

Correlations between Grammatical and Sociopolitical Complexity: Some Empirical Studies

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This talk presents a series of empirical studies supporting a positive correlation between certain aspects of grammatical complexity, and complexity in various sociopolitical domains such as language size (number of speakers), language status (local vs. national), and others.

The focus of the talk is on a large-scale cross-linguistic experimental study now nearing completion, measuring the extent to which thematic roles are encoded in different languages. Given a simple construction such as CHICKEN EAT, the experiment measures the degree to which various morphosyntactic devices (eg. word order, case marking, and so forth) differentiate between thematic roles (eg. agent and patient). A world-wide sample of 69 languages reveals a striking correlation to the effect that languages associated with higher sociopolitical complexity (eg. English, Arabic, Chinese) differentiate thematic roles to a greater extent than languages of lower sociopolitical complexity (eg. Juh'oan, Yali, Tikuna). Further manifestations of the same correlation are also observed language internally, whereby dialects/registers/varieties of higher sociopolitical complexity exhibit greater thematic role differentiation than their counterparts of lower sociopolitical complexity (eg. Standard vs. Neapolitan Italian, Standard vs. Riau Indonesian, Standard vs. Osaka Japanese). Similarly, within the same language variety, speakers of higher SES display greater thematic role differentiation than speakers of lower SES.

Following this, the talk briefly surveys a number of other recent cross-linguistic studies also supporting a correlation between grammatical and sociopolitical complexity. One, recently completed, demonstrates a correlation between the presence of obligatory tense-aspect-mood marking and language-family size. Another, currently in progress, reveals a correlation between metaphor directionality and sociopolitical complexity. And a third, just started, may perhaps suggest a correlation between part-based vs. holistically-based descriptions of certain visual images and sociopolitical complexity.

The results reported on here join forces with other studies that have found positive correlations between grammatical and sociopolitical complexity in various domains (Hay and Bauer 2007, Atkinson 2011, Wichmann et al 2011, Meir et al 2012, Raviv, Meyer and Lev-Ari 2019, 2020, Raviv 2020, Ergin et al 2020). However, they appear to run counter to another body of studies that finds negative correlations (McWhorter 2005, 2018, Dahl 2004, Wray and Grace 2007, Lopyan and Dale 2010, Trudgill 2011). A potential avenue to resolving this conflict lies in the distinction between two memory types, procedural and declarative; specifically, grammatical features that correlate positively with sociopolitical complexity appear to be those generally connected with procedural memory, whereas features that correlate negatively seem to be typically governed by declarative memory (Bénitez-Burraco et al 2021).

In conclusion, the results of the studies reported on here lend further force to our increasing awareness that the investigation of human language and cognitions needs to escape the bounds of WEIRD languages and societies, and focus more on languages of low sociopolitical complexity. In particular, patterns of grammatical features observed in languages of low sociopolitical complexity provide a promising window into the challenging question of how the human language capacity, and the variegated languages that instantiate it, may have evolved.

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