

Impersonal Passives: A Phase-based Analysis

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1. *The impersonal passive*

In this paper I apply the phase-based model outlined in Chomsky 1998, 1999 to the pattern of impersonal passives in English and the Scandinavian languages, with supporting evidence drawn from French and Spanish.

The basic observation is that the location of an 'associate' DP in impersonal passives varies cross-linguistically. The basic order can be taken to be that in (1), where the order is participle-object (essentially VO), and the minimal assumption is that the object is in situ. This is the neutral order for Eastern Norwegian, which, as the sociopolitically dominant dialect, can be referred to as Norwegian. Participle-object is also the usual order for closely related Danish and Icelandic, and in French, as shown. Though I have glossed them quite literally, all of the examples in (1) mean essentially the same as the English sentence 'There were three journalists arrested.'

- (1) a. Det ble arrestert tre journalister. ((E.) Norwegian)
it became arrested three journalists
b. Der blev arresteret tre journalister. (Danish)
there became arrested three journalists
c. *fi* > voru settir *fl*rír bla > amenn í var > hald. (Icelandic)
it were put.M.PL.NOM three journalists in custody
d. Il a été arrêté trois journalistes. (French)
it has been arrested three journalists

Unlike Norwegian and Danish, Icelandic allows the DP to appear in a higher position, in the so-called 'Transitive Expletive Construction,' but this is demonstrably different from the English object-participle (OV) order (cf. Sigursson 1991, Holmberg 1994, Vangsnes 1999).

The order illustrated in (2a) is the only possible order for English, barring Heavy NP Shift or the like. This is also a common order for Swedish and various Western Norwegian dialects.

- (2) a. There were three journalists arrested last night. (English)
b. Det blev tre journalister arresterade. (Swedish)
it became three journalists arrested.PL
c. Det vart tre journalistar arresterte. (W. Norwegian)
it became three journalists arrested.PL

The question addressed in this paper is what determines the word order contrast. For several of the languages under discussion, the opposite order is actually ungrammatical, as indicated in (3) for Norwegian and English.

- (3) a. * There were arrested **three journalists** last night.
 b. * Det ble **tre journalister** arrestert i natt. (Norwegian)
it became three journalists arrested in night

A comparison of the gloss of (3b) with the English counterpart in (3a) might lead one to suspect that the difference is a function of *it-* versus *there-*type expletives; however, a closer examination of (1-2) will reveal that this is false, and in fact all four possible combinations of expletive type and word order are manifested. Nor does the fault lie with the nature of the auxiliary verb; once again, all four combinations of ‘be’ vs. ‘become’ and object-participle vs. participle-object are attested.

On the other hand, in Mainland Scandinavian (MS), overt participial agreement correlates very closely with object-participle order. In some languages, both orders are possible, and object-participle order correlates with overt agreement. This can be seen by comparing the non-agreeing participle in French in (1d) above, with the existential and movement passive forms given in (4) (cf. Kayne 1989).

- (4) a. Il y a eu trois journalistes arrêtés. (French)
it there has had three journalists arrested.PL
 b. Trois journalistes sont arrêtés.
three journalists are arrested.PL

Further support for the connection between movement and morphology is provided by the Swedish and West Norwegian examples below (cf. Svenonius 1996 on the incorporation of the particle in the variant in (5d)).

- (5) a. Det blev många älgar skjutna. (Swedish)
it became many moose(M).PL shot.PL
 b. Det blev skjutet många älgar.
it became shot.N.SG many moose(M).PL
 c. Det vart hogge ned mange tre. (W. Norwegian)
it became chopped.SG down many trees
 d. % Det vart mange tre nedhogne.
it became many trees down.chopped.PL

Other cases have been noted of movement correlating with overt agreement morphology; e.g. by Christensen & Taraldsen 1989.

- (6) a. Det er nett kome nokre gjester. (W. Norwegian)
it is just arrived some guests
 b. Nokre gjester er nett komne
some guests is just arrived.PL
 ‘Some guests have just arrived’

However, the correlation of overt agreement and object-participle order is not complete. As can be discerned in (1-2), there are at least two counterexamples. English has object-participle order but no agreement, and Icelandic has participle-object order with agreement.

Chomsky 1999 proposes a PF rule called TH/EX (“Thematicization/Extraction”) to derive the object-participle word order in English. In this paper I present an alternative account. In §2 I outline the model developed in Chomsky 1998, 1999; in §3 I present a modification of it; and in §4 I apply this to the constructions in (1-2).

2. Derivation by Phase

Chomsky (1998, 1999) proposes that the derivation proceeds in PHASES, where a phase is an active part of a derivation, roughly analogous to the Cycle of earlier work. For each sentence, an ARRAY of lexical items is selected from the lexicon (the lexical array is basically equivalent to the Numeration of Chomsky 1995). For each phase, a SUBARRAY of lexical items is selected from the array, and used to construct a phase; when this is done, another subarray is selected, until the array is used up. There are two functional categories that are critical for identifying phases: the light verb ν and the complementizer C. Each phase contains one of these. Chomsky proposes that if the light verb ν is part of a transitive verb, then it is PHI-COMPLETE. Furthermore, finite and control C are also phi-complete. Phi-complete ν and C head STRONG PHASES. Strong phases, then, are finite CPs, control CPs (those containing PRO subjects), and transitive ν Ps. Strong phases are crucially subject to the PHASE IMPENETRABILITY CONDITION, or PIC, stated in (7) (adapted from Chomsky 1998, 1999).

- (7) *Phase Impenetrability Condition*:: In [_{ZP} Z ... [_{HP} [H YP]]], HP a strong phase, ZP the next higher strong phase:
 The domain of H (here, YP) is not accessible to operations at ZP, but only H and its edge

‘Edge’ here means left edge, namely specifiers. The essence of (7) is derived by (8), where ‘next’ means next higher in the tree.

- (8) Interpretation/evaluation for strong phase PH₁ is at the next strong phase PH₂

The PIC serves to place locality conditions on operations (cf. the Strict Cycle Condition of Chomsky 1973). Consider a straightforward case where HP is transitive vP , and ZP is finite CP, for example in the sentence *Bears eat berries*. Since verb phrases are deconstructed into vP containing VP in this model, ‘YP’ in (7) is the lexical VP. What (7) says about this example, then, is that $[_{VP} \textit{eats berries}]$ is not ‘accessible’ to ‘operations’ at CP; only v and the specifier of vP (i.e. the external argument) are. Put another way, VP is opaque to attraction by strong features in C. A sample derivation of the sentence is sketched in (9-13). First, the Array is listed in (9). It is a selection of lexical items, including five null functional heads and three lexical words.

(9) The Array: C, D, $[_N \textit{bears}]$ T, v , $[_V \textit{eat}]$, D, $[_N \textit{berries}]$

From (9) the four-item subarray in (10) can be selected. As prescribed above, it contains one instance of v or C.

(10) Subarray 1: D, $[_N \textit{bears}]$, v , $[_V \textit{eat}]$, D, $[_N \textit{berries}]$

Now the operation Merge recursively combines elements in Subarray 1 pairwise, as sketched in (11).

- (11) a. Merge D, N: $[_{DP} D [_N \textit{bears}]]$
 b. Merge D, N: $[_{DP} D [_N \textit{berries}]]$
 c. Merge V, DP: $[_{VP} [_V \textit{eat}] [_{DP} \textit{berries}]]$
 d. Merge v , VP $[_{vP} v [_{VP} \textit{eat} [_{DP} \textit{berries}]]]$
 e. Merge DP, vP : $[_{vP} [_{DP} \textit{bears}] [_{vP} v [_{VP} \textit{eat} [_{DP} \textit{berries}]]]]$

At stage (11e) all the items in Subarray 1 are used up and Merge cannot be applied again. At this point another subarray can be selected.

(12) Subarray 2: C, T

This is a subarray because it contains one instance of C or v . It also happens to exhaust the Array. Now these items can be combined with the vP constructed in (11). Specifically, T may be combined with vP as in (13a). Assuming that T has a strong feature (the EPP feature), Move will apply immediately as in (13b), attracting the nearest nominal to TP. Finally, C may be Merged with TP, as in (13c).

- (13) a. Merge T, ν P: [_{TP} T [_{ν P} [_{DP} *bears*] [_{ν P} ν [_{VP} *eat* [_{DP} *berries*]]]]]]
 b. Move DP: [_{TP} [_{DP} *bears*] [_{TP} T [_{ν P} t_s [_{ν P} ν [_{VP} *eat* [_{DP} *berries*]]]]]]]]
 c. Merge C: [_{CP} C [_{TP} [_{DP} *bears*] [_{TP} T [_{ν P} t_s [_{ν P} ν [_{VP} *eat* [_{DP} *berries*]]]]]]]]]]

Now, according to (7) above, VP is not accessible to operations at C, only ν and its specifier (and also the material above ν P, in TP). In other words, no feature in C may attract any element in VP (according to (8), this is because ν P is Interpreted or Evaluated at CP).

Consider then how the sentence in (14) is to be derived.

- (14) Berries, bears eat.

It is common to take topicalization structures to involve movement to CP. Chomsky entertains the possibility that all movement is due to attraction by a higher head, in this case C. So (14) appears to be ruled out by (7).

There are two possibilities for deriving (14). One is that the topic is not moved out of VP, but base-generated in the higher position, as proposed in Chomsky 1977 (cf. Platzack 2000 for a recent argument supporting this analysis). Alternatively, the object moves to the edge of ν P after step (11d) (perhaps immediately after (11e)), but before C is Merged in step (13c). Chomsky explicitly allows this by postulating that strong features may be inserted in strong phase heads, to force movement. This is called INDIRECTLY FEATURE-DRIVEN MOVEMENT, or IFM.

At this point the question is, what does all this say for impersonal constructions? Impersonal constructions of the type given in (1-2) contain ν and C, by hypothesis, and therefore consist of two phases. However, since the verb is passive, the ν P is not a strong phase. Therefore, VP will be accessible to C, since there is no strong phase between them. All of this sheds little light on why the object might sometimes move. Chomsky suggests that the object remains in situ unless the language-specific rule TH/EX moves it leftward, because of a filter operating in English to prevent objects from appearing in passive and unaccusative VP. But of course objects remain in ditransitive passive VPs, in sentences like *People were sent credit cards in the mail*.

Holmberg 2000 analyzes impersonal constructions in terms of phases, arguing that whether the participial phrase constitutes a strong phase or not is a point of cross-linguistic variation. When it is a strong phase, then the prediction is that both of the word orders in (1-2) are possible. When the participial phrase is not a strong phase, then only the participle-object order will be possible. Holmberg argues that Swedish participials are strong phases, leading to the possibility of both orders (as seen in (5a-b) above), while Norwegian

participials are not, resulting in the ungrammaticality of the object-participle order (cf. (3b) above).

Holmberg's account is successful in many ways, but does not straightforwardly predict the existence of languages like English, which have only the object-participle order (cf. (3a) above). Furthermore, it does not treat as central the correlation of agreement and object-participle order noted in §1. Finally, it requires that the inventory of strong phase heads vary from language to language. In the next section I develop an alternative account that addresses these matters.

3. An alternative: *Impatient Spell-Out*

Recall the PIC from (7-8) above, restated here as (15-16).

- (15) In $[_{ZP} Z \dots [_{HP} [H YP]]]$, HP a strong phase, ZP the next strong phase:
The domain of H is not accessible to operations at ZP, but only H and its edge
- (16) Interpretation/evaluation for strong phase PH_1 is at the next strong phase PH_2

Recall that (16) can be interpreted to derive (15): if the lower phase is evaluated by being sent to Spell-Out, where it is assigned a PF and an LF representation, then it is too late to access its contents. (15) allows for the specifier and head to be 'visible' to the derivation after HP has been sent to Spell-Out, but only until the next strong phase is sent there.

In a sense, (16) is not the 'minimal' assumption. It would be more parsimonious to determine *locally* whether a phase should go to Spell-Out, rather than having to wait until the higher phase is built. The delay allows elements from the lower phase to move into the higher one. Recall the example in (14) above; if vP went off to Spell-Out with the object inside it, then it would be impossible to topicalize the object. Given (15-16), IFM movement of the object is possible even after T is Merged.

However, recall that the object is moved to the left edge of vP (by IFM) anyway. Assuming that the object forms a second specifier of vP , then since multiple specifiers are at the 'edge' for purposes of (15), it is not actually necessary to wait until PH_2 to evaluate PH_1 for movement of the object; vP could be sent immediately to Spell-Out after IFM, e.g. after step (11e) plus movement of the object; the object and subject, as part of the 'edge,' will still be accessible to 'operations at C,' by (15). Consider (17) as an alternative to (16).

(17) Evaluate strong phase PH_1 when it is complete

A phrasal construct in general may be considered to be ‘complete’ when all of the features on its head have been checked. This would mean that once features have been checked, a strong phase may be sent immediately to Spell-Out.

One kind of movement which is allowed by (15-16) but ruled out by (17) is attraction of an object from VP directly to TP, without stopping at vP first, in the configuration sketched in (18).

(18) $[_{TP} \text{Theme } T [_{vP} \text{Agent } v [_{VP} V t_{\text{Theme}}]]]$

Such movement might be needed for ergative languages, if absolutive Case is similar or identical to nominative and checked by T (assuming that ergative Case is assigned to the external argument in $\text{Spec}vP$). This is the analysis proposed by Bittner 1994 for an Inuit sentence like that in (19). (Cf. Bittner’s example (35a), p. 16, with Ergative-Absolutive-V order, her proposed structure in (37b), p. 17, and fn. 13, p. 18, where she asserts that the Ergative is fronted at PF. The suffixes on the verb are mood (here, dependent past) ergative agreement, absolutive agreement.)

(19) atisassat arna-p irrur-m-a-git (Inuit)
 clothes woman-ERG wash-DPST-3SG-3PL
 ‘...the woman washed the clothes...’

On the other hand, it is difficult to demonstrate that the absolutive Theme could not have stopped at the edge of vP on its way to TP. Note that (17) must be interpreted to allow IFM; that is, it cannot be the case that the vP is evaluated before IFM can draw an object up to vP . The most straightforward way to ensure this is to assume that IFM features are inserted when the Array is chosen; then, if an IFM feature can be inserted in v , this means that v can be selected from the lexicon with or without that feature.

Another situation that (17) can be tested against is the case of featural agreement across a vP boundary. Consider the issue of how Case is determined for the associate DP, in the impersonal construction. Chomsky 1999 mentions Icelandic examples like the ones in (20) (cf. Sigurðsson 1991 inter alia).

(20) a. *fi*a> *vir*>ast *hafa veri*> *veiddir* *nokkrir fiskar.* (Icelandic)
 it seem have been caught.M.NOM.PL [some fish(M)].NOM.PL
 ‘There seem to have been some fish caught.’
 b. *Vi*> *töldum hafa veri*> *veidda* *nokkra fiska.*
 we believe have been caught.M.ACC.PL [some fish(M)].ACC.PL
 ‘We believe there to have been some fish caught.’

In (18a), nominative Case on the associate DP, within VP, is assumed to come from the finite T in the main clause (though cf. Sigurðsson 2000 for arguments that nominative is assigned vP -internally). In (20b), accusative Case comes from the transitive v in the main clause.

The danger here from overly rapid Spell-Out is that the lower vP might go to Spell-Out before the Case features on the nominal are checked. However, the assumptions outlined so far will not lead to such a situation. Consider first the fact that there is only one strong phase head in (20a), namely matrix C. Since (17) applies only to strong phases, there will be no early Spell-Out. In (20b), there are two strong phase heads, matrix v and matrix C. This means that the first opportunity for (17) to apply is at the matrix vP level, sending [_{vP} vi > *töldum hafa veri* > *veidda nokkra fiska*] to Spell-Out if the matrix v bears no uninterpretable features. Depending on assumptions about selection and Tense (see below), there are no uninterpretable features on matrix v . In that case, (17) causes no problems; matrix vP may go to Spell-Out without preventing any necessary Agree relations, since the object and the matrix participle are in the same strong phase, and the subject is still extractable since it is at the edge of vP .

Thus, for the limited cases being examined, at least, there does not seem to be any obstacle to opting for the (arguably) more restrictive (17) over (16) as a rationale for (15); this has the result that (15) may be refined to (21).

(21) *PIC*, first revision: In [_{ZP} Z ... [_{HP} [H YP]]], HP a strong phase:

The domain of H is not accessible to operations outside HP, but only H and its edge

I.e. it does not matter whether Z is a strong phase head or not; only the specifiers and head of a strong phase HP are available to extraction. At this point it is interesting to explore an even stronger stance, that of eliminating the escape hatch, so that when an expression is sent to Spell-Out, not even its specifiers or head are available. One way to accomplish this is to allow YP in (21) to go to Spell-Out; that is, to allow the Spell-Out of maximal projections which are not strong phases. Imagine for the moment that when it is to be extracted, a specifier or head of HP always has an uninterpretable feature (e.g. the topicalized object in (14) above gets a Topic feature, the nominative subject in (20b) gets a Nominative feature, a verb that must raise to T has an Agreement feature). Now, (17) can be restated as in (22), with the result that (21) can be replaced with (23).

- (22) Evaluate X when it is complete
 (23) *PIC*, second revision: When YP has been evaluated, no subpart of it is available to Agree/Attract

The success of this reformulation hinges very much on the distribution of uninterpretable features. The privileged status of v and C as phase heads is preserved mainly in their featural makeup; they will serve to ‘close off’ parts of the derivation only to the extent that they provide for the elimination of uninterpretable features on lower heads (though (22) does not serve to entirely eliminate the special status of v and C, given that they still define the subarray). I will not be able to explore the many consequences here (see Svenonius 2000 for more discussion), but will simply attempt to apply this model to a single construction, the impersonal passive construction presented in §1. This I do in the next section.

4. *Impatient Spell-Out and the impersonal passive*

Consider first the clear correlation of Agreement and object-participle order in Mainland Scandinavian. Take Norwegian as a typical representative of non-agreement and VO order.

- (24) Det ble tatt mange bilder. (Norwegian)
it became taken many pictures
 ‘There were many pictures taken’

The derivation of this example, given the model adopted above, is as follows. First, the Array in (25) is selected.

- (25) Array: C, [_D *det*], T, v , [_V *ble*], v , [_V *tatt*], [_D *mange*], [_N *bilder*]

Assuming that there is a participial v (cf. Chomsky’s ‘PRT’) which is a phase head but not a strong phase head (contra Holmberg 2000), that there is also a v associated with the raising verb *bli* ‘become,’ and that DPs are not phases (a dubious assumption but harmless for the present purposes), there are three phases here, but only one is strong (the one headed by finite C).

- (26) Subarray 1: v , [_V *tatt*], [_D *mange*], [_N *bilder*]

Merge combines the D and N into a DP. Assuming that there are selectional features on N which must be checked in D (cf. Svenonius 1994b), (22) cannot apply to N before Merge; assuming that there are Case features on D, (22) cannot apply to D before Merge, nor to the whole DP after Merge. Thus, at this stage, nothing has gone to Spell-Out. The lexical verb may then be combined with the DP already constructed to yield a VP, yielding (27).

(27) [_{VP} *tatt* [_{DP} *mange* [_N *bilder*]]]

At this point it is important to know how Case is checked. Following Åfarli 1989, 1992, passive verbs in Norwegian assign Case; assume, then, that participial V in Norwegian is an inherent Case assigner (cf. Platzack 1982 on the assignment of Case by adjectives in Swedish; his comments there extend to Norwegian). In Chomsky's 1999 terms, this would mean that the uninterpretable Case feature of D is matched with an interpretable Case feature on V in (29), and the uninterpretable feature on D is then deleted. According to (24), DP can then be evaluated (sent to Spell-Out). But at the same time, VP is plausibly bereft of uninterpretable features, so it too may go to Spell-Out, in accordance with (24).

Whether *v*P can go to Spell-Out as soon as *v* is Merged with VP is a more difficult question, having to do with the issue of whether there is a selectional relation between the participial *v*P and the higher auxiliary. I will assume that there is one, and that *v*P does not go to Spell-Out at this stage. (I will also set aside the complication that if V is assumed to move into *v*, then VP could not go to Spell-Out before *v* was Merged.)

Now, I claim, the reason that the Norwegian word order in impersonal constructions is participle-object is that the VP goes to Spell-Out at this early stage, before any feature can be inserted in the derivation that would draw the object out of VP (according to Chomsky, IFM features can only be inserted in phi-complete heads, i.e. strong *v* and C).

At this point we may turn to Swedish. In Swedish, it will be recalled, there is overt agreement morphology on the participle (optionally; cf. (5a-b)), and the word order is object-participle (when the agreement option is selected), as in (28).

(28) Det blev många bilder tagna. (Swedish)
it became many pictures taken.PL
 'There were many pictures taken'

The Array and Subarrays will be essentially the same as for the Norwegian example. First the DP meaning 'many pictures' will be constructed, and then it will be Merged with the lexical V. At this point it is conceivable that Case features on DP are checked just as in Norwegian. However, the agreement morphology on the participle signals that there is an additional relation. Assuming that agreement is mediated by a functional head such as *v*, it is reasonable to assume that the critical difference between Norwegian (24) and

Swedish (28) is that in (28), there are uninterpretable agreement features on V which must be eliminated before VP can be evaluated, by (22).

Various implementations are possible, but to make the idea precise, I suggest that Case on the DP is checked as in Norwegian, and DP goes to Spell-Out by (22). After this point, its internal make-up is inaccessible, though the DP itself can still be repositioned within the larger structure. V remains behind because of an uninterpretable selectional/agreement feature which must be checked by v (the presence of this feature is signalled by the overt morphology). When v is Merged with VP, then agreement features on v are given values by the DP (whose top label is still visible, as just noted), and the uninterpretable features on V are given values by v , so all uninterpretable features are eliminated. This means that the entire v P can be sent to Spell-Out. Now, the question is, why is the order object-participle?

The easiest answer is that Swedish has a strong feature (what Chomsky 1998, 1999 calls an ‘EPP’ feature) in participial v which attracts the object. Norwegian could not because VP went to Spell-Out before v was Merged, at which point VP became opaque to operations outside it, including operations involving v . Swedish can have a strong feature precisely because the necessity of checking agreement morphology induces a delay in Spell-Out just long enough for the strong feature in v to be inserted.

On this view, Icelandic (which has agreement morphology but participle-object order) could be just like Swedish but without the strong feature. The fourth possibility, English, is discussed below.

However, a more satisfying analysis would derive the difference between Swedish and Icelandic from some independently motivated difference between the two languages, rather than the stipulated strong feature. One plausible difference lies in the mechanism of Case assignment. Case in Icelandic can be seen to vary with the nature of the higher Case assigner (cf. (20)), so the source of Case is different from that postulated above for Norwegian and Swedish. But another step of reasoning is needed, since this difference alone does not indicate why Swedish, but not Icelandic, should manifest movement of the DP to the left of the participle.

I have claimed above, following Chomsky, that ‘Evaluation’ in (22) involves Spell-Out. Spell-Out, in this model, is the process by which syntactic structures are translated into LF and PF representations, the interpretive interfaces for the semantics and phonology. This means that when X is sent to Spell-Out, the interpretive mechanisms must be able to assign a coherent LF and PF to it. When Spell-Out is conceived of as applying to clausal or sentential entities, this

is straightforward. But when it is conceived of as applying to fragments of sentences, as it is here, there are complications.

One question has to do with what the interpretive mechanism does with unsaturated predicates. In Svenonius 1994a I explored the consequences of assuming that syntax is sensitive to the interpretation of nodes, and that nodes denoting unsaturated predicates are syntactically more restricted than nodes denoting entities. Extending that idea into the model at hand, it might be assumed that Spell-Out cannot interpret an unsaturated predicate; either an open function cannot be sent to Spell-Out, or if it is sent to Spell-Out then the derivation crashes, or the open function is ‘sent back.’ Consider the revision of (22) given in (29).

(29) Evaluate X as soon as possible

Now, the idea would be that uninterpretable features make it impossible to Evaluate X, but other inadequacies of X might also do the same; specifically, if the interpretive mechanisms cannot assign a well-formed PF (for example if X contains a stray affix) or a well-formed LF (for example if X is an unsaturated function).

I suggested above that the VP in Norwegian goes to Spell-Out quite early; I assume that VP is property-denoting, in the sense of e.g. Chierchia 1985. If v is a predicative head (cf. Bowers’ 1992 ‘Pr’), then vP is a predicate, and therefore unsuitable for Spell-Out regardless of whether its features are checked. Moving the object up to the left of vP as in Swedish (28), however, would make that vP suitable for Spell-Out.

This raises the question of whether a movement might be motivated solely by the earliness of Spell-Out (cf. Pesetsky’s 1989 notion of Earliness, revised in Pesetsky & Torrego 2000). Chomsky states that IFM is possible “when it has an effect on the outcome”; but this criterion is difficult to apply. The idea would be that whatever economy factor prevents elements from moving freely (cf. Procrastinate) is overridden by the concerns of (29) (cf. Earliness), when that movement satisfies Spell-Out. Juan Uriagereka (personal communication) has suggested that the demands of processing make plausible a constraint requiring that Spell-Out be accessed as frequently as possible, in order to reduce the amount of material in working memory. This principle could (as he suggested) be summed up in the slogan ‘Minimize Information.’

Now, given the understanding of Agreement already presented, the account of the difference between Norwegian and Swedish is preserved, and no strong feature need be postulated for Swedish. If in addition we adopt the

Without wishing to enter into these various debates at this time, I will simply assume that main clauses in Icelandic are always CP (cf. Schwartz & Vikner 1996), that expletives are inserted in SpecTP (cf. Vangsnes 1999), and nominative Case is a function of finite C (as for Platzack). This particular set of assumptions has the result that the associate DP bears uninterpretable features until C is Merged (a different set of assumptions yields the right results as well, but at the TP level instead). The strong features of C force the expletive to raise to SpecCP, and at that point, the entire CP is sent to Spell-Out.

This state of affairs, I suggested above, means that the ν P does not need to be reconfigured for the LF interface; instead, a subject-predicate structure can be constructed on the basis of the entire clause, including the expletive. The nominative DP may therefore remain in situ.

Spanish is similar to Icelandic in this matter. Spanish has two different orders, depending on the higher verb. The relevant examples are given in (32).

- (32) a. Habia tres periodistas arrestados. (Spanish)
had.3.SG three journalists arrested.M.PL
- b. Fueron arrestados tres periodistas.
became.3.PL arrested.M.PL three journalists
 ‘There were three journalists arrested’

Although there is number and gender agreement on the participle in both cases, only in the participle-object order in (32b) is there person agreement on the higher verb. This suggests that in (32b), but not in (32a), a higher inflectional head is involved in the licensing of the Case of the associate.

The claim, then, is that (32a) is like Swedish: the VP cannot go to Spell-Out (as it does in Norwegian) because of participial Agr; but ν P can because Case on the associate is satisfied in some domain smaller than the entire clause (possibly ν P-internally, but see below). Spell-Out forces reconfiguration into a subject-predicate structure (a small clause). (32b), on the other hand, is like Icelandic, in that the ν P cannot go to Spell-Out before T is Merged, because until then, Case has not been checked on the associate. Raising the associate to Spec ν P will not create an evaluable ν P, because Case features remain unchecked on DP.

Support for this analysis comes from the fact that only the structure in (32a) supports object clitics, as seen in (33) (this was pointed out to me by Juan Uriagereka).

- (33) a. Los habia arrestados. (Spanish)
them had.3.SG arrested.M.PL
 ‘They were arrested’
- b. * Los fueron arrestados.
them became.3.PL arrested.M.PL

If object clitics necessarily get non-nominative case, then the pattern in (33) provides independent evidence for exactly the postulated difference in Case assignment between the two structures.

The only pattern remaining to account for, then, is English, which has the object-participle order but no participial agreement. Given the lack of agreement, one might expect English to pattern with Norwegian and Danish and the non-agreeing alternates in French and Swedish. However, recall that my analysis of that order relied crucially on there being a source for Case in the VP, a possibility explicitly motivated for Norwegian by Åfarli 1989, 1992. Åfarli contrasts Norwegian specifically with English, arguing that the possibility of Case in VP distinguishes Norwegian from English, accounting for various differences in impersonal constructions and pseudopassives. Independent limitations on pseudopassives in French and other languages make it difficult to be sure that those languages should pattern with Norwegian (though if my analysis above is correct then they must), but for English the prediction is clear: the Case assigner must be higher up.

Lasnik 1992 argues that the Case assigner in English existential constructions is the verb *be*. This makes exactly the right predictions, within the current model, for word order in the existential construction. Consider a simple example like (34).

- (34) There were errors discovered.

Starting from the bottom, as above, the DP *errors* is constructed first. It bears uninterpretable Case features. These are not checked in the VP *discovered errors*, nor in the *vP* containing the same lexical items. It is not until the next V, *were*, is Merged, that Case is checked on the DP. At this point, DP can go to Spell-Out. But so can the lower VP and *vP*; in short, exactly the same constituent that was sent to Spell-Out in Swedish.

Thus the prediction is that exactly the same word order as was observed in Swedish will hold for English, as it does. This result is achieved without the postulation of any strong EPP feature in the participial phrase, but is instead built up on independently motivated assumptions about Case assignment and agreement, along with a particular conception of how phase-based derivation might work.

Note that at the point of early Spell-Out (of the participial *vP*), the higher VP containing *were* will not go to Spell-Out before tense on *were* is checked in T. In a more complex construction the situation might be different. Consider, for example, the contrast between progressive and passive *be* in (35) (boldface is used here to highlight the alternation).

- (35) a. There have been **people** interrogated.
b. * There have **people** been interrogated.
c. * There are being **people** interrogated.
d. There are **people** being interrogated.

On the analysis presented here, this pattern suggests that the perfect participle *been* in (35a-b) must check features on *have*, and therefore does not accompany the *vP* containing *interrogated* to Spell-Out, whereas the progressive participle *being* in (35c-d) does not check any features on the auxiliary *are* and therefore goes to Spell-Out at once, with the lower *vP*. This would be consistent with the general observation that the *-ing* form of the verb readily forms independent phrases such as gerunds, while the perfective does not (deverbal adjectives are based on the passive, not the perfective).

More strikingly, the pattern in (35) is consistent with Kayne's 1993 analysis of *have* as composed of *be* plus an abstract preposition, in that it postulates an additional relation between *have* and its subordinate structure, as compared against structures with auxiliary *be*; a straightforward version of Kayne's analysis in the present model would translate the abstract preposition into the *v* of the perfect participle.

5. Conclusion

In this paper I have taken a particular interpretation of some of the ideas in Chomsky 1998, 1999 and recast them slightly according to some conceptual arguments. Specifically, I have speculated that Spell-Out of an element X might be triggered not by the construction of some higher structure Y, but by the satisfaction of interface conditions on X itself; in practice, this will often lead to the same result, as the crucial elements lacking in X are to be found in Y. This is an extension of the notion of dependency that I explored in Svenonius 1994a.

Although the specifics of the analysis are highly dependent on various fine mechanical assumptions regarding the nature of Case and agreement, the conclusion is that TH/EX is not a language-specific rule, and is not phonological, but is instead semantic in nature, and should apply to any

language with the same constellation of Case and agreement properties that English has.

I have suggested that movement in some cases is driven not by strong features, but by a motivation to go to Spell-Out as early as possible; a notion akin to that of Earliness (cf. Pesetsky & Torrego 2000) which I have referred to as ‘Impatience.’ Whether the principle in (29) should really be seen as motivating movement in the absence of strong features is something which will have to be subjected to further testing.

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