[WLG]

In the absence of a subject

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1.   Background

Initially, there was a simple question incited by a simple observation: what might be the grammatical reason for the ungrammaticality of subjectless clauses in English? The observation was this: "*There is compelling evidence that the subject of a clause is obligatory in English and similar languages* (Chomsky 1981, 40)."

In the absence of any deeper understanding, the empirical finding has been turned into an axiomatic grammatical constraint, namely the '*Extended projection principle'* (EPP). It should be obvious that this is merely a technical restatement of the fact and the unanswered original question is turned into an unanswered technical question: why would a grammar have to embody such a requirement? In Lasnik's words (2001, 356) "*The 'Extended Projection Principle' (EPP) has been* [...] *a pervasive mystery since it was first formulated by Chomsky (1981).*"

Even more mysterious is only the fact that the EPP is considered to be a *universal* axiom of a theory of sentence structures. In the present versions of generative theorizing, the axiom is not limited anymore to a subset of languages, namely "*English and similar languages*". Without any substantive evidence beyond SVO languages, it has been elevated to the rank of a universal property of clause structure.

The universality claim is in immediate conflict with facts from languages other than English and similar languages, that is, other than SVO languages. McCloskey (1996) has shown that VSO languages such as the Celtic languages do not pattern as predicted.[1] As for SOV languages, there is no language known that provides unequivocal evidence for

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[1]

(i)	Laghdaigh	ar	a	neart.	(Irish)
	decreased	on	his	strength	
	'His strength decreased'				

the efficacy of an EPP requirement. In particular, no SOV language requires or admits a purely expletive[2] subject in an otherwise subjectless clause, Dutch notwithstanding.

Eventually, the EPP axiom got translated into a feature device. Each clausal structure happens to be universally imbued with an EPP feature that must be eliminated ('checked') by a lexical item in the affected subject position. It is truly surprising that anyone could regard the postulation of an EPP feature as a satisfactory theoretical explanation of the alleged fact that clauses must have subjects in SVO languages. Hardly anyone seems to be irritated by the narrow circularity: clauses have subjects, because there is an EPP feature (= theoretical claim), and there is an EPP feature because clauses have subjects (= empirical claim). The understandable theoretical move – let's postulate a feature for an ill-understood structural property – is deceptive for at least two reasons. Empirically it is wrong; theoretically it is immaterial as long as the postulation of such a feature is merely begging the question. Moreover, such a feature would be unique. It would be the only *meta-grammatical* feature. To postulate an EPP feature amounts to advising a grammar by posting signs such as "*To leave this position empty is against the law. If it is left empty, the sentence will be starred.*" The grammar has to decide then whether to move something to this position or to plug it with an expletive.[3]

2.   EPP as an SVO affair

If SVO languages are seen as what they are, namely as languages with a particular type of sentence structure, EPP falls in place. In SVO languages, there is an argument that does not stay within the projection of the verbal head it is an argument of. It ends up in a functional spec-position outside of the VP. As a consequence, it is not only outside of the VP but it *precedes* the verbal head while all other arguments *follow* this head inside the VP. It is this setting that constitutes the clause structure type called [S [VO]]. In the two other clause structure types, the verbal head either precedes all its arguments or it follows all of its arguments. In any case, all the arguments stay within the same directionality domain. Only in SVO there is a mismatch. One argument is not in the directionality domain that contains all the other arguments. This is the argument in the pre-VP functional subject position.

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[2]As will be argued below, semantically *void* arguments (e.g. weather-verb subjects) must not be mistaken for expletive subjects. Void arguments are nevertheless *arguments* of a verb. Expletives are mere structural fillers.

[3]Note that in Norwegian there is free alternation (Taraldsen 1979, 49). The obligatory structural subject position may be filled by an expletive ('det') or by fronting the complement of a PP (cf. English 'pseudo-passive'), even in the presence of a direct object, which could be fronted.

(i)   *Brevet* ble   klistret   frimerker   på.
           letter$_{DEF}$ was   pasted   stamps   on.

(ii)   *Det* ble klistret frimerker på brevet.

Note that in (ii), the subject expletive has moved to the clause-initial spec-position while the object remains in its post-verbal position. Alternatively, the direct object could be fronted to the subject position in both sentences.

The trigger of the EPP property of SVO structures is this very directionality mismatch. In SVO, the canonical directionality of heads is to the right; the directionality of merger in phrases is to the left. Hence, neither the verb nor a projection node of the verb can provide directional licensing for the VP-internal subject in (1a). Therefore, a functional head is employed to provide directional licensing (1b), which is indicated by arrows in (1). The projection of the functional head establishes the particular spec-position that is typical for SVO languages, namely the position for XP in (1b).

(1)　　a.　............ $[_{VP}$ XP$_{Subj.}$ $[V°_{\rightarrow}$ $[ZP]]$

　　　　b.　$[_{FP}$ XP$_j$ $[_{F'}$ F°$_{\rightarrow}$ $[_{VP}$ e$_j$ $[V°_{\rightarrow}$ ZP$]]]]$

In SOV (2a) and in VSO (2b), any argument of a verb remains within the directionality domain of the verbal head or a projection of it, whence the absence of the particular subject-related functional projection in the clause structures of these languages:

(2)　　a.　$[_{VP}$ XP$_{Subj}$ $_{\leftarrow}$ $[_{V'}$ ZP $_{\leftarrow}$ V°$]]$

　　　　b.　$[_{VP}$ V$_i$° $_{\rightarrow}$ $[$XP$_{Subj}$ $[$e$_i$ $_{\rightarrow}$ ZP$]]]$

The functional projection in (1b) provides a directionally licensing head for the preverbal, VP-internal subject and a trigger for moving the subject to the spec-position. This is an effect of the general licensing condition (Haider 2015, 84). The licenser and the licensee must c-command each other. In (1b), F° c-commands the VP-internal subject and the subject c-commands F° by virtue of being raised to the spec-position. The very same relation holds VP-internally and triggers the VP-shell structure[4] for complex, head-initial phrases (see Haider 2015, 85).

3.　Immediate evidence for a structural subject position and for its absence

The difference between (1b) and (2) accounts for a wide range of predictable syntactic differences with respect to subjects. On the one hand there are differences between the subject and the objects within the same SVO language, and on the other hand, there are differences between SVO subjects and subjects in VSO or SOV languages. Among the most perspicuous differences are the following ones (see Haider 2010, ch.1; 2015).

(3)　　a.　(no) island-effects for subjects
　　　　b.　(no) ban against in-situ wh-subjects
　　　　c.　(no) expletive element in an otherwise subjectless clause

In the past century, more than two decades of Generative research on conditions constraining extractions has produced clear results. In SVO, any position preceding the verbal head, that is, any position outside of the domain of the head-initial VP, is an opaque domain for extraction. In particular, the subject of a CP is an opaque domain. This is

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[4]$[_{VP}$ V$_i$°$_{\rightarrow}$ $[$DP $[$e$_i$ $_{\rightarrow}$ DP$]]]$ as in: $[$deny$_i$ $[$nobody $[$e$_i$ anything$]]]_{VP}$

clearly not true for SOV (4). In (4a), the extraction site is the subject clause of a transitive verb. (4b) illustrates the extraction out of an object clause preceding the subject. In SVO languages, none of this is grammatical.

(4)   a.   Wen$_i$ würde   [e$_i$ damit   konfrontieren zu dürfen]
              whom   would   [with-it   confront   to-be-allowed-to]
              jeden   Syntaktiker amüsieren?
              every   syntactician amuse

       b.   Was$_i$ hat [e$_i$ mit diesem Satz   zu beweisen] jemand   soeben versucht?
              what has [with this   clause to prove]   someone just   tried

The explanation for the ban against a wh-subject in situ in SVO proposed in Haider 2010, 117 is based on the very same structural difference. In VO, an in-situ wh-subject is in a functional spec position. In OV, the in-situ wh-subject is in its VP-internal argument position. A wh-pronoun in a functional spec-position gains operator status. It cannot be interpreted as a dependent wh-element anymore. This rules out patterns such as in (5a-c), originally discussed by Chomsky (1981, 236). They show that in-situ subjects are ungrammatical, independently of any Superiority violation.[5] In SOV languages, no matching restrictions are found. There is no such restriction against an in-situ wh-subject in German (5d-f):

(5)   a.   I know perfectly well *who* thinks (that) she/*who is in love with him.
       b.   I don't know *who* would be happy that she/*who won the prize.
       c.   I don't remember *who* believes that she/*who read the book.

       d.   Wir müssen herausfinden, *wer* sich   sicher ist, dass *wer* gewinnen werde.
              we must   find out   who REFL sure   is that who win   will

       e.   Man weiß   nicht   genau, *wer* hustete, als   *wer* geredet hat.
              one knows   not   exactly who coughed when who talked   has

       f.   Hier steht geschrieben, *wer* zuständig   ist, wenn sich   *was*   ereignet.
              here is   written   who in-charge   is   when REFL what happens

Let us turn now to the cardinal evidence for a structurally obligatory subject position, namely expletive subjects as plugs for otherwise empty positions. This area of syntax is notoriously contaminated by the equivocation of apparently similar but entirely different items, namely true *expletives* on the one hand and *void* subject arguments on the other hand. The latter are arguments of a verb; the former are not.

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[5]Of course, the very same restriction that rules out an in-situ wh-subject in (5) would rule out an in-situ wh-subject in a superiority context such as in (i). Nevertheless, and in oblivion of the facts illustrated by (5), clauses with in-situ wh-subjects are standardly adduced as evidence for superiority-based accounts.

(i)   *Why would *who* omit such facts?

4.   *Expletive* versus *void* subjects

The lexical entry of a verb may provide argument slots without linking them semantically. These are syntactically realized as semantically void arguments. In German, a void argument may surface as a third person neuter pronoun (6a) or as a reflexive (6b). (6c) illustrates a verb with both a void subject and a void object.

(6)   a.   weil   *es*   keinen Wein   gab
             since   *it*   no   wine   gave
             'since there was no wine'

       b.   weil   er   *sich*   wunderte
             since   he   *himself* wondered
             'since he wondered'

       c.   weil   *es sich* bei diesem Verb um   ein seltsames Verb handelt
             since *it iself* at   this   verb about a   strange   verb deals
             'since this verb is a strange verb'

It is essential to draw a clear distinction between a structural expletive and a void argument. In German, for instance, a structural expletive is found in the clause initial position in declarative clauses. This is an obligatory functional spec-position that must be filled. It cannot be left radically[6] empty. If this spec-position is not occupied by a fronted phrase, it is filled with an expletive (7a). This expletive is homophonous with the pronoun used for void arguments. However, unlike a void argument, the expletive *es* cannot appear anywhere else but in the clause-initial position. Clearly, this element would be the candidate for the role of a subject expletive. If German had a structurally obligatory subject position, (7d) would have to be grammatical.

(7)   a.   *Es* hat   jemand   angerufen.
             it has   somebody   called
             'there has called somebody'

       b.   *Es*   wurde   darüber   diskutiert.
             it   has been   about-this   discussed
             'there has been a discussion about this'

       c.   dass   (**es*) jemand   angerufen   hat.
             that   (*it*)   somebody   called   has

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[6]'*Radically empty*' means that it is *phonetically* as well as *syntactically* empty. The position is not *radically* empty if it contains a trace (i) or an empty operator (ii):

(i)   Wh-trace: Was$_i$ hat   er   behauptet [e$_i$ [stehe   hier   in   Spec-C]]?
                  what   has   he   claimed   stands   here   in   Spec-C

(ii)   Topic operator: Wo   ist hier das Subjekt? [0$_i$ [Ist e$_i$ stumm]] und [0$_i$ [e$_i$ steht   im   Vorfeld]]
                        where is here the subject? [[Is   silent]] and [[stands in-the pre-field]]

    d.   dass (*es) darüber   diskutiert wurde
        that (*it*)   about-this discussed was

In Dutch, the expletive for the clause-initial position in V2-declaratives is *er* ('there') while the void subject is *het* ('it'). The expletives in Dutch and German declaratives are expletives for the obligatory clause-initial spec position. Hence, if Dutch or German employed subject expletives, these would be the proper candidates for this function, too. Indeed, *er* has been claimed to be a subject expletive in Dutch:

(8)   a.   dat   *er*   ge-sms't   werd
         that   *there* text-messaged was

      b.   dat   *er*   iemand   de oproep   heeft   beantwoord
         that   there   someone   the call   has   answered

In (8a), there would be room for an expletive but not in (8b), because of the transitive subject that allegedly needs to be accommodated in the subject position. If, on the other hand, *er* is not an expletive subject in (8b), it need not be one in (8a) either. This is what Dutch syntacticians such as Hoekstra & Mulder (1990), Neeleman and Weerman (1999, 210-13) and Koeneman (2000, 192) argue for.

    If *er* is not a subject expletive, it is not obligatory in subjectless constructions, which is often the case. A Google search (April 28, 2017) for "*dat wordt gewerkt*" and "*dat er wordt gewerkt*", restricted to news sites, produced 1880 hits for the variant with 'er' and 469 for the variant without *er*.[7] Evidently, *er* is optional in subjectless sentences in Dutch. What could be mistaken as an expletive subject in (8a) is in fact a particle that can show up also in the presence of a subject (8b). If it were a subject expletive, it would be obligatorily present, just like an expletive subject in Danish, Norwegian, or Swedish:

(9)   a.   at   *der*   bliver handlet   nu   (Danish)[8]
         that   EXPL   is   acted   now

      b.   Ofte vart *det*   telefonert/gesticulert.   (Norwegian)
         often was EXPL telephoned/gesticulated (Åfarli 1992)

      c.   Sedan dansades *det*   hela   natten.   (Swedish)
         then   dance$_{Pass}$ EXPL whole night$_{Def}$ (Falk 1993, 106)

Could there be an empty version of *er*, that is, an 'empty expletive', or in technical diction an 'expletive *pro*'? This concept is not only a *contradictio in terminis*; it also runs

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[7]Here are two examples:

(i)   *dat wordt gewerkt* aan een permanent bezette maanbasis
          (https://www.scientias.nl/chinezen-maken-ruimteplannen-bekend/)

(ii)   *dat wordt gewerkt* aan een snelle oplossing
          (http://www.nieuwsblad.be/cnt/dmf20140423_01078554)

[8]http://www.tveast.dk/artikel/danske-patienter-det-er-godt-der-bliver-handlet

into immediate empirical problems. Anyone who admits null expletives wrongly admits intransitive passives in pro-drop SVO languages. This will be the topic of the following section.

Let us summarize the essential difference between expletives and void arguments. Void arguments are specified in the argument structure of a verb. A void argument is an argument with a morphological form but without semantic content. An expletive is a dummy element that is not related to a verb. In languages that – unlike Dutch (10a,b) – use the same morpheme for both functions (10c-f), this may lead to equivocation.

(10) a. *Er* wordt gewerkt.
        there is   worked

     b. Het heeft geregend.   (Dutch)
        it   has   rained

     c. *Es* wird gearbeitet.
        it is   worked

     d. *Es* hat geregnet.   (German)
        it has rained

     e. *Wird es gearbeitet?
        was it worked

     f. Hat es geregnet?
        has it rained

In German and in some Scandinavian languages, the form of the expletive (10c) is identical with the form of the void subject (10d). The void subject appears in clause-internal positions (10f) but in an SOV language such as German (10e), there is no clause-internal position available for an expletive.

5.   No standard passive of intransitive verbs in pro-drop SVO languages

In Romance null-subject languages, the standard passivization of an intransitive verb is ungrammatical. In other words, if the very same grammatical means used for passivizing a transitive verb are applied to an intransitive verb, the outcome is deviant (11).

(11) a. *[*expl*]   È   stato dormito bene in questo letto   (Italian)
              has been slept   well in this   bed

     b. *[*expl*]   È   stato tossito   per   il fumo
              has been coughed because-of the smoke

It is the case only in French, a Romance language without the null-subject property, that intransitive verbs may get passivized,[9] but an expletive subject, namely *il*, is obligatory.[10]

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[9]In Vèneto, the vernacular of the Italian province Veneto, intransitives can be passivized, but only in the presence of an obligatory expletive of the *there*-type. Gratefully acknowledged source: Cecilia Polletto (p.c.).

(i)   *Z'*è   stà   parlà   de   ti   Regional variant: *Gh'*è stà parlà de ti
      there   has-been   spoken about you

[10]The literature contains introspectively grounded claims that in subjunctive contexts the expletive subject may be missing. A frequently quoted example is (i). Its factual status is questionable, however.

(i)   Je veux que soit procédé au réexamen.   (Roberts 1993, 217)

(12) a. *Il* a   beaucoup été fumé   dans cette sale.   (Gaatone 1998, 124)
          it has much   been smoked in   this room

      b. *Il* a   eté   dormi dans ce lit.   (Rivière (1981, 42)
          it has been slept   in   this bed

      c. qu'*il* a   été   procédé   à cette arrestation.   *Le Figaro,* Sept. 7, 2016
          that-it has been proceeded to this detention

      d. *Il* a   été   opté   pour cette   solution.[11]
          it has   been   opted for   this   solution

The obvious question to ask is this: why wouldn't (12a-d) have direct grammatical coun-
terparts in Italian or in any other Romance pro-drop language with a null expletive in-
stead of *il*, given that a null expletive would replace the lexical expletive of French? The
straightforward answer is this: there is no such thing as a null expletive. So, (11a,b) and
all other cases of passivized intransitive verbs are ungrammatical because a structural
subject position in an SVO language must not be null, but a pronominal expletive would
have to be null in a pro-drop language.

An expletive subject cannot be empty for at least two reasons, a grammatical and a
theoretical one. First, an expletive is not an argument, hence the null-subject identifica-
tion mechanism of pro-drop languages would not apply. It applies only to arguments of a
lexical head. Consequently, an empty expletive would be irrecoverable. Second, an
empty position "filled" by an empty expletive could not be distinguished from an empty
position without an empty expletive.

Note that here the distinction between a subject expletive and a void subject argument
becomes crucial. An expletive cannot be null but a void subject can. In pro-drop lan-
guages, verbs with void subjects such as weather verbs are typically null-subject verbs.
Void subjects are typical of intransitive middle constructions (13a,b), too. Consequently,
pro-drop languages will be able to employ null subjects for this construction (13c,d).

(13) a. In diesem Bett   schläft *es*   sich   gut.
          in this   bed   sleeps *it*   itself well

      b. Wenn   man   nicht   raucht, hustet   *es*   sich   leichter.
          if   one   not   smokes coughs   *it*   itself easier

      c. [*pro*] Si e   dormito   bene   in   questo letto.
              self is   slept   well   in   this   bed

      d. [*pro*] Si e   tossito   per   il   fumo.
              self is   coughed   due-to the   smoke

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A corpus search (web, restricted to French, on April 23, 2017) of "*veut que soit procédé*" produced zero
hits. The version with the expletive subject *il*, however, is frequent. The complete imbalance contradicts the
alleged optionality of an expletive *il* in this context.
    [11]From a list of examples with passivized intransitive verbs: http://gabrielwyler.com/page479.html

In Icelandic, void subjects (e.g. weather-verb subjects) are null subjects (Eythórsson & Sigurðardóttir 2016). The null-subject option is restricted to *void* subject arguments. Neither referential pronouns nor expletives are dropped (Maling & Zaenen 1978, 491). An expletive may be substituted by a fronted adverbial, however.

(14) Hún   sagði að   *það*   hefði verið dansað   í gær.
      he   said   that EXPL   has   been   danced   yesterday

Weather verbs are not the only void argument verbs of course. There is a large class of verbs that allow for variation between a version with a specified subject argument and a version with a void argument (15a,b). This class of verbs is virtually identical for Icelandic and German. In Norwegian, the subject of these verbs is an overt void subject (15c). The Icelandic null-subject version in (15d) would puzzle those who notice that there is an accusative object in the apparent absence of a subject. What these people would fail to appreciate is that the verb in (15d) is the version with a void subject argument that is pro-dropped in Icelandic. (15d) is the exact counterpart of the German (15e), modulo pro-drop of the void subject.

(15) a. Hier brennt/raucht/ knistert/ stinkt/ hallt/   ... / *es* sehr.
          here burns/ smokes/crackles/stinks/echoes/ ... / it   very-much

      b. Dann   hat   *es*   ihn   umgeworfen/ vom   Dach geweht/
          then   has   it   him   overturned/ off-the roof blown/
          aus   der   Bahn geworfen/...
          out   of-the track thrown/…

      c. Frå   skogen   ropar *det.*   (Norwegian)
          from   wood-the   shouts *it*

      d. Strompinn_{Acc}   blés   af   húsinu.   (Icelandic)
          the chimney   blew   of   house-the

      e. Den   Schornstein_{Acc} wehte *es*   vom   Dach.
          the   chimney   blew   *it*   off-the roof

The joint evidence from Romance pro-drop languages and Icelandic as languages that drop void arguments clearly points to the conclusion that the absence of an expletive subject in subjectless SOV clauses cannot be reconciled with the EPP by 'throwing in' a null expletive. Neither in Romance nor in OV-Germanic languages would this correctly cover the empirical situation.

6.   Exceptional English

One of the many exceptional traits of English is the ungrammaticality of the passive of intransitive verbs. (16a) is deviant, with or without *there*. In Scandinavian languages, as for instance in Danish, an expletive would fill the structural subject position (16b).

(16)   a. *that there was worked

b.	at	*der*	bliver	handlet	nu	(Danish)
	that	EXPL	is	acted	now	

It is a longstanding question as to what prevents *there* from functioning as an expletive in passive constructions. Vikner (1995, 209) suspects nominative-case assignment to be the crucial factor and assumes that in V2 languages, but not in English, "*nominative is assigned from C° under government*" while in English "*nominative is assigned from I° via spec-head*." Together with the assumption that expletives have to be governed, this would rule out (16a). But there is a simpler account. English *there*-constructions (17a) as well as locative inversion constructions (17b) show agreement effects. Since *there*, unlike French *il*, does not provide an agreement value of its own, it is well-formed only if it is associated with an item from which it imports agreement features (17a). This is true also for locative inversion (17b), with a PP in the subject position.[12] (16a) is deviant because *'there'* does not provide any agreement values.

(17) a. There *has* arrived a letter - There *have* arrived two letters
      b. On this spot *has* stood a great man - On this spot *have* stood several great men

Vikner (1995, 210) does not fully trust his account because of the ungrammaticality of ECM infinitival constructions such as (18a) for which nominative assignment (or agreement) would not come into play. However, this construction is deviant for an independent reason. Subjectless infinitival clauses (18b) are ungrammatical in SOV languages as well (Haider 2010, 304). This indicates that the source of the ungrammaticality of (18a,b) is independent of the presence or absence of a special subject position and the availability of a suitable filler.

(18) a. *I expect there to have been danced.

b.	*ohne	am	Sonntag	gearbeitet	zu	werden.
	without	on	Sunday	worked	to	be

c.	ohne	dass	am	Sonntag	gearbeitet	wird.
	without	that	on	Sunday	worked	was

d.	ohne	dass	gearbeitet	zu	werden	braucht.
	without	that	worked	to	be	needs

In German, clausal infinitival constructions without a (silent) subject argument are ungrammatical (18b) and contrast with subjectless finite clauses (18c). If the infinitival construction is not clausal but rather a mono-sentential verb cluster construction (18d), it

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[12]The absence of *do*-support indicates that the PP is in the subject position indeed:

(i)   Out of which carriage jumped a horse?

(ii)   Out of which carriage *did* there jump a horse?

may remain subjectless. In sum, an agreement-based account of the deviance of *there* as an expletive subject is sufficient.

7.   Summary

Semantically void subject arguments must not be confused with subject expletives. Expletive subjects are non-arguments. In pro-drop languages, void subject arguments are null subjects. Null expletives are a theoretical fiction. They do not exist. Void arguments are found in virtually every language, be it a null-subject language or not.

For principled reasons, SVO languages employ subject expletives, and SOV and VSO languages don't. In the SVO clause structure, there is a VP-external subject position that needs to be filled. If an SVO language lacks a subject expletive – either because it is a null-subject language or because it lacks a suitable candidate – it is unable to passivize intransitive verbs in the standard passive construction.

The EPP describes an SVO phenomenon, namely the defining characteristics of the SVO clause structure, with its obligatory VP-external structural subject position, which is a 'reaction' of the grammar on a 'defect' of the VP-internal position of the subject in SVO. In SOV and VSO, the base position of any argument of a verb is *within* the directionality domain of the head, In SVO, the VP-internal subject argument precedes, but the other arguments follow the verbal head they depend on. A functional head selecting the VP turns the VP into an extended projection in which all argument positions are in the canonical directionality domain of a head, either a lexical or a functional one. The spec of this functional head is the VP-external subject position. Expletives are indicators of this position and the requirement that it be lexically represented.

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