Codependencies in Argument Encoding

Phenomenon: In some languages the realization of case marking depends on the featural content of an items coargument, in particular on its person or animacy features – a phenomenon called *global case split* (GCS) by Silverstein (1976) in opposition to the familiar *local case splits* where the shape of an argument depends only on its own featural content. In Yurok for example, the internal argument of a transitive verb is marked by the object marker –ac only when the verb's external argument is third person. In Umatilla Sahaptin the external argument has the ergative suffix in case the internal argument is a local person. In Tauya human objects require the subject to bear ergative marking.

- (1) Yurok (Western North America; Robins 1958)
 - a. ke?l nek ki newoh-pa? 2sg.nom 1sg.nom fut see-2>1sg You will see me.
- b. yo? nek-ac ki newoh-pe?n 3sg.nom 1sg-obj fut see-3>1sg He will see me.
- (2) Umatilla Sahaptin (Western North America; Rigsby and Rude 1996)
 - a. ɨwínš i-tu.xnana yáamaš-na man 3sg.sbj-shot mule.deer-obj The man shot a mule deer.
- b. iwinš-nim=nam i-q'inu-ša man-ERG=2SG 3SG.SBJ-see-IPFV The man sees you.
- (3) Tauya (Papua New Guinea; MacDonald 1990)
 - a. ya-ni fanu yau-e-?a 1sg-erg man [3sg.o]see-1sg.a-ind I saw the man.
- b. ya pai yau-e?a 1sg.nom pig [3sg.o]see-1sg.A-ind I saw the pig.

Similar phenomena: These data are of theoretical interest for at least two reasons: The elements that have to communicate stand in a non-local relation that in the case of Yurok even seems to require look-ahead (because the object depends on the structural higher subject) and there is an interaction of different features, namely case and person/animacy.

Restrictions on arguments with respect to the *same* feature like person in the Person Case Constraint (Bonet 1991) are well known. Analyses of the PCC (Anagnostopoulou 2006, Boeckx 2000) all postulate that the restriction falls out from a competition of two goals that have to check their features with a single probe. Since one of them is closer to the probe, it checks and values its person features first and under a matching requirement for checking the second goal can only be 3rd person which is assumed to be defined as absence of person features, so that it cannot contradict the first valuation. It is clear that such an approach cannot derive a restriction where two different features interact: if one goal values person/animacy, the other goal should be free to check and value any case feature.

What comes closest to the GCS data is the requirement that nominative objects in Quirky Subject constructions (QS) be 3rd person. All the analyses that discuss this restriction try to unify it with the PCC and therefore use the same mechanism and run into the same problem with respect to the data presented above: As the dative quirky subject values and checks its person features first on the probe, the nominative object has to be third person, either because 3rd person is absence of person features (Anagnostopoulou 2006, Boeckx 2000, Adger and Harbour 2007) or because the QS is third person and the object has to match it (Richards 2006).

The GCS data have barely been discussed in the literature. Aissen (1999) provides an optimality–theoretic account. She derives local case splits by harmonic alignment of grammatical relations with the person/animacy hierarchies (Silverstein 1976) and local conjunction of the constraints that fall out of this with a markedness constraint that prohibits the morphological spell–out of features. She uses the same mechanism to account for global case splits: local conjunction of the subject and object subhierarchies that were used to derive local case splits: $*Su/3 \gg *Su/Local$ (local) locally conjoined with $*Oj/Local \gg *Oj/3$ (local) $\to *Su/3$

 \gg *Oj/Local \gg *Su/3 \gg *Oj/3, *Su/Local \gg *Oj/Local \gg *Su/Local \gg *Oj/3 (global). The problem with this account is that it uses the mechanism of local conjunction but the result is in fact a non-local constraint because the valuation of it requires that a representation including the subject and the object is accessible.

Analysis: I will provide an analysis that derives the non-local restrictions in a local way (not exceeding the closest probe-goal-relations possible to get) and does not rely on feature hierarchies whose role in such phenomena has been questioned recently (Bickel and Makarevich 2008). The analysis relies on assumptions for which has been independently argued (Probe-goal relations, person decomposition, subset principle). What is new is the transfer of the subset relation into the agreement system developed in Chomsky (2001): probe and goal have featural content and checking does not only involve matching between their features but also that the probe's features are a subset of the goals features. I assume that person features have to be checked in a probe-goal-relation under c-command. Second, I decompose persons on goals on probes in a manner so that they stand in an inclusion relation (Adger and Harbour 2007), features of first person include those of second and third, and those of second include the third person's features. Furthermore, I capture the intuition that case and agreement are closely tied together (Schütze 1997) by representing case as an abstract feature '•' that is tied to an unvalued person feature of a probe (as in a feature geometry tree) and gets activated when that feature is valued and deleted. Taking the case of Umatilla Sahaptin, I will show that the restriction on case marking of the subject arises because the probe v in a transitive clause is defective in the sense that it has only an unchecked third person feature associated with a case feature •. As a consequence, only a third person object can agree with v and activate its case feature, first and second person not fulfilling the subset requirement because they include more elementary features. The external argument agrees with the second probe T and gets a case feature as well. As a result, both the external and the internal argument end up with one case feature that is spelled out as absolutive. If the internal argument is first or second person, it does not get v's case feature and ends up with a different case feature specification than the external argument, which results in different realization of cases, namely ergative and absolutive.

References

Adger, David and Daniel Harbour (2007): 'Syntax and Syncretisms of the Person Case Constraint', Syntax 10, 2-37.

Aissen, Judith (1999): 'Markedness and Subject Choice in Optimality Theory', Natural Language and Linguistic Theory 17, 673-711.

Anagnostopoulou, Elena (2006): Strong and weak person restrictions: A feature checking analysis. *In:* L.Heggie and F. Ordoñez, eds, *Clitics and Affixation*. Benjamins, Amsterdam, pp. 199-235.

Bickel, Balthasar and Alena Witzlack-Makarevich (2008): Referential scales and case alignment: reviewing the typological evidence. *In:* A.Malchukov and M.Richards, eds, *Scales. Linguistische Arbeits Berichte 86.* Institut für Linguistik, Universität Leipzig.

Boeckx, Cedric (2000): 'Quirky Agreement', Studia Linguistica 54, 354-380.

Bonet, Eulália (1991): Morphology after Syntax. PhD thesis, MIT, Cambridge, Mass.

Chomsky, Noam (2001): Derivation by Phase. In: M. Kenstowicz ,ed., Ken Hale. A Life in Language. MIT Press, Cambridge, Mass., pp. 1–52.

MacDonald, Lorna (1990): A Grammar of Tauya. Mouton de Gruyter, Berlin.

Richards, Marc (2006): Quirky Expletives. To appear in: Agreement Restrictions, R. d'Alessandro, G. H. Hrafnbjargarson and S. Fischer (eds).

Rigsby, Bruce and Noel Rude (1996): Sketch of Sahaptin, a Sahaptian language. In: *Handbook of North American Indians*.

Robins, Robert H. (1958): The Yurok Language: grammar, texts, lexicon. Mouton de Gruyter, Berkeley: University of California Press. ze:97

Schütze, Carson T. (1997): INFL in child and adult language: Agreement, case and licensing. Doctoral dissertation, MIT.

Silverstein, Michael (1976): Hierarchy of Features and Ergativity. *In:* R.Dixon, ed., *Grammatical Categories in Australian Languages*. Australian Institute of Aboriginal Studies, Canberra, pp. 112-171.