

## **Grammatical properties which influence GNMCCs**

This paper aims to extend or further circumscribe the typology of GNMCCs by surveying data from a wider range of languages than has been considered to date. Based on observations and hypotheses in the literature, we investigate three properties which may positively correlate with the presence of the GNMCC, and which are canonically attested in Japanese (Matsumoto 1997):

- (1)    a. The noun modified by the clause is not syntactically represented in the clause (no relative pronoun).
- b. The modifying clause has no internal morphology which restricts the interpretation of the clause in relation to the noun.
- c. An extended array of semantic and grammatical relations can be represented by the head noun.

In regard to (a), languages with strong exemplars of GNMCCs like Japanese and Korean have no relative pronoun, or other nominal marker of a specific construction like a relative clause. We interpret this to mean that there should be a range of semantic relations between the head noun and modifying clause which goes even beyond the broadest conception of relative clauses. In other words, the semantic relations between a NMCC and a head noun cannot be reconfigured by simply reconstructing the noun back into the NMCC, either directly or due to the mediation of relative pro-forms.

For (b) Korean does have a special set of verbal inflections which appear in relative clauses, but exactly these forms are also used in all (other) types of NMCCs (Kim and Sells 2008). As far as we are aware, languages which show different forms of verbs in different NMCC types are quite rare (if there are any at all), but we wish to investigate this property.

Strictly speaking, (a) and (b) are potentially enabling properties, and then (c) should be the manifestation showing the full GNMCC character. Languages which are otherwise quite similar do appear to differ along the dimension in (c). For instance, Korean shows a tighter range of semantic relations than Japanese, which would suggest that there are some factors that license the different range of interpretive relations in the two languages.

In order to extend our understanding, we consider comparative data on a number of languages, representing potential different strategies for relativization, and with different clause-internal morphological properties. Further, we investigate noun-complement clauses and other adnominal clauses, to try to determine whether the language has a core GNMCC or not. Our planned sample of languages for which we believe enough data is available includes Diyari (Australian, Pama-Nyungen; source Austin 1981), Godoberi (Nakh-Daghestanian, Avar-Andic-Tsezic; source Kibrik 1996), Imonda (Border, Border; source Seiler 1985), Japanese (Japanese; Matsumoto 1997), Kannada (Dravidian, Southern Dravidian; source Sridhar 1990), Kombai (Trans-New Guinea, Awyu-Dumut; source de Vries 1993), Korean (Korean; Kim and Sells 2008), Mian (Trans-New Guinea, Ok family; source Fedden 2011), Mina (Afro-Asiatic, Chadic, Biu-Mandara; source Frajzyngier and Johnston with Adrian Edwards 2005), Russian (Indo-European, Slavic; various sources), Supyire (Niger-Congo, Gur; source Carlson 1994).