Cross-linguistic variation in descriptions of human faces

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Human faces are notoriously difficult to describe. As such, they have long been considered an ineffable domain, in particular in terms of naming facial recognition features (Levinson & Majid 2014). The apparent verbal limitation in describing faces seems to be linked to the fact humans process faces to access identities and this relies strongly on holistic processing (i.e., processing of configurations of features). Describing aspects of faces, in turn, relies more on featural processing (i.e., processing of individual features) (cf. Levinson & Majid 2014). In fact, verbal descriptions of faces have been shown to impair facial recognition, suggesting that language can have a detrimental effect on perception (Dodson et al., 1997). Despite the large body of work in psychology feeding into hypotheses on why faces might be difficult to verbalize, there is little systematic work in linguistics trying to establish how speakers of different languages actually describe faces and whether facial descriptions differ across languages in meaningful ways. In fact, this domain has been explicitly singled out as "neglected" in semantic typology research (Evans 2011), despite its potentially high significance for semantic theory and our understanding of the limits of language.

Here, we present research in which we compare descriptions of a set of standardized facial stimuli focusing primarily on dynamic facial characteristics. We concentrate on two typologically diverse languages: Maniq (Austroasiatic) and Polish (Indo-European) reporting results of two labelling tasks: one targeting single features ("action units") and second configurations of features (emotional expressions). While two languages are not sufficient to make typological generalizations, this is a first systematic cross-linguistic comparison in this domain. Maniq and Polish provide a good basis for comparison because they are unrelated, spoken in different areas, and have markedly different lexical profiles: with Polish showing a tendency towards compositional encoding and distributing meaning across different word classes, and Maniq displaying a more holistic encoding and being more "verby" (Wnuk 2016).

Our initial analysis shows Maniq possesses highly semantically specific vocabulary expressing facial actions in monomorphemic verbs, e.g., *citũn* 'to raise upper lip', whereas Polish frequently employs multi-morphemic phrases, e.g., *podnieść górną wargę* 'to raise upper lip' (raise upper lip). At the same time, Polish exhibits richer and more specific vocabulary of configurational descriptors referring to emotion, e.g., ***zażenowanie*** 'embarassment', *wstyd* 'shame', compared to Maniq, where such descriptors are less specific and less numerous, e.g., *ʔiyay* 'to be unhappy, upset, irritated'. Further analysis reveals cross-linguistic differences in participant naming agreement of single features vs. configurations, suggesting different lexical specialization is accompanied by different conveyability. We present our findings placing them in the broader context of human facial cognition and discuss the implications of this work for lexico-semantic typology.

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