Functional explanations of prenominal possessors in attributive possessive constructions: dynamic evidence from Czech

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In languages with pre- and postnominal possessors in attributive constructions (cf. (1) and (2)), there is a strong tendency for syntactically light possessors (PR) high on the animacy and referential hierarchies to precede the possessum (PM) (for discussion see O'Connor et al. 2013: 91). This is also the case for Czech. This tendency has been explained on the basis of discourse status and information structure in Křivan (2014). In our paper, we test this explanation on Czech diachronic data.

(1) a. *John's book*
     b. *A book of John*

(2) a. *Jan-ov-a*   *knih-a*   (Czech)
         John-POSS(M)-NOM.SG.F   book-NOM.SG.F
         'John's book.'

     b. *knih-a*   *král-e*   *Jan-a*
         book-NOM.SG.F   king-GEN.SG.M   John-GEN.SG.M
         'A book of King John.' / 'King John's book.'

As evidenced in Gebauer (2007), the position of pronominal and adjectival PRs relative to the head noun changed from predominantly postnominal to prenominal between 14th and 18th century. Discourse status of the PR can be analyzed as one of the triggers for this change. On the other hand, we expected to find no such effect for non-possessive adjectives, which nevertheless underwent similar change. To test this, we compared internal word order of NPs with prototypical human animate attributive PRs with NPs with non-possessive adjectives. We predicted this change to have been caused by an interaction of discourse status of the PR (a general functional principle) and structural analogy driven by the shared agreement properties of both types of modifiers (language internal factors). This change reflects a structural shift of PRs from a postnominal genitive construction to a prenominal monolexemic PR construction.

Our dataset consisted of 5,000 NPs modified by attributive PRs or non-possessive adjectives which were randomly sampled from *Vokabulář webový*, a 5 mil. token data bank of old and middle Czech texts (i.e. 14th–18th century). We coded the concordances for following variables: origin (original/translated), genre, and dating of the text, semantic characteristics of the modifier (referential type of the PR) and its morphosyntactic properties (i.e. modification and coordination), morphosyntactic characteristics of the NP (i.e. case, headedness, embedding, number of modifiers and projectivity), information status of the NP (following Lambrecht 1996 and Hajičová et al. 1998), and discourse status of the PR. The data were analyzed both qualitatively and quantitatively using generalized linear mixed-effects modeling (Hilpert & Gries 2010).

Contrary to our initial expectations, the change of word order started in qualitative adjectives. The adjectival PRs that, in line with our predictions, pattern with possessive pronouns and relational adjectives, followed later. Category membership is thus a major predictor of word order in and of itself. Two conserving forces are at play with respect to the ordering of adjectival PRs. First, the constructions are considerably fixed in that particular possessors appear with a relatively small number of possessa. On the other hand, the data may be biased in this respect due to a large proportion of biblical literature. Second, they are close to postnominal genitival modifiers both formally and functionally, suggesting that change of category membership was one of the driving forces of the change, once the adjectival PRs acquired more adjective-like behavior. All of the

factors considered are thus in many cases outweighed by strongly collocated and lexically specific expressions resistant to the change. The same effect was observed when the NP is further modified (cf. (3)).

(3) *krev-n-í*   *přietel-é*   *mateř-in-i*   (Old Czech)
blood-ADJ-NOM.PL.M   relative-NOM.PL.M   mother-POSS(F)-NOM.PL.M
'Mother's blood relatives.'

As an outcome, in a general perspective, the results of our investigation show that the language particular diachronic pathways of prenominal adjectival PRs in Czech are related to the explanations for prenominal monolexemic PR construction based upon synchronic evidence far less straightforwardly than previously expected. This suggests (in line with Cristofaro 2012) that diachronic data are needed to reveal the language particular diachronic principles (leading to the general explanation by means of language as an adaptive system) which cannot be inferred directly from synchronic patterns.

References

Cristofaro, Sonia. 2012. Cognitive explanations, distributional evidence, and diachrony. *Studies in Language* 36(3), 645–670.

Gebauer, Jan. 2007. *Historická mluvnice jazyka českého IV. Skladba.* (1st edn. 1929, ed. F. Trávníček.) Praha: Academia.

Hajičová, Eva & Partee, Barbara H. & Sgall, Petr. 1998. *Topic-focus Articulation, Tripartite Structures and Semantic Content*. Dordrecht: Springer.

Hilpert, Martin & Gries, Stefan Th. 2010. Modeling diachronic change in the third person singular: a multifactorial, verb- and author-specific exploratory approach. *English Language and Linguistics* 14/3, 293–320.

Křivan, Jan. 2014. The role of information structure in Czech possessive constructions. In Emonds, J. & Janebová, M. (eds.), *Language Use and Linguistic Structure: Proceedings of the Olomouc Linguistics Colloquium 2013*. Olomouc: Univerzita Palackého, 211–227.

Lambrecht, Knud. 1996. *Information Structure and Sentence Form. Topic, Focus and the Mental Representations of Discourse Referents*. Cambridge: Cambridge University Press.

O'Connor, Catherine & Maling, Joan & Skarabela, Barbora. 2013. Nominal categories and the expression of possession: A cross-linguistic study of probabilistic tendencies and categorical constraints. In Börjars, K. & Denison, D. & Scott, A. (eds.), *Morphosyntactic categories and the expression of possession*. Amsterdam: John Benjamins, 89–121.

Vokabulář webový [online]. Version 0.4.2. Department of Language Development, Institute of the Czech Language, Academy of Sciences of the Czech Republic. (http://vokabular.ujc.cas.cz) (Accessed 2016-01-10.)