THE EPP IS INDEPENDENT OF CASE: ON ILLICIT UNACCUSATIVE INCORPORATION*

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1 Introduction
The stipulative nature of the (generalized) EPP – the requirement that certain functional heads have filled specifiers – has led to numerous attempts to subsume its effects within other properties of natural language (e.g. Fukui & Speas 1986; Bošković 1997, 2002, 2007; Martin 1999; Grohmann et al. 2000; Epstein & Seely 2006; Landau 2007; Bjorkman & Zeijlstra 2014; Richards 2014; McFadden & Sundaresan 2015). Most commonly, the (generalized) EPP has been subsumed within Case Theory (e.g. Fukui & Speas 1986; Bošković 1997, 2002, 2007; Martin 1999; Grohmann et al. 2000; Epstein & Seely 2006). The (generalized) EPP and the Case Filter – the requirement that DPs receive abstract Case – share a significant amount of explanatory coverage. Both are able to account for A-movement in passives, unaccusatives, and raising (1-3):

(1) a. John kicked the dog.
   b. *was kicked the dog (by John).
   c. [The dog]i was kicked t1 (by John).

(2) a. John broke the porcelain doll.
   b. *broke the porcelain doll.
   c. [The porcelain doll]i broke t1.

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(3)  a. It seemed that John was alright.
    b. *seemed John to be alright.
    c. John seemed t₁ to be alright.

As the (a) examples in (1-3) indicate, the ungrammaticality of the (b) examples cannot be attributed to the \( \theta \)-criterion. Instead, the ungrammaticality can be modeled *either* as a failure to move some element to (matrix) Spec-TP, violating the EPP, *or*, given properly defined Case-positions, as a failure to Case-license the DP, violating the Case Filter. The grammaticality of the (c) examples is attributed to satisfaction of the EPP, matrix Spec-TP is filled, or to satisfaction of the Case Filter, by moving to matrix Spec-TP the DP receives Case.¹

Even expletive constructions (4a,c) and Locative Inversion (4b), which, at first blush, appear to support an independent EPP, have received explanations in terms of Case.

(4)  a. *(There) was a unicorn in the meadow.
    b. *(Down the hill) rolled the cheese wheel.
    c. *(It) is clear that Coppe loves hotdogs.

In (4a,b), the subject appears in an low position to the right of the verb. Movement to Spec-TP seems unnecessary for subject Case-licensing. Nevertheless, the ungrammaticality of such constructions without expletive *there* or a locative PP in canonical subject position appears to indicate that Spec-TP must be filled. Similarly, if the Case Filter is restricted to DPs, it should have no purview over the distribution of CP complements, as in (4c). Yet, failure to realize expletive *it* in subject position is ungrammatical. The need to fill subject position with *some* element, in every instance in (4), seems to follow from the EPP, not the Case Filter.

However, the constrasts in (4) can be, and have been, accorded Case-theoretic explanations. Regarding expletive constructions, either *there* and *it* and their associates enter into a Case-transmission relationship whereby the expletive receives Case for itself and its associate (e.g. Safir 1982, Chomsky 1986, Bošković 1995, Den Dikken 1995 Hazout 2004, Deal 2009) or low subjects (and CP complements) are exceptionally Case-licensed *in situ* in the presence of an expletive (e.g. Belletti 1988; Lasnik 1992; Bošković 1997, 2002, 2007; Epstein & Seely 2006).² Similarly, Locative Inversion constructions have also received Case-transmission accounts (e.g. Hoekstra & Mulder 1990, Broekhuis 2008), or have been argued to be reducible to null *there*-expletive constructions (e.g. Postal 1977, 2004; Bruening 2010), raising the possibility that the low subject is exceptionally Case-licensed in (4b) for the same reasons as the subjects of other *there*-expletive constructions. See Bošković (2007; and sources cited therein) for a discussion of similar constructions in other languages that initially appear to support divorcing the EPP from Case Theory, but may still be amenable to Case-theoretic explanations.

¹As David Pesetsky has frequently reminded me, the EPP does *not* explain the ungrammaticality of sentences like *It seemed John to be alright*, without adopting constraints on expletive-associate relationships (e.g. Bošković 1997, McFadden 2004). The Case Filter does capture such ungrammaticality without further emendation.

²Weather *it* fares no better in supporting an independent EPP. Weather *it* is more argument-like than expletive *it* (Chomsky 1981, Pesetsky 1995, Lasnik 2008 a.o.). Weather *it* controls PRO (ia); expletive *it* does not (ib), suggesting that weather *it* is an argument requiring Case-licensing.

(i)  a. It₁’s trying PRO₁ to snow.
    b. *It₁’s trying PRO₁ to seem that Coppe loves hotdogs.
In light of these confounds, alternative arguments must be identified to determine if the EPP should be retained independently of the Case Filter. In this paper, I offer an argument that the explanatory coverage of the EPP is distinct from that of the Case Filter. Nominals that undergo (pseudo-)incorporation are incapable of receiving Case (e.g. Baker 1988, 1996; Massam 2001). Therefore, the ungrammaticality of ill-formed unaccusative incorporation constructions cannot be attributed to the Case Filter. It can, however, be attributed to the EPP.

2 The (Un)availability of Unaccusative Incorporation

Noun Incorporation (NI) in Mapudungun (Araucanian; Chile, Argentina) and Pseudo Noun Incorporation (PNI) in Niuean (Oceanic) share a crucial commonality. Both involve the merger of structurally reduced objects that do not receive Case. Examples (5) and (6) show canonical transitives in the (a) examples and (P)NI constructions in the (b) examples.

(5) a. Ñi chao kintu-le-y ta.chi pu waka.
    my father seek-PROG-IND.3SS the COLL cow
    ‘My father is looking for the cows.’

   b. Ñi chao kintu-waka-le-y.
    my father seek-cow-PROG-IND.3SS
    ‘My father is looking for the cows.’

   [Baker et al. 2005: 139]

(6) a. Takafaga tūmau nī e ia e tau ika.
    hunt always EMPH ERG he ABS PL fish
    ‘He is always fishing.’

   b. Takafaga ika tūmau nī a ia.
    hunt fish always EMPH ABS he
    ‘He is always fishing.’

   [Massam 2001: 157]

(P)NI out of a DP is impossible. The obligatory structural reduction is indicated by the inability of (P)NI objects to host DP-level material. Note first that DP-level material like determiners and number morphology in (5a) and (6a) are absent in (5b) and (6b). Moreover, such material is ungrammatical if it is included (7).

    P. buy-cow-IND.3SS that
    ‘Pedro bought this cow.’

   [Baker et al. 2005: 140]

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3The most significant difference between the two constructions is that NI involves visible complex head formation while PNI does not. In NI, the nominal head appears next to the verbal head, within the verbal complex, and strands any modifiers. In PNI, the nominal constituent is not (overtly) broken up and commonly thought to remain in situ. In this short paper, I remain agnostic as to how the nominal head joins the verbal complex in NI (see e.g. Baker 1988, Barrie & Mathieu 2015) as well as to how PNI word order is achieved (see Massam 2001, Baker 2014, Clemens 2014).

4On this point, there is some cross-linguistic variation. For instance, Mohawk NI (Mithun 1984, Baker 1996) and Diyari PNI (Polinsky t.a.) permit the realization of (stranded) demonstratives that modify the (P)NI object. This variability may be attributed to cross-linguistic variation in (P)NI object size or to cross-linguistic variation in the location of demonstratives within the extended nominal projection.
b. *Kua holoholo tau kapiniu a Mele
   PERF wash PL dishes ABS M.
   ‘Mele washes the dishes.’

[Massam 2001: 168]

The inability of (P)NI objects to receive Case follows from common assumptions that Case-licensing arises via Case-feature valuation and that Case-features are hosted on D⁰ or even higher in the nominal domain (e.g. Bittner & Hale 1996; Chomsky 2000, 2001; Massam 2001). Given that (P)NI objects lack a DP-layer (7), we expect them to lack a concomitant Case-feature. This position is further supported by the change in case pattern in Niuean. Canonical Niuean transitive clauses (6a) display an ergative-absolutive pattern, but, in PNI constructions (6b), the object has no case morphology and the subject bears absolutive case. This is unexpected if the PNI object bears null case morphology, but follows if the PNI object cannot receive C/case at all. On various theories of morphological case realization, ergative morphology is only available when another argument in need of C/case is present in a local domain (e.g. Yip et al. 1987, Marantz 1991, Massam 2001, McFadden 2004, Woolford 2008, Preminger 2014). The change in case pattern then indicates that the PNI object does not need (or receive) C/case. (See e.g. Baker 1988, 1996 for additional arguments that (P)NI objects are not Case-licensed.)

Arguments generated outside of the VP cannot be (pseudo-)incorporated (e.g. Baker 1988, 1996; Massam 2001). This follows either from conditions on Head Movement (Baker 1988) or conditions on c-selection variability which limit variable DP/NP-Merger to VP-internal positions (Massam 2001, Clemens 2014). However, it is more surprising that in both Mapudungun (8) and Niuean (9) unaccusative subjects cannot incorporate if they are the sole argument of the clause.⁵

   burn-house-IND.3SS
   ‘The house burned down.’

   be.good-wine-NEG-IND.3SS
   ‘Wine is not good.’

[Massam 2001: 168]

(9) a. *(Ma-)mate tagata he gagao vevela
   (PLR)-die person CAUS illness hot
   ‘People die of fever.’

b. *Kua nonofo tagata
   PRF settle people
   ‘People settled.’

[Massam 2001: 168]

In light of (8) and (9), one might conclude that the predicates above are not unaccusative in Mapudungun and Niuean respectively. More severely, it could be maintained that these languages

⁵Mohawk and Sakha generally permit unaccusative (P)NI (Mithun 1984, Baker 1996, 2014; Baker & Vinokurova 2010). Even Mapudungun and Niuean display some variability based on predicate type. Mapudungun permits the sole argument of weather predicates to incorporate, as do Nahuatl and Chukchi (Baker et al. 2005 and sources cited therein). Niuean permits the sole argument of the existential predicates muhu ‘have plenty/be plentiful’ and fai ‘have/be’ to undergo PNI (e.g. Massam 2001, Clemens 2014). I will not address these constructions here.
have no syntactically unaccusative predicates, and that the ungrammaticality of (8) and (9) follow from the same principles as those that rule out (P)NI of arguments generated VP-externally.

However, neither of these positions can be maintained. (P)NI of unaccusative subjects in both languages is licit so long as another argument is present in the clause. In Mapudugun, possessor raising introduces the second argument; compare (10) to (8a). (The raised possessor controls subject agreement; see Baker et al. 2005 for more details of possessor-raising in Mapudungun.)

(10) Juan luñ-fu-kı-y.
    J. burn-house-IND.3SS
    ‘Juan’s house burned down.’ [Baker et al. 2005: 167]

In Niuean, the second argument can be a locative expression; compare (11) to (9b). The phenomenon is also mentioned by Massam (2001; p. 172)

(11) Kua nonofo tagata i kunaa
    PRF settle people over there
    ‘People settled over there.’ [Masha Polinsky: p.c.]

The presence of another argument does not license transitive or unergative subject incorporation. Therefore, the data in (10) and (11) illustrate that unaccusative subjects can (pseudo-)incorporate, and that there is not some independent, idiosyncratic restriction on the merger of structurally reduced nominals as complements to unaccusative verbs or no unaccusatives in these languages.6

Examples (8-11) have a ready explanation in terms of the EPP.7 In (8) and (9), the sole argument of the clause is structurally reduced. In NI (8), the object will move into the verbal complex. In PNI (9), the object remains in situ at least in the narrow syntax (see fn. 3). In neither case is the structurally reduced object capable of moving to fill any specifier position. Therefore, if in Mapudungun and Niuean some functional head along the clausal spine has an EPP-requirement, ungrammaticality will arise because the sole argument of the unaccusatives in (8) and (9) has no hope of satisfying that EPP-requirement. The functional head in question is most likely v0, at least in Niuean. Massam (2001) argues that Spec-TP is filled by VP-fronting. When another argument is present, as in (10) and (11), that argument satisfies the EPP, yielding a grammatical construction.

Some (admittedly weak) evidence that movement is implicated in constructions like (10) comes from variation in the positions of the raised possessor of unaccusative subjects and direct objects; compare (10), repeated in (12a), to (12b)

    J. burn-house-IND.3SS
    ‘Juan’s house burned down.’ [= (10)]
   J. buy-cow-o-ind.3ss P.
   ‘Juan bought Pedro’s cow.’

The possessor raised from an incorporated direct object appears after the verb (12b). The possessor raised from an incorporated unaccusative subject appears before it (12a). This difference can be captured if the raised unaccusative possessor, and not the raised direct object possessor, moves to satisfy the EPP requirement of some functional head. Given the independent property of VP-fronting in Niuean, it is more difficult to determine the exact location, along the clausal spine, of the locative adjunct i kunaa in (11), but its linear position is consistent with it occupying Spec-vP.\(^8\) Longenbaugh & Polinsky (t.a.) offer the same suggestion on independent grounds.

Crucially, the data cannot be captured by the Case Filter. (P)NI arguments do not need Case, so the ungrammaticality of (8) and (9) cannot be attributed to their failure to receive it. Baker (1988) does attempt to capture the ungrammaticality of Greenlandic Eskimo constructions analogous to (8) and (9) in Case-theoretic terms, but his account fails to explain the well-formedness of unaccusative subject (pseudo-)incorporation in the presence of possessor raising (10) or a locative argument (11). Under an EPP account of (8-11), languages that permit (P)NI of unaccusatives subjects that are the sole argument of the clause (see fn. 5) can be said to lack relevant EPP-requirements entirely or alternatively satisfy them, possibly via Head Movement (e.g. Alexiadou & Anagnostopoulou 1998). Another alternative is provided by Massam (2001), who suggests that, in structures analogous to (11), the apparent subject tagata ‘people’ may be an instrumental argument which, like transitive objects, undergoes PNI in Niuean. This move is unnecessary in light of the Mapudungun data. A uniform analysis can be presented for the unavailability of unaccusative subject (pseudo-)incorporation in both cases. This uniformity is preferable to positing variable thematic roles for the same argument in (9) and (11).

3 Against an Inverse Case Filter

Lacking a common Case Filter explanation for the data in (8-11), it would appear that the EPP cannot be subsumed under the Case Filter. However, another alternative must be entertained and dismissed before this conclusion can be reached. The data can be explained by adopting the Inverse Case Filter (Fukui & Speas 1986; Bošković 1997, 2002; Martin 1999; Grohmann et al. 2000; Epstein & Seely 2006). In fact, this is exactly the position adopted by Massam (2001) to explain constructions like (9). The Inverse Case Filter maintains that Case-assigning heads must discharge their Case during the course of the derivation. Failure to do so triggers ungrammaticality. On this view, the ungrammaticality of the examples in (8) and (9) can be captured as a failure to discharge Case, because the sole argument of the (P)NI construction is incapable of receiving Case. When another argument is introduced to receive that Case, as in (10) and (11), grammaticality arises.

However, there are independent reasons for abandoning the Inverse Case Filter (e.g. Bošković 2007). First, some verbs assign C/case only optionally. This is particularly striking in Differential Object Marking (DOM) languages, in which only some objects bear case morphology (see Aissen 2003 for an overview). Consider the data from Sakha (Russia, Turkic):

\(^8\)On this view, Niuean VP-fronting itself cannot satisfy the EPP requirement of v\(^0\).
(13) a. Masha salamaat-*(y) turgennik sie-te
M. porridge-*(ACC) quickly eat-PST.3SS
‘Masha ate the porridge quickly.’
b. Masha turgennik salamaat-(#y) sie-te
M. quickly porridge-(#ACC) eat-PST.3SS
‘Masha ate porridge quickly.’ [Baker & Vinokurova 2010: 602]

In Sakha, accusative case marking, object definiteness/specificity, and object position with respect to VP-level adverbs all co-vary. Only definite/specific objects move high enough in the clause to receive accusative case. When the object does not move, accusative case is not assigned. Furthermore, caseless objects must undergo PNI, suggesting they receive no C/case, and must be alternatively licensed (Baker & Vinokurova 2010, Baker 2014). Nevertheless, failure to assign accusative does not yield ungrammaticality, contrary to the predictions of the Inverse Case Filter.

English optional transitives (14) present another instance of failure to assign accusative case.

(14) a. She washed (herself).
b. Coppe is eating (a hotdog).
c. Mary and Phil danced (a furious tango).

If an optionally transitive verb is able to assign Case, the Inverse Case Filter requires that it must assign Case, effectively eliminating the possibility of ‘true’ optional transitives.

It is possible to rescue the Inverse Case Filter, despite the data in (14), if optionally transitive verbs are analyzed as involving two separate verbs in the lexicon – one transitive and one intransitive (e.g. Fodor & Fodor 1980, Mittwoch 1982, Bošković 1997). When the transitive form is used, accusative C/case is obligatorily discharged. When the intransitive form is used, there is no accusative C/case to discharge. On this view, the Inverse Case Filter is compatible with (14). However, this position is untenable. Graćanin-Yuksek (2007) provides evidence that optionally transitive verbs cannot be modeled as distinct, homophonous lexical items. She observes that bi-clausal multiple wh-questions are only well-formed with optional transitives:

(15) a. What and where did you sing / dance / eat?
   b. *What and where did you sell / fix / buy?

Graćanin-Yuksek (2007) provides arguments that the examples in (15) contain two CP conjuncts, modeled as multi-dominance structures, sharing a significant part of their architecture – including the verb. Only Spec-CP and the wh-phrases are not shared. The grammaticality of (15a) follows because verbs like sing introduce the direct object what in the first CP-conjunct and no direct object in the second CP-conjunct. The ungrammaticality of (15b) arises exactly because no object is introduced in the second CP-conjunct, in violation of the verb’s c-selectional requirements. Only if optionally transitive verbs are one lexical item can they occur in the proposed structure. In light of (15), the data in (14) pose a true problem for the Inverse Case Filter.

Environments in which transitive objects receive non-canonical case offer a final argument against the Inverse Case Filter. In many Slavic languages, accusative case is not realized on certain direct objects – e.g. in genitive of negation constructions (e.g. Pesetsky 1982, Bošković 2007; and many others). Verbs fail to assign accusative case when they are negated, as in Polish:

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9I thank Omer Preminger for bringing these data and Graćanin-Yuksek’s work to my attention.
If failure to realized accusative case morphology reliably diagnoses failure to discharge accusative Case, then the Inverse Case Filter would deem (16b) ungrammatical, contrary to fact.

Given these issues, the Inverse Case Filter cannot be employed in explaining the constrasts (8-11), because it is independently untenable.

4 Conclusion

The pattern of ungrammatical and grammatical instances of unaccusative subject incorporation in Mapudungun and Niuean cannot be accorded a Case-theoretic explanation. (P)NI arguments do not need Case. Therefore, the ungrammaticality of such constructions cannot be attributed to their failure to receive it. Furthermore, a Case-theoretic explanation struggles to explain why the introduction of some other argument either by possessor raising in Mapudungun or base-generation of a locative adjunct in Niuean should rectify the Caselessness of the unaccusative subject. The dichotomy in these constructions can, however, be captured by the EPP. When the unaccusative subject is the sole argument of the clause, ungrammaticality arises because the (P)NI object cannot satisfy the EPP. When the unaccusative subject is not the sole argument of the clause, grammaticality arises because the other argument satisfies the EPP.

The data presented in this paper require the EPP to be independent of Case (see also e.g. McCloskey 1996, Miyagawa 2001). They do not, however, require the EPP to be an independent property of grammar. The EPP could be subsumed by some other property so long as that property were itself independent of Case. Recent proposals have sought to subsume the EPP within phonological properties (e.g. Landau 2007, Salzmann et al. 2013, Richards 2014, McFadden & Sundaresan 2015). Future research must determine if these (or other) attempts will succeed.

References


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