Co-expression patterns of nominal predicate functions in (Indo-)Iranian

Shahar Shirtz, Department of Linguistics, University of Oregon.

The co-expression of different grammatical functional domains by the same structural coding means has been at the heart of many typological studies involving semantic maps and other methods (e.g., Van der Auwera & Plungian 1998, Hartmann et al. 2014). Similar studies have been used to argue for or against a relationship between predicative possession and predicate location (e.g. Heine 1997, Baron & Herslund 2001, DeLancey 2002, Payne 2009), or to present a typology of the co-expression of core nominal predicate functions and predicate location (Stassen's 2013 entry in WALS). Many of these studies treat co-expression as a binary variable: two functional domains are expressed by the same structural means or by different structural means. Thus, they do not take into account intralinguistic variation in the expression of different functional domains. Moreover, some of these studies (e.g., Stassen 2013) limit their scope to the identity of the copula alone, ignoring other structural coding means such as nominal flagging by case markers and adpositions, relative word order, and indexation.

This paper takes a more nuanced approach to the analysis of co-expression patterns. First, it treats co-expression as a continuous, rather than a binary, variable. Second, it takes into account an ensemble of structural coding means, including the identity of the copula, nominal flagging by case markers and adpositions, relative word order, and (where applicable) verbal indexation. Drawing on a set of published corpora (supplemented by grammatical descriptions) in ten Iranian and six Indo-Aryan languages, this paper reports two studies. The first study is concerned with the co-expression patterns of predicative possession and predicate location, and the second study is concerned with the relationship between the core nominal predicate functions (equation, predicate attribute, proper inclusion) and predicate location (following Stassen 2013). Using affiliation network analysis (e.g., Wasserman & Faust 1994:291-345), a tool used in social network research, we analyze the different patterns in which the targeted functions are co-expressed by the same structural coding means. This method allows us to evaluate the degree to which two functions are co-expressed as a continuous variable, and to analyze the processes of grammatical change and semantic extension which underlie the co-expression patterns. Thus, this paper assesses the degree to which well-established localist semantic relationships (following, e.g., Jackendoff 1990) between locations and possessors on the one hand, and locations and states on the other, effect the clause-level grammar used to express nominal predicate functions.

Data for this paper comes from published naturalistic texts, from which clauses expressing core nominal predication, predicative possession, and predicate location functions were collected (following definitions used in Clark 1978, Payne 1997:111-115). All together, 200 – 500 tokens expressing these functions were collected per language. These tokens were tagged for the function they express and for several structural coding means: type of copula, flagging of constituents, relative word order, and indexation.

Even when considering more structural coding means than the copula alone, one finds clear and frequent co-expression patterns. The clauses in (1a-b), from Middle Persian, express predicative attribute and predicate location by the same configurations of structural coding means. In both examples the same copular verb is used, accompanied by a morphologically unflagged NP and a prepositional phrase headed by *andar* 'in, inside'. In examples (2a-b), from Gorani, the same verbal copula is accompanied by two morphologically unmarked NPs. Example (2a), however, expresses the predicate attribute function and example (2b) expresses the predicate locative function. In (3a-b) the copular verb is accompanied by two unflagged NPs, but (3a) expresses predicative possession and (3b) equation.

(1a) *mardōm-ān andar gumān būd h-ēnd*
man-PL in doubt be.PST be.PRS-3PL
"the people were in doubt" (Middle Persian, AWN)

(1b) *was ruwān ud frawahrān andar ān rōd būd h-ēnd*
many soul and fravašis in DEM river be.PST be.PRS-3PL
"there were many souls and fravašis in this river" (Middle Persian, DK6)

(2a) *dita-ka=š* *šīt* *biya*
daughter-DEF=3SG insane be.PST.3SG
"his daughter became insane" (Gorani, Mahmoudveysi et al. 2012: 98)

(2b) *usā* *āsā* *faransa biya*
master then france be.PST.3SG
"at that time, the master was in France" (Gorani, Mahmoudveysi et al. 2012: 108)

(3a) *harw kas* *ciš=ē* *ast*
every person thing=INDEF be.PRS.3SG
"Every person has one thing (which is dearer than other things)" (Middle Persian, DK6)

(3b) ēn xwaršēd pāyag ast
DEM sun station be.PRS.3SG
"This is the station of the sun" (Middle Persian AWN)

Overall, we find that predicative possession and predicate locative are rarely expressed by the same configurations of structural coding means (despite often sharing a copula type), and are usually expressed by more or less dedicated constructions. This is despite a clear localist origin for some (or even most) possessor markers. Predicate locative and the core nominal predicate functions, however, are more often co-expressed by the same structural coding means, following patterns of functional change and semantic extension such as those demonstrated in (1-2) above. These co-expression patterns vary cross-linguistically, which points to variation in the type of semantic extensions and language change processes active in different languages at different times, driving the rise of different co-expression patterns.

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