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Person and Animacy Splits: from Hierarchies to Features

1. The proposal. In this paper, we establish a correlation between person splits familiar from ergative languages (1st/2nd vs. 3rd) and animacy splits in languages like Romanian, Spanish and Hindi where animate direct objects surface with marked prepositional accusative and non-animate objects surface with unmarked accusative. At a descriptive level, both phenomena appear to operate on the basis of the nominal hierarchy in (1) (Silverstein 1976; Kuno 1976; Dixon 1994: 85) the difference being that person splits are located in the left part of the hierarchy, while animacy splits are located in the right part of the hierarchy.

(1)				Common Nouns
1st person pronouns	2nd person pronouns	3rd person pronouns, demonstratives	Proper Names	Human Animate Inanimate

We argue that the syntax of split systems, whether these are person or animacy splits, is tied to the syntax of transitivity and the feature specification on functional heads. Split systems result from particular choices of the v introducing the external argument and checking Case of the internal argument (Kratzer 1994, Chomsky 1995), which are determined by properties of T or Asp. In person splits the basic distinction is transitive vs. intransitive v depending on whether subjects and objects are 1st/2nd vs. 3rd; these features are related to T. In animacy splits the basic distinction is an aspectual one: eventive/telic vs. stative/atelic v correlating with +/- agentive features for subjects and +/-prepositional accusative for animate objects.

2. The correlation. Within the ergative paradigm, there is a set of languages that exhibits a type of split determined by the core referents of the NPs in A (subject of transitive verb) and O (object of transitive verb) function. In these languages, 1st and 2nd person subjects surface with *unmarked nominative* while third person with *marked ergative* when they occur in the A function and, conversely, 1st and 2nd person objects surface with *marked accusative* while 3rd person with *unmarked absolutive* when they occur in the O function. As a result, 1st and 2nd (*local*) person arguments display an accusative pattern, while 3rd person (*non-local*) arguments an ergative pattern, as illustrated in (2) with examples from Dyirbal (Dixon 1994):

(2)a. ŋ^{y}urra nana-na buran
you-all nom we all-acc see-non fut
'you all saw us'

b. yabu numa-ngu buta-n
mother-abs father-erg see-nonfut
'father saw mother'

To account for (2), typologists appeal to the hierarchy in (1) in combination with a functional "markedness" principle. It is proposed that the elements in the left-hand side of (1) are more likely to appear in the A function and the ones on the right-hand side are more likely to appear on the O function. Furthermore, marked morphology is associated with marked grammatical function. As a result, marked cases (ergative for A and accusative for O) appear on non-local subjects/local objects, while unmarked cases (nominative for A and absolutive for O) appear on local subjects/non-local objects. From this perspective, *pe*-marking in Romanian (Steriade 1980, Borer 1984, Dobrovie-Sorin 1990), *a*-marking in Spanish (Jaeggli 1982, Suñer 1988), *ko*-marking in Hindi (Mohanan 1990) seem very similar processes. In the transitive clause, these languages mark animate objects with a special preposition, *a* in the Spanish example (3a), while inanimate objects are assigned unmarked accusative, as shown in (3b).

(3) a. vimos *(a) Juan/ saw-we *(a) Juan b. vimos (*a) la casa de Mafalda/saw-we (*a) the house of Mafalda

Object marking with *a, pe, ko* mirrors ergative subject marking. In transitive clauses, Spanish Romanian and Hindi mark with a preposition all objects that are less likely to appear in the O function, treating as unmarked common nouns [-animate], which are placed in the right-hand side of (1). In Romanian *pe*-acc occurs with pronouns, proper names and common nouns [+human], in Spanish *a*-acc occurs with pronouns, proper names and common nouns [+human] and [+animate]. Thus, the splits encode distinctions made in different parts of the hierarchy. Person in person splits, animacy in animacy splits. Micro-variation depends on how the second columns from left and right are treated. In some languages, 2nd person is grouped together with 1st, in others not (Dixon 1994: 88). In Romanian only humans are marked with *pe*; non-human animates bear unmarked accusative like inanimates (Borer 1984). In Spanish all animates can be marked with *a*; only inanimates surface with unmarked accusative (Suñer 1988).

3. Case distinctions and types of vs. Building on the view that there several types of vs available to the computational system (Marantz 1999, Harley & Noyer 1998), we argue that the choice of different cases in person and animacy splits is a matter of choice between different types of vs. In person splits, transitive vs. intransitive v, in animacy splits agentive vs. non-agentive v.

Generalization I: *person features determine choice of transitive (accusative) vs. intransitive (ergative) v*. In e.g. Lummi (Straits Salish), transitive v is selected when the subject and object are 1st/2nd leading to an accusative system, while intransitive v is selected when the subject and object are 3rd leading to an ergative system (Jelinek 1993: 18):

(4)a. NOM ACC xci-t-onəs=sən 'I know you' b. NOM ABS xci-t-0=sən 'I know him'
c. ERG ABS xci-t-s=0 'He knows him' d. *ERG ACC * 'He knows me'

In (4b), the highest argument checks Case in C and the lower in T (Nash 1996). The reverse is impossible: *ERG ACC is ruled out as an intransitive v introducing the ergative subject cannot check accusative Case on the object (Bok-Bennema 1991, Jelinek 1993, Nash 1996 and others argue that the syntax of the ergative clause is intransitive, the ergative subject has oblique case and the absolutive object moves to T).

Generalization II: *eventiveness/telicity determine choice of agentive vs. non-agentive transitive v. The difference is reflected on the case of animate objects. Marked accusative in agentive v, unmarked accusative in non-agentive v*. Torrego (1998) observes that in Spanish the presence of an *a*-accusative correlates with telicity. Accomplishments require *a* (5a). When there is an option for *a*, as in (5b), its presence is linked to a telic interpretation of the predicate and its absence to an atelic one.

(5)a. la policia encarceló *(a) varios ladrones b. esconderion (a) varios prisoneros
the police jailed a various thieves they hid several prisoners

Most importantly, the presence of an *a*-accusative correlates with agentivity. With predicates that are non-agentive, non-causative, when the subject is animate and can be construed as being in control of the event the object can be marked by *a* (6a); when the subject is inanimate, *a* on the object is ungrammatical (6b):

(6) a. El herido exigía /pedía (a) un médico b. El situación exigía /pedía (*a) un médico
The injured required/ asked for a doctor The situation required/ asked for a doctor

With agentive/causative predicates, *a* is obligatory (Torrego 1998:30). Statives like *hate* expressing "active emotions" (Pesetsky 1995) require *a* (Torrego 1998:32). Other stative verbs permit *a* when the subject is animate but not when it is inanimate. As Torrego (1998: 32-34) argues, those statives that permit *a* are coerced into activities when they take *a* and are stative when they don't by e.g. the progressive test (Dowty 1979). The combinations just described involve an AspP together with a vP under current assumptions.

4. Person vs. animacy and Agree. But why is the distinction underlying different choices of vs (+/-person) in person splits vs. (+/- human, animate) in animacy splits? We propose that this is linked to properties of the heads in which the relevant features entering into *Agree* relations (Chomsky 1999) with the DP arguments are located: T and v. We take the relevant features to be person and gender respectively. Following Benveniste (1966), Bonet (1991), Taraldsen (1995) and others we take 3rd person to be absence of person. We furthermore propose that the (+/-animate, +/-human) distinction is a gender distinction (Corbett 1991, Baker 1996 and others). Languages differ as to whether they treat animate/zoic or the subset/more specified human as the relevant feature encoded and whether they employ the dative marking or a separate preposition to mark accusative resulting in the Romanian vs. Spanish type of micro-variation. We propose that person is located in T (Davis 1998 building on Partee 1984), while gender is located in v. DP subjects specified for person (1st, 2nd) enter into *Agree* with T, while DP objects specified for gender (animate/human) enter into Agree with v. Localizing person on T and gender on v receives support from agreement phenomena.. T-agreement is person agreement, e.g. agreement in person with the nominative in nominative-accusative languages. Accordingly, the splits observed are: 1st 2nd person pronouns: nominative vs. everything else, i.e. all subjects without person features surface with ergative which, being oblique, doesn't enter *Agree* with T. On the other side, v-agreement is gender agreement, e.g. participle agreement is gender + number in French and Italian, and the splits observed are gender related: non-animates vs. everything else. In Spanish/Romanian, where animate objects are *a/pe*-marked, they enter *Agree* with v, as is evidenced by clitic doubling, which is limited to objects preceded by *a/pe*. Non-animates are unmarked and do not enter *Agree* with v (Kayne's Generalization). Further variation among dialects of Spanish results from the class of marked accusatives that can undergo doubling and the form of the clitic (dative in Leista accusative in Argentinean). Local arguments in person split languages (Jelinek 1993) and clitic doubled objects in animacy split languages (Borer 1984, Suñer 1988) are specific. We take specificity to cut across person and animacy splits as a consequence of the Mapping Hypothesis (Diesing 1992, Diesing and Jelinek 1993). On the view expressed here, phi-features do not come as a bundle. They are hierarchically scattered in clause structure. DPs enter *Agree* relations with functional heads in a manner that suggests that the hierarchical structure of the clause corresponds to that of the DPs (Ritter 1995): T>(Asp)>v corresponds to Person> (Number) >Gender.