Case alternations: The interaction of semi-lexicality and case assignment

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<u>Introduction</u>: A number of Slavic and Uralic languages share the peculiar property of seeming to block structural case assignment in the presence of an oblique case assigner. This case alternation is particularly salient with the case-assigning numerals found in these languages, whereby the structural case assigned by the numeral, genitive in the Slavic languages (1a) and partitive in the Uralic languages (2a), fails to appear in oblique contexts (1b, 2b):

- (1) a. Iwan kupił pięć samochodów Ivan bought five cars.GEN Ivan bought five cars
- (2) a. Ivan osti viisi auto-a Ivan bought five-0 car-PART.SG Ivan bought five cars (Brattico 2011: 1045)
- b. z pięcioma samochodami with five.INST cars.INST ...with five cars
- b. Minä asuin kolmessa talossa I lived three.INE.SG house.INE.SG I lived in three houses (Brattico 2011: 1051)

This phenomenon has been approached from numerous perspectives in the literature, ranging from Case Hierarchies in which a more marked case blocks assignment of a less marked case (cf. Babby 1987; Franks 1994, 2002, Rutkowski & Szczegot 2001) to ideas of case stacking in which both the oblique and structural case are assigned, but only one is realized overtly (Brattico 2011; Matushansky 2008; Pesetsky 2012). In this talk, I address these varying approaches and based on agreement found with and within numeral-noun constructions, I propose an analysis which attributes these case alternations to the semi-lexical nature of numerals.

Semi-Lexicality: The lexical categories adjective and noun can be distinguished on the basis of their feature sets, whereby adjectives carry all unvalued phi-features and nouns all valued phifeatures (based on Baker's (2003) theory of categories). Under this definition, it is possible to define a class of semi-lexical elements (Corver & van Riemsdijk 2001) which differ from adjectives and nouns in their (phi) feature sets. Specifically, these semi-lexical elements may involve (i) incomplete feature sets, such that there is some phi-feature that is missing, (ii) mixed feature sets, such that there are both valued and unvalued phi-features, or (iii) feature sets which include some extra non-lexical feature. Turning to numerals, I propose that the numerals 2,3,4 and 5+ (5-10, 100) in Polish (and certain other Slavic languages) are semi-lexical. In particular, numerals 2,3,4 agree in gender ($dwa_M ptaki_M$ 'two birds', $dwie_F dziewczyny_F$ 'two girls'), but not in number (dwa ptaki_{PL} / *ptak_{SG} 'two birds/*bird'), as compared to numeral 1 (jeden ptak_{SG}, jedne ptaki_{PL} 'one bird, some birds'). Thus, these numerals have valued number, but unvalued gender, giving them a mixed feature set. Numerals 5+ do not agree in gender 1 (pięć dziewczyn_F / ptaków_M / krzeseł_N 'five girls / birds/ chairs'), and like 2,3,4, do not agree in number (pięć ptaków_{PL} / *ptaka_{SG} 'five birds / *bird'). Historically, these numerals triggered feminine singular verbal agreement, which surfaces now only as neuter singular (3). I assume they have lost their gender feature, in line with Miechowicz-Mathiason & Dziubała-Szreibroska (2012).

¹ I assume the Nominative-Genitive Hypothesis for numerals 2,3,4 and 5+, whereby numerals modifying non-masculine personal gendered nouns are in a (default) nominative case and numerals modifying masculine personal gendered nouns are in genitive (optionally for 2,3,4).

- (3) a. Ona siedm panien szła that.F.NOM seven.NOM maidens.GEN walked.F.SG

 Those seven maidens were walking (Old Polish Rutkowski 2006: 93)
 - b. Te pięć dziewczyn szło
 Those five girl.GEN walked.N.SG
 Those five girls were walking (Modern Polish)

Thus, these numerals have valued number, but missing gender, giving them an incomplete feature set. As a result, neither numeral type is fully lexical, but both are instead semi-lexical.

<u>Hypothesis</u>: Oblique case assigners may only assign their case to theta-role carrying elements where theta-roles require elements with fully specified, valued phi-features (i.e. lexical nouns as defined above). Consequently, oblique case assignment to a DP will percolate downwards until a lexical noun (or theta role) is encountered – in the case of semi-lexical numerals, the case will percolate past the numeral, targeting the quantified noun. This hypothesis predicts that case alternations are the result of semi-lexicality – this prediction is borne out for the semi-lexical coś in Polish (Rutkowski & Szczegot 2001), cf. (4):

(4) a. Widziałam coś ładnego b. Spałam z czymś miłym I.saw something nice.GEN I saw something nice I.stept with something.INST nice.INST I slept with something nice

Discussion: Case suppression vs. stacking: In Government and Binding theories, the distinction between surface structure (SS) and deep structure (DS) allowed for a bleeding effect in case assignment: oblique cases were assumed to be assigned at DS and structural cases at SS - with only one case feature per noun, case assignment at DS effectively blocked the assignment of case at SS (Franks 1994; Rutkowski & Szczegot 2001). In modern Minimalism, we dispense with these levels of representation and are left with what looks like case suppression. If we maintain the one-case-per-noun restriction, then case assigning abilities must be *lost* in oblique environments. Analyses of this type may achieve this by positing that numerals bear different categories in different positions (e.g. Q in structural positions and A in oblique positions). If we drop the one-case-per-noun restriction, then we are left with case stacking. The mainstream view seems to support the idea of case competition, whereby the most marked case is the one assigned (Franks 2002). As Brattico (2011) points out, this is exactly case stacking – for two cases to be in competition, they must both be assigned at some level of representation. Following Brattico (2011), I propose that case alternations involve case stacking, where the choice of which case will surface overtly is determined by markedness and locality. For the examples in (1) and (2), the oblique case takes precedence over the structural case, hence the case alternation.

<u>Conclusions:</u> Case alternations appear to present a challenge to linguistic theory, suggesting that numerals can 'lose' their case assigning abilities, or that their category will differ as a function of their case position. Such proposals are undesirable and introduce unnecessary idiosyncracies into the syntax of numerals. If we treat numerals as semi-lexical, unable to be the sole holder of an oblique case, and allow for case stacking, with the overt case determined by markedness and locality constraints, we can provide a principled explanation of case alternations. In this talk, I will discuss in more detail the case alternations (or lack thereof) in Polish, Serbo-Croatian, and Finnish.

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