basic/unmarked emotion
b. SHORT LATENCY: unexpected emergence of emotion
c. HIGH DEGREE: emotion has strong implications for self
d. ELSE: emotions is characterized otherwise

Expanding current methodology in typological studies of lexical domains and emotion lexis (Nichols et al., 2004; Levinson et al., 2007) , we devised an oral elicitation task based on (1) and (2). In order capture comparable inventories of emotion predicates in naturalistic usage, we created 5 (emotion domains) × 2 (± animacy of stimulus) = 10 simple scenarios using generic human referents and avoiding emotionally loaded wording. For each scenario, questions targeting the sub-components in (2) were used to incite speakers to provide citation forms and basic phrases based on their own emotional taxonomy, thus reconciling the conflicting requirements for cross-linguistic comparability and naturalness in the target language data. As this study was developed to investigate alternations, participants were further asked to invert sentences following elicitation. However, in principle this method could be used to address a large number of questions concerning the behavior of psych predicates. Remarks about the appropriateness and naturalness of individual expressions were also recorded. We tested this method with native speakers of Icelandic, Spanish, Korean, Chinese and Finnish across multiple sessions. The resulting data were analyzed and coded with regard to their bases and their morphological and syntactic structure. Where available, etymological information was included. Sentences were segmented, glossed and translated. All material was entered into a parallelized database.

3 Results

We compiled extensive inventories of psych verbs for each language. A comparison of the coding patterns for morphology and argument structure across items shows that we successfully elicited the relevant phenomena despite foregoing direct translation equivalence:

Table 1: Structural patterns in initial sample (n=392)

Language	Lexical bases	% Base ES	% Base EO	Main strategies
Icelandic	30	6.67	90	mid. voice
Spanish	119	0	100	reflexive
Korean	113	91.15	0	peri. caus.
Chinese	71	92.95	2.82	peri. caus.
Finnish	59	49.2	33.9	caus., inch.

ES = Experiencer-subject, EO = Experiencer-object; % < 100 = remaining items exhibited other strategies.

It is clear that many of the alternating pairs would have been difficult to capture via English. Consider the following FEAR items: Kor. *honpipayksan hata/honpipayksan hakey*

hata ‘be/make scared out of one’s wits’, Chin. *hàoqí/shǐ hàoqí* ‘be/make curious’, Fin. *jännittää/jännittyä* ‘make/get excited, nervous, tense’. Their English translations do not alternate straightforwardly and represent only partial semantic matches. Under a strict translation-based approach, these could not have been drawn upon as equal items for further controlled hypothesis testing despite being natural exponents of the category in the individual lects. We present a new theoretically substantiated and empirically sound approach to phenomena in the domain of psych verbs, addressing methodological issues highly relevant for typological studies at the intersection of natural language data and controlled experimentation.

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