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Ergative Case Assignment, Wackernagel's Law, and the VP Base Hypothesis*

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1. In this paper, I will argue that the syntax of morphologically ergative languages provides evidence for the hypothesis that all verbal arguments are base-generated within VP and that thematic agents and other external arguments appear as IP specifiers only after syntactic movement. This general view, which I will call the VP Base Hypothesis, has been articulated recently with several specific proposals (see e.g. Cowper 1988, Fukui 1987, Roberts 1988, and Sportiche 1988, with references to other work), which may all be compatible with the evidence to be presented here. To be concrete, however, I will claim that external arguments are base-generated in the VP specifier position (spec VP), as in (1a). I will follow Fukui and Speas (1986: 138-42), according to whom Infl is licensed at S-structure only by agreement with the IP specifier position (spec IP), which must therefore be filled and which is assigned structural case by Infl. In English, spec IP is ordinarily filled by movement, with the result in (1b) that the surface subject *Dan* agrees with and is assigned nominative case by the verb *said*.

- (1) (a) *D-structure*: [_{IP} [_{I'} Infl [_{VP} [_{NP} *Dan*] [_{V'} *said a prayer*]]]]
 (b) *S-structure*: [_{IP} [_{NP} *Dan*]_i [_{I'} [_{Infl} *said*]_j] [_{VP} *t*_i [_{V'} *t*_j *a prayer*]]]]

It is also possible for nominative case to be assigned to the structural complement of V (see e.g. den Besten 1985: 33-39, Borer 1986, and Burzio 1986: 93-102). I will

assume that this is due to case-transmission via an expletive in spec IP, either an overt expletive, as in (2), or a phonologically empty one, as in (3), where superscripts coindex arguments and expletives.¹

- (2) [_{CP} *es*ⁱ_j *ist* [_{IP} *t*_j [_{VP} [*ein junger Mann*]ⁱ *angekommen*]]]
 "there arrived a young man"
- (3) ...[_{CP} *daß* [_{IP} *expl*ⁱ [_{VP} *meinem Bruder* [*der Schnee*]ⁱ *nicht gefällt*]]]
 "... that the snow doesn't please my brother"

2. A language is morphologically ergative if some of its case-marking is organized ergatively rather than accusatively (for more detail see Dixon 1979 and 1987 with references). Ergative languages in this sense may be contrasted with morphologically accusative languages like German, in which a single morphological case--the nominative--marks the subjects of both transitive and intransitive verbs, and another case--the accusative--marks the objects of transitive verbs. In a morphologically ergative language, one case--the absolutive--marks the subjects of intransitive verbs and the objects of transitive verbs, and another--the ergative--marks the subjects of transitive verbs. In this paper, I will use the terms "nominative", "accusative", "ergative", and "absolutive" in these pre-theoretical senses, and I will refer to the structural cases assigned by Infl and V as C_{Infl} and C_V respectively.

Explicit treatments of ergative case-marking usually assume that ergative and absolutive cases are simply C_{Infl} and C_V (see e.g. Marantz 1984: 197-98 and Levin and Massam 1985: 288-91). This assumption may account for fully ergative case-marking systems, if they exist, but it cannot in general be extended to split ergative languages. In such languages, ergative and accusative case-marking are in complementary distribution, so that NPs inflect ergatively under some circumstances and accusatively under others. According to Dixon (1979: 63), all morphologically ergative languages are split ergative languages; in other words, no language is entirely ergative. Whether or not this is so, it is certainly true that most languages which display some ergativity also display some accusativity. Cross-linguistically, several factors may condition the appearance of ergative case-marking in such languages, and accordingly several split ergative types have been described. These split ergative types have distinct diachronic origins (see Garrett 1989), and as a result they have different synchronic characteristics and require different theoretical treatments. In this paper I will discuss one such type, namely, tense/aspect split ergativity.

In systems of this type, only the arguments of verbs in certain tenses or aspects display ergative morphology. In the past tense, for example, verbs may

require absolutive and ergative arguments, while otherwise they require nominative and accusative arguments:

(4) *Case-marking in a tense/aspect split ergative language*

(a) *Some tense/aspect (e.g. past)*

George-ABS went fishing.

He-ERG watched [the convention]-ABS.

(b) *Other tenses/aspects*

Burt-NOM hurries from meeting to meeting.

He-NOM runs [the university]-ACC.

Tense/aspect splits originate when a passive verb is reanalyzed as active and transitive (see Anderson 1977 and 1988: 340-49, and Estival and Myhill 1988, with references). As a rule, this process does not involve all passive verbal categories; the majority retain their inherited passive force and argument structure, and continue to have active transitive counterparts. This reanalysis is schematized in (5), where I and II are the stages before and after reanalysis respectively:

(5) *Some tense/aspect (e.g. past)*

(a) I: NP-NOM (NP-AGT) V-PASS
II: NP-ABS (NP-ERG) V-ACT

(b) I: NP-NOM V-INTR
II: NP-ABS V-INTR

Other tenses/aspects

(c) I = II: NP-NOM NP-ACC V-TRANS (d) I = II: NP-NOM V-INTR

The reanalysis under discussion is shown in (5a). At stage I, this structure is intransitive, with a nominative subject (the thematic object) and an optional obliquely case-marked agent. At this stage, therefore, as is typical for passives, grammatical relations and thematic relations do not correspond canonically. The reanalysis which results in tense/aspect split ergativity corrects this incongruity by construing the passive verb as active; its subject is accordingly reanalyzed as the direct object, and the oblique agent is reanalyzed as the subject. In other words, formerly oblique case-marking now appears on the subject, and formerly nominative case-marking now appears on the object. This results in an ergative pattern, since at stage I, and therefore also at stage II, only transitive verbs appear in (a). Intransitive clauses continue to case-mark their subjects as nominative, as in (b) and (d),

although by definition the stage I case-marking in (b) is called absolutive at stage II. Likewise, transitive clauses in other tenses or aspects undergo no diachronic change, as in (c); they continue to be active and transitive.

The best-known tense/aspect split ergative systems occur in the Indo-Iranian branch of Indo-European, from which I will illustrate the development sketched above. In the oldest Indic and Iranian languages, there was a past participle which had active force when built to an intransitive verb, but passive force when built to a transitive verb. In Sanskrit, for example, the intransitive verbs *mṛ-* "die" and *i-* "go" formed participles *mṛ-ta-* "dead" and *i-ta-* "gone", whereas the transitive verbs *kṛ-* "make" and *pā-* "protect" formed participles *kṛ-ta-* "made" and *pā-ta-* "protected". Independently in various Middle Indic and Middle Iranian languages, these participles were reanalyzed as active past-tense verbs. This resulted in the tense/aspect split ergative systems of many Middle and Modern Indic and Iranian languages. Thus, in Kurdish, a Modern Iranian language, past-tense verbs take ergative and absolutive arguments, while those in other tenses take nominative and accusative arguments. Since the absolutive case continues the nominative case historically, nominative and absolutive are phonologically identical in Kurdish; ergative and accusative are also phonologically identical, but this is an accident, not a typical development of tense/aspect split ergative systems. In the present tense, both intransitive and transitive verbs agree with their nominative subjects:

- (6) (a) *ez dikevim* "I fall" (Bedir Khan and Lescot 1970: 59)
1SG.NOM fall.PRES.1SG
- (b) *mehîn dibeze* "the mare runs" (ibid. 93)
mare.NOM run.PRES.3SG
- (c) *mehîn dibezin* "the mares run" (ibid. 94)
mare.NOM run.PRES.3PL
- (d) *tu min nas-dikî* "you know me" (ibid. 325)
2SG.NOM 1SG.ACC know.PRES.2SG
- (e) *ez hespê dibînim* "I see the horse" (ibid. 94)
1SG.NOM horse.ACC see.PRES.1SG

Past-tense intransitive verbs agree with their absolutive subjects:

- (7) (a) *ez ketim* "I fell" (ibid. 136)
1SG.ABS fall.PAST.1SG

- (b) *ew ket* "s/he fell" (ibid.)
3SG.ABS fall.PAST.3SG

In past-tense transitive clauses, however, subjects are ergative and direct objects are absolutive, and since these objects are historical reflexes of nominative subjects, they trigger verbal agreement:

- (8) (a) *keçkê hesp dît* "the girl saw the horse" (ibid. 178)
 girl.ERG **horse.ABS see.PAST.3SG**
- (b) *keçkê hesp dîtin* "the girl saw the horses" (ibid.)
 girl.ERG **horse.ABS see.PAST.3PL**
- (c) *min tu dîtî* "I saw you" (ibid. 176)
 1SG.ERG **2SG.ABS see.PAST.2SG**
- (d) *te ez dîtîm* "you saw me" (ibid. 174)
 2SG.ERG **1SG.ABS see.PAST.1SG**

Although the Kurdish ergative and accusative are accidentally homophonous, another modern Iranian language, Pashto, preserves the surface distinction between these cases. In Pashto, accusative and nominative (and hence absolutive) are homophonous, but ergatives retain their distinct shape. Thus in (9a-d), *spay* "dog" is nominative, accusative, and absolutive, but in (9e), a different form, *spi*, appears as the ergative. (Transitive past tense verbs in Pashto too agree with their absolutive objects, not ergative subjects.)

- (9) (a) *spay tarəl kigi* "the dog is getting tied" (Tegey 1979: 380)
dog.NOM tied become.PRES.3
- (b) *zə spay tarəm* "I am tying the dog" (ibid. 382)
1SG.NOM dog.ACC tie.PRES.1SG
- (c) *mā spay tārə* "I was tying the dog" (ibid.)
 1SG.ERG **dog.ABS tie.PAST.3SG.MASC**
- (d) *ağə sur spay zğələdə* "that red dog was running" (ibid. 386)
that.ABS red.ABS dog.ABS run.PAST.3SG.MASC
- (e) *ağə srə spi zə wuxwarəm* "that red dog bit me" (ibid.)
 that.ERG red.ERG dog.ERG **1SG.ABS bite.PAST.1SG**

3. We are now in a position to address the syntactic problem posed by languages like Kurdish and Pashto or in general any tense/aspect split ergative language. The case-marking of such a language at stage II of (5) above is illustrated in (10):

(10) (a) *Ergative/absolute tense/aspect*

Transitive subject = ergative < stage I oblique

Transitive object = absolute < stage I nominative (C_{Infl})

Intransitive subject = absolute < stage I nominative (C_{Infl})

(b) *Nominative/accusative tenses/aspects*

Transitive subject = nominative < stage I nominative (C_{Infl})

Transitive object = accusative < stage I accusative (C_V)

Intransitive subject = nominative < stage I nominative (C_{Infl})

Synchronically, the appearance of ergative morphology at this stage is not conditioned by verbal stem but by tense or aspect category: in some tense or aspect, a verb takes ergative and absolute arguments, but in others it takes nominative and accusative arguments. I will assume that the appropriate tense or aspect is formally a feature of V (not e.g. Infl). In a tense/aspect split, then, any particular NP can appear in three phonologically distinct surface cases, as indicated in (10): the ergative, which continues a stage I oblique case; the accusative, which continues the stage I accusative case; and the nominative or absolute, which are phonologically identical, since both continue the stage I nominative case.

The surface nominative and accusative cases are presumably still C_{Infl} and C_V respectively even after the introduction of ergativity. The synchronic status of the ergative and absolute cases are not immediately so clear, however. For example, although the absolute may be C_{Infl} when it marks a subject, it cannot be C_V when it marks a direct object, since C_V is realized as the surface accusative. Thus, in Kurdish, because the accusative first-person pronoun *min* in (6d) is marked with C_V , the absolute first-person pronoun *ez* in (7a) and (8d) must represent a different abstract case. Absolutes are phonologically and historically identical to nominatives in a tense/aspect split, and are probably the same case formally as well; I propose, in other words, that the absolute is always C_{Infl} . Given the discussion of (2-3) above, this poses no formal problem: direct object absolutes are base-generated as complements of V and either move to spec IP, where they are assigned case directly by Infl, or remain in situ, where they receive C_{Infl} via a null expletive in spec IP.

The ergative case is neither C_{Infl} nor C_V , since these have distinct surface realizations (nominative and accusative respectively). In Kurdish, for example, the ergative first-person pronoun *min* in (8c) cannot be marked with C_{Infl} , because *ez* in (6a) and (6e) is marked with C_{Infl} ; likewise in Pashto, the ergative *spi* "dog" in (9e) cannot be marked with C_{Infl} or C_V , because they are both realized by *spay*, as in (9a) and (9b) respectively. This means, first, that transitive verbs of the appropriate tense or aspect in tense/aspect split ergative systems do not assign C_V , and second, that the ergative case in such systems represents an abstract case other than C_{Infl} and C_V . Since there is no independent evidence for a third structural case, I propose that the ergative is formally an inherent case associated with the external θ -role, just as other inherent cases can be associated with internal θ -roles, for example, source with ablative or instrument with instrumental.

If the ergative is, like other inherent cases, assigned by V, and if case is assigned only under government, this proposal contradicts the view that all external arguments are base-generated in spec IP, since V does not govern this position. Ergatively case-marked arguments must be base-generated within VP. On the assumption that the underlying structure of VP is ultimately determined by the thematic argument structure of its head, this in turn entails that all external arguments must be base-generated within VP, since ergative case-marking in a tense/aspect split is conditioned by factors which are not represented in verbal argument structure. On this analysis, Kurdish and Pashto past-tense verbs possess a feature which suppresses C_V assignment (just as their passive ancestors did) and causes inherent ergative case-assignment to the external argument. These two effects are somehow linked in these languages, as a result of which only verbs which have a C_V to be suppressed--that is, only transitive verbs--assign the ergative case.² Thus, for example, the Kurdish transitive past-tense sentence given above as (8a) has the S-structure in (11). Inherent ergative case is assigned by the verb *dît* to the external argument *keçkê*, and C_{Infl} is assigned to the null expletive in spec IP and transmitted to the direct object *hesp*.³

(11) $[_{\text{IP}} \text{expl}^i [_{\text{I}'} [_{\text{VP}} \text{keçkê} [_{\text{V}'} \text{hesp}^i t_j]] \text{dît}_j]]$

In an intransitive or a present-tense transitive sentence, however, the ergative case is not available, and the external argument must either move to spec IP or be coindexed with a null expletive there; in either instance it is assigned C_{Infl} .⁴

4. Clitic syntax confirms this analysis of tense/aspect split ergative systems. As is well-known, some version of Wackernagel's Law is a widespread and inherited feature of the Indo-European languages, among many others (see Kaisse 1982). Wackernagel's Law describes the phenomenon whereby a language's clitics--

pronominal clitics or sentential clitic adverbs--appear in the second position of their sentence. From language to language, and even from clitic to clitic, however, Wackernagel's position varies: in Hittite, for example, the clitic chain follows the first word in the sentence, even interrupting a constituent, as in (12), while in Pashto it follows the first phrasal constituent, as in (13).⁵

- (12) *Hittite* (KBo 3.4 i 11-12)
 [_{Comp} DUMU-ŠU *ma wa ši za kan kuiš*] ANA GIŠGU.ZA ABI.ŠU *ešat*
 his.son and PTCL his PTCL PTCL REL on throne his.father.GEN
 sit.PAST.3SG
 "and his son who sat on his father's throne ..." (correlative, not subordinate)
- (13) *Pashto* (Kaisse 1981: 200)
- (a) *tor de nən xar nə rāwali* "Tor shouldn't bring the donkey today"
 Tor PTCL today donkey NEG bring.PRES.3
- (b) *nən de xar nə rāwali* "he shouldn't bring the donkey today"
 today PTCL donkey NEG bring.PRES.3
- (c) *xar de nə rāwali* "he shouldn't bring the donkey"
 donkey PTCL NEG bring.PRES.3
- (d) [_{NP} *xušal aw patang*] *ba ye dər ta rāwri*
 Khoshal and Pantang PTCL 3SG.ABS 2SG.OBL to bring.PRES.3
 "Khoshal and Pantang will bring it to you"

There is evidence that Wackernagel's Law clitics leave traces which obey the ECP (Garrett 1988), and the syntactic position of these clitics is thus of some interest. In languages like Hittite, these clitics can interrupt constituents; therefore, either they do not govern (in fact, do not bind) their traces, or they reach their surface position in two steps. These steps are, presumably, first, S-structure adjunction to the maximal maximal projection of their sentence, and second, PF-movement into their phonologically-defined position. In languages like Pashto, where Wackernagel's Law clitics follow the first phrasal constituent of a sentence, they can also interrupt constituents--for example, if VP is coterminous with S--and may thus be treated as the result of a similar two-step process: S-structure adjunction to their sentence's maximal maximal projection, followed by PF-movement to their surface position. If this is correct, the S-structure representations of (12) and (13a) are as follows:

- (14) *Hittite* (=12)
 $[_{CP} ma\ wa\ \check{s}i\ za\ kan\ [_{CP} [_{Comp}\ [_{NP}\ DUMU-\check{S}U\ kui\check{s}}]_i] [_{IP}\ t_i\ ANA\ GI\check{S}\ GU.ZA\ ABI.\check{S}U\ e\check{s}at]]]$
- (15) *Pashto* (=13a)
 $[_{IP}\ de\ [_{IP}\ tor\ n\check{a}n\ xar\ n\check{a}\ r\check{a}wali]]]$

At S-structure, then, Wackernagel's Law clitics are adjoined to maximal maximal projections:

- (16) (a) $[_{CP}\ \text{clitic}\ [_{CP}\ (\text{spec})\ \text{Comp}\ \text{IP}]]]$
 (b) $[_{IP}\ \text{clitic}\ \text{IP}]$

An interesting prediction about the syntactic relationship between Wackernagel's Law clitics and their traces seems to follow from (16). Epstein 1989 and Lasnik and Saito (to appear) argue that adjunction to a maximal projection results in two discrete maximal projections. If so, then the lower CP and IP nodes in (16a) and (b) respectively are inherent barriers to government and clitics adjoined to them should be unable to govern their traces.⁶ This tentative conclusion may be restated as follows:

- (17) Clitics in Wackernagel's position do not antecedent-govern their traces.

The ECP requires that traces must be either antecedent-governed or lexically governed, and if (17) is correct, the traces of Wackernagel's Law clitics must be lexically governed; cliticization to Wackernagel's position should be possible only from lexically governed positions. Since V lexically governs subcategorized VP-internal positions, Wackernagel's Law movement from such positions will not test (17). However, movement from spec IP to Wackernagel's position is predicted to be impossible if, as is ordinarily assumed, spec IP is not lexically governed.

This prediction can in fact be extended: Wackernagel's Law cliticization should be impossible not only from spec IP but from any position assigned C_{Infl} , even via an expletive in spec IP. This is because such cliticization would, given (16), result in a structure in which an expletive is superscript-coindexed with a c-commanding argument, and such structures seem in general to be ungrammatical, as indicated by the unacceptability of (18) in contrast to (19).

- (18) (a) $*[_{IP}\ [_{CP}\ \text{that}\ John\ is\ a\ fool}]_j^i\ [_{IP}\ it^i\ seems\ t_j]]]$
 (b) $*[_{IP}\ [_{NP}\ a\ lengthy\ and\ expensive\ legal\ battle]]_j^i\ [_{IP}\ there^i\ ensued\ t_j]]]$

- (c) * $[_{CP} \textit{what}_j^i \textit{does} [_{IP} \textit{it}_i^i \textit{seem} t_j]]$
 (d) * $[_{CP} \textit{who}_j^i \textit{did} [_{IP} \textit{there}_i^i \textit{arrive} t_j]]$
- (19) (a) $[_{IP} [_{CP} \textit{that we are all fools}]_i [_{IP} \textit{I know well} t_i]]$
 (b) $[_{IP} [_{NP} \textit{a decade-long war}]_i [_{IP} \textit{I read about} t_i]]$

Within Indo-European at least, this prediction seems to be correct. Proto-Indo-European lacked nominative clitics altogether. This might have been accidental, of course, but it is striking that despite the frequency of analogical innovation in every part of the grammar throughout the history of Indo-European, those languages which retained Wackernagel's Law did not in general create subject clitics. The three apparent exceptions to this generalization all involve circumstances in which there is independent evidence that the clitic trace is properly governed. One of these exceptions is relevant here, namely, Iranian languages which introduced tense/aspect split ergativity and retained Wackernagel's Law.⁷ These languages have productive ergative clitics. For example, Pahlavi, a Middle Iranian language, has a full set of ergative clitics but lacks nominative and absolutive clitics:

- (20) (a) *u š ān zan rād nē ōzad* "he did not kill that woman" (Heny 1984: 84)
 CONJ **3SG.ERG** DEM woman PTCL.ACC NEG kill.PAST
- (b) *u t ēzišn ē yazdān kard* "you worshipped the gods" (ibid. 86)
 CONJ **2SG.ERG** worship PTCL god.GEN.PL make.PAST

Pashto too has a full set of ergative clitics, exemplified in (21), which are obligatory in the absence of a stressed ergative and which contrast with the complete absence of nominative or absolutive clitics.

- (21) (a) $[_{NP} \textit{aḡa jəga paxrəpore sra māḡəy}] \textit{xo ba de xwaxa wi}$ (Kaisse 1981: 200)
 that tall interesting red building PTCL PTCL **2SG.ERG** liked AUX.3
 "you would indeed have liked that tall interesting red building"
- (b) *kitāb xo ye wāxistə* "he really got the book" (Tegey 1975: 574)
 book.ABS PTCL **3SG.ERG** get.PAST.3MASC
- (c) *tor dem wāhə* "you were hitting Tor" (Tegey 1979: 408)
 Tor **2SG.ERG** hit.PAST.3MASC

If ergative case is assigned to arguments in spec IP, then, given the above analysis, ergative Wackernagel's Law clitics should not exist. I have argued, however, that

external arguments are base-generated within VP and assigned ergative case in situ; there is thus an alternate route to Wackernagel's position, namely, direct movement. This alternative is not available to nominative clitics or to absolutive clitics in a tense/aspect split ergative system, since such clitics must be assigned case and must therefore either move to spec IP or be coindexed with a null expletive in spec IP, and in either case Wackernagel's Law cliticization is impossible.

Notes

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1 Belletti has argued to the contrary that "no process of nominative Case transmission is ever at work to Case-mark the postverbal object NP of unaccusative verbs" (1988: 2), and that NPs like *ein junger Mann* in (2) are assigned inherent partitive case. Even on this view, however, some mechanism of VP-internal nominative case assignment must be posited to account for sentences like (3), and it is unclear why this mechanism would fail to generate (2). Note that the account presented here differs from that of den Besten (1985: 39-41), according to whom dative experiencers like *meinem Bruder* in (3) occupy spec IP. Such NPs may instead be treated either as remaining in their base-generated positions or as moved to spec VP, which is a possible movement site precisely because it is not a θ -position with unaccusative and psych verbs, like *gefallen* in (3) (cf. n. 4 below). This account, if correct, also argues against the suggestion of Belletti and Rizzi (1988: 337-39) that Italian preverbal dative experiencers are in spec IP; they may instead be adjoined to IP.

2 These effects need not always be linked, however, and as James Gair has reminded me, other languages--such as the ergative Indic languages--exhibit various other combinatory possibilities.

3 Verb-raising to Infl, although present in (11), cannot in general be adduced as an alternative explanation of the observed government relation between verb and ergative argument, since in both Kurdish and Pashto, ergative case can equally well be assigned in sentences with auxiliary verbs and hence no verb-raising.

4 Ergative case-marking in tense/aspect split systems may thus be assimilated to the well-known quirky subject cases of Icelandic and other languages (cf. the suggestion of Jane Simpson in Levin 1983: 212). This is diachronically natural, since ergatives and quirky subjects both originate when VP-internal obliquely case-marked NPs are reanalyzed as subjects; similar synchronic analyses seem natural as

well. Unlike ergatives, however, quirky subject cases are not assigned to agents, but to experiencers and patients (Levin and Simpson 1981: 186), and it is therefore possible, without adopting the VP Base Hypothesis, to analyze them as NPs which are--like canonical experiencers and patients--base-generated VP-internally, where they are assigned case, and which are then moved into subject position. Note that on the analysis presented here, Icelandic quirky subjects cannot occupy spec IP at S-structure, since they are not assigned C_{Infl} . Instead, they must occupy the CP specifier position (spec CP), just like topicalized constituents. Their subject-like properties (see e.g. Thráinsson 1979: 462-76 and Zaenen et al. 1985: 447-55), treated by Cowper (1988) as the result of movement to spec IP, may alternatively be explained as follows. Like all preverbal constituents, quirky subjects occupy spec CP, but unlike ordinary topicalized NPs, they can move first to spec VP, which is not a θ -position (cf. n. 1 above). It is the trace in spec VP which is responsible for their subject-like properties.

5 In some languages, a mixed situation obtains. For example, in Rigvedic Sanskrit and Homeric Greek (as shown by Hale 1987 and 1988 respectively), adverbial clitics follow a sentence's first word, but pronominal Wackernagel's Law clitics appear between Comp and IP. These pronominal clitics pose an obvious problem, which I will address elsewhere, if they are the result of syntactic adjunction to IP.

6 The argument is as follows. A head X is defined as selecting a complement maximal projection Y iff either Y is lexically subcategorized by X, or X is Comp and Y is IP, or X is Infl and Y is VP (cf. Baker 1988: 57). Y is defined as an inherent barrier for an X it dominates iff Y is an unselected maximal projection (cf. Chomsky 1986: 88). Given these definitions, the lower CP and IP nodes in (16a) and (b) respectively are unselected, since neither is lexically subcategorized by its clitic sisters, and there is no Comp to select IP in (16b); they are therefore inherent barriers to government.

7 I will discuss the other two exceptions elsewhere; they occur in an ergative case-marking system (Anatolian) and in apparently quantifier-selected positions (Slavic).

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