The voice of French existential *on* constructions

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Abstract

The external arguments of short passives and French existential *on* constructions share strikingly similar properties: both display discourse and scopal inertness, both fail to provide an antecedent for a PRO subject of a passive infinitival, and neither is compatible with an unaccusative verb. Such similarities have yet to be fully explained. Using Merchant's (2013) observation that ellipsis is subject to identity between phrase markers, we argue that existential *on* sentences contain a non-active Voice head that existentially binds an external argument that remains syntactically unprojected, just as Bruening (2013) argues is the case for short passives. We further argue that *on* is the default agreement spellout that obtains when tensed T fails to find a goal bearing the appropriate valued φ-features, assuming with Preminger (2009, 2014) that when Agree fails, the unvalued features on the probe retain their preexisting or default values. Finally, we argue that EPP in existential *on* constructions is satisfied on the assumption that it reduces to An's (2007) Intonational Phrase Edge Generalization (IPEG) and we show that IPEG, combined with our theory of existential *on*, correctly predicts the existence of a silent counterpart to existential *on* in ECM contexts.

Keywords: default agreement, French, implicit arguments, Intonational Phrase Edge Generalization, non-active voice.

1. Introduction

This article takes as a point of departure Bruening & Tran's (2015) discussion of what it means to be a passive. As they point out, object promotion is not an essential feature of the passive. It is merely a side effect that may or may not occur. For example, the German and French impersonal passives in (1a-b) do not involve object promotion and neither do the English expletive passives in (1c-d).

(1)   a. German
        Es   wird   gearbeitet.
        it   becomes   worked
        '(People) are working.'
        b. French
        Il   a   été   parlé   de   toi.
        it   has   been   talked of   you
        'Someone talked about you.'
        c. There were several studies conducted on teenage smoking.
        d. Near that site, there was believed to have been a blockhouse.

Further, there are cases involving object promotion, such as the *tough*-movement construction in (2b), that have never been argued to instantiate passivization.

(2)   a. It is difficult to find quality soccer players.
        b. Quality soccer players are difficult to find.

On the other hand, an essential property of passives is that the external argument of the predicate is either 'missing' or demoted to an oblique (cf. Perlmutter & Postal 1983). An immediate consequence of this essential property is that verbs that do not take an external argument, such as unaccusatives, cannot, unlike unergatives, partake in any kind of passive. This is illustrated in (3a) with Dutch impersonal passives and in (3b) with English passives.

(3)   a. Dutch
        Er   werd   gelopen/*gevallen.
        it   became   run/fallen
        '(Someone/people) ran/fell.'
        b. English, Perlmutter & Postal (1984:101)
        The bridge was skied under by the contestants/*existed under by the trolls.

With this in mind, let us now consider those French *on* constructions in which *on* signals existential value for the understood Agent, as it does in (4). On this interpretation, *on* has been referred to in the literature as arbitrary *on* by Egerland (2003), ultra-indefinite *on* by Koenig (1999) and Collins (2017), and a-definite *on* by Koenig & Mauner (2000).

(4)   On   a   toussé !
        ON   has   coughed
        'Someone coughed/There was some coughing!'

Existential *on* constructions share with short passives a number of characteristics that are usually thought to be unique to implicit arguments. First, as illustrated in (5), existential *on* constructions, just like the passive constructions in (3), are incompatible with unaccusative verbs, an observation that goes back to Cinque (1988).

(5)   On   est   tombé dans   les   escaliers.
        ON   is   fallen in   the   stairs
        Can only mean: 'We fell down the stairs.'
        Cannot mean: 'Someone fell down the stairs.'

In other words, both existential *on* and the implicit argument of a passive must correspond to an external argument. This property is also revealed by the fact that just like passive structures cannot be further passivized, existential *on* constructions are incompatible with passivization, as (6) shows.

(6)   On   a   été   arrêté(s).
        ON   has   been   arrested
        Can only mean: 'We were arrested.'
        Cannot mean: 'Someone was arrested/There were some arrests.'

Second, unlike true indefinites like *quelqu'un* 'someone' in (7a), the implicit argument of a short passive cannot bind pronouns (cf. (7b)) and, as discussed in Koenig (1999:243), neither can existential *on* (cf. (7c)).[1]

(7)   a.   Quelqu'un$_i$ a   oublié   son$_i$ parapluie.
                someone   has   forgotten   his   umbrella
                'Someone forgot their umbrella.'
        b.   *Un   os   a   été   IMP$_i$ donné à   son$_i$ chien.[2]
                a   bone   has   been   given to   his   dog
                Intended: 'Someone gave their dog a bone.' (in passive form
        c.   *On$_i$ a   oublié   son$_i$ parapluie.
                ON   has   forgotten   his   umbrella
                Intended: 'Someone forgot their umbrella.'

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[1]   The significance of this fact can be fully appreciated by observing that unlike existential *on*, quasi-universal *on* in generic sentences is able to bind pronouns.
(i)   On$_i$ doit   communiquer ces   informations   à   son$_i$ banquier.
        ON   must   communicate these   informations   to   his   banker
        'One must share this information with one's bank.'
[2]   IMP in (7b) and subsequent examples stands for 'implicit argument'.

Third, while true indefinites can generate discourse referents (cf. (8a)), the implicit argument of a short passive cannot do so (cf. (8b)) and, as Koenig (1999:241) observes, neither can existential *on* (cf. (8c)).

(8)   a.   Quelqu'un$_i$ a   oublié   un   parapluie.
             someone   has   forgotten   an   umbrella
             Il$_i$ reviendra   probablement le=chercher.
             he   will-come-back   probably   it=fetch
             'Someone forgot an umbrella. They'll probably come back to
             get it.'
       b.   Un   parapluie   a   été   IMP$_i$ oublié.
             an   umbrella   has   been   forgotten
             *Il$_i$ reviendra   probablement   le=chercher.
             he will-come-back probably   it=fetch
             Intended: 'An umbrella was forgotten. Whoever forgot it will probably
             come back to get it.'
       c.   On$_i$ a   oublié   un   parapluie.
             ON   has   forgotten   an   umbrella
             *Il$_i$ reviendra   probablement le=chercher.
               he   will-come-back   probably   it=fetch
             Intended: 'Someone forgot an umbrella. Whoever forgot it will
             probably come back to get it.'

Fourth, unlike true indefinites, existential *on* is scopally inert (Creissels 2011) and so is the implicit argument of a short passive (Lasersohn 1993:148); that is, both must take the narrowest scope with respect to any scope-bearing element present in the sentence in which they appear. For example, unlike the true indefinite *quelqu'un* in (9a), existential *on* in (9b) and the implicit argument of the short passive in (9c) must scope under the adverbial *deux fois cet été* 'twice this summer', which quantifies over the number of events denoted by the sentence.

(9)   Adapted from Creissels (2011:8)
       a.   Quelqu'un   a   volé   mon   vélo   deux   fois   cet
             someone   has   stolen my   bike   two   times   this
             été.   (ambiguous)
             summer
             ∃ > 2 times i.e., There were two events of bike stealing initiated by the
             same indeterminate individual.
             2 times > ∃ i.e., There were two instances of some indeterminate
             individual stealing my bike.
       b.   On   a   volé   mon   vélo   deux   fois   cet   été.
             ON   has   stolen my   bike   two   times   this   summer
             (unambiguous)
             2 times > ∃ *only* i.e., There were two instances of some indeterminate
             individual stealing my bike.

c.	Mon	vélo	a	été	volé	deux	fois	cet	été.
	my	bike	has	been	stolen	two	times	this	summer

(unambiguous)

2 times > ∃ *only* i.e., There were two instances of some indeterminate individual stealing my bike.

Consider next the fact, illustrated in (10), that both the implicit argument of a short passive and existential *on* can serve as antecedents to a PRO subject of a rationale clause.

(10)	a.	Un	coup	de	feu	a	été	IMP$_i$	tiré
		a	stroke	of	fire	has	been		fired

	pour	PRO$_i$	provoquer	la	police.
	to	PRO	provoke	the	police

'A shot was fired to provoke the police.'

	b.	On$_i$	a	tiré	un	coup	de	feu	pour
		ON	has	fired	a	stroke	of	fire	to

	PRO$_i$	provoquer	la	police.
	PRO	provoke	the	police

'Someone fired a shot to provoke the police.'

As shown in Williams & Green (2017), there is indisputable evidence that the coreference relation in (10a) cannot be one of argument control. For example, the same coreference relation can obtain across discourse, as shown in (11a). Further, as (11b) illustrates, the PRO of a rationale clause can denote an individual not named by any part of the target clause as long as it is viewed as responsible for the target fact. That is, in (11b), PRO may be understood to refer to the organizers of the fundraiser.

(11)	a.	Un	coup	de	feu	a	été	IMP$_i$	tiré.	C'était
		a	stroke	of	fire	has	been		fired	it-was

	probablement	pour	PRO$_i$	provoquer	la	police.
	probably	to	PRO	provoke	the	police

'A shot was fired. It was probably to provoke the police.'

	b.	Il	y	a	eu	un	gala	de	bienfaisance
		it	there	has	been	a	gala	of	charity

	pour	PRO	venir	en	aide	à	6.000	familles
	to	PRO	come	in	help	to	6,000	families

	rurales	pauvres.
	rural	poor

'There was a fundraiser to assist 6,000 poor rural families.'

And yet, as noted in Jaeggli (1986) and Landau (2000), the implicit argument of a short passive cannot serve as the antecedent of the PRO of a rationale clause if the latter is itself a passive. This constraint is illustrated in (12). The ungrammaticality of examples like (12b) has been argued by Williams (1985:310), Lasnik (1988:9-16) and

Reed (2014:318-321) to follow from event control.[3] Simply put, an event can impress the board of directors (12a) but events cannot be congratulated (12b).

(12)   The report was IMP$_i$ carefully prepared…
       a.   PRO$_i$ to impress the board of directors.
       b.   *PRO$_i$ to be congratulated by the board of directors.

What is of interest for our purposes, however, is that existential *on* constructions behave exactly like short passives with respect to the constraint responsible for ruling out (12b). This is illustrated in (13).

(13)   On$_i$ a   falsifié   ces   documents…
      ON   has   falsified   these   documents
      a.   pour   PRO$_i$ obtenir accès à   nos   fichiers.
           to   PRO   gain   access to   our   files
      b.   *pour   PRO$_i$ être   autorisé à   consulter   nos
           to   PRO   be   allowed   to   consult   our
           fichiers.
           files

There is, however, in the midst of these similarities, one notable difference between existential *on* and the implicit argument found in passives, which is that only the former must be understood as being [+ human]. For example, (14) can only be understood to mean that someone, not something, killed Patrick whereas the short passive in (15) does not so restrict the interpretation of the implicit external argument, which can be understood as being inanimate (e.g., a stray bullet).

(14)   On   a   tué   Patrick.
      ON   has   killed   Patrick
      'Someone/*something killed Patrick.'

(15)   Patrick a   été   tué.
      Patrick has   been   killed
      'Patrick was killed (by someone/something).'

This difference should not, however, be taken to indicate that the external argument in existential *on* constructions is fundamentally different from that found in passives for at least two reasons. First, as Gaatone (1994:43) points out, the [+ human] restriction on the understood external argument is also present in those French impersonal passives that do not alternate with passives involving promotion. Gaatone illustrates this constraint with the contrast in (16).

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[3]   Event control refers to cases in which a PRO inside a non-finite propositional adjunct refers to the event denoted by the main clause.

(16) a. Il   a   déjà   été   répondu   à   ces   questions
          it   has   already been   answered to   these   questions
          (par   le   ministre).
          (by   the   minister)
          'These questions have already been answered (by the minister).'
      b. *Il   a   été   répondu   à   notre   attente
          it   has   been   met   to   our   expectation
          (par   les   résultats   obtenus).
          (by   the   results   obtained)
          'Our expectations were met (by the obtained results).'

Second, passives involving promotion in Hebrew display the same [+ human] requirement on the interpretation of their implicit argument, as noted by Meltzer-Asscher (2012:284), who says of examples like (17) that speakers "agree that it is only possible that someone sank the boat, not something."

(17)   Hebrew, Meltzer-Asscher (2012:284)
       ha-sira   hutbe'a
       the-boat   was-sunk
       'The boat was sunk.'

2. A New Hypothesis

As the preceding section has shown, the implicit external argument of a short passive and the external argument of an existential *on* construction share a substantial number of properties, summed up in (18), and this must be explained.

(18)   a. Incompatibility with unaccusatives and passives;
        b. Inability to antecede pronouns;
        c. Scopal inertness (lowest scope only);
        d. Inability to control the PRO of a passive rationale clause.

One approach to existential *on* that seeks to account for its discourse inertness has been to assume that the sentences in which it appears are in the active voice but that existential *on* is an 'ultra-indefinite' (Koenig 1999) or 'a-definite' (Koenig & Mauner 2000) clitic pronoun. That is, in the two articles just mentioned, it is argued that existential *on* is a pronoun that is neither definite, nor indefinite; it is ultra-indefinite. To explain, while definites function as discourse markers anchored to a previously introduced entity and indefinites introduce new discourse markers, ultra-indefinites are taken to satisfy a predicate's argument position without generating a discourse marker into the Discourse Representation Structure of a sentence, hence they are discursively inert. While this proposal accounts for the discourse inertness of existential *on*, it is not immediately obvious whether it can predict its scope inertness property (18b) relative to indefinites like *quelqu'un*.[4]

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[4]   The same problem arises in conjunction with Collins's (2017) reinterpretation of ultra-indefinites as syntactically projected pronouns with no phi-feature. On this account, the

In this article, we aim to take a different approach to this issue. Specifically, we will explore the possibility that existential *on* constructions are not what they appear to be; that is, they are not active sentences with an ultra-indefinite subject pronoun. We will suggest instead that the properties of existential *on* and those of the implicit argument of the passive are in some way linked to the kind of Voice head present in the sentences in which they occur. More specifically, we will argue that existential *on* is dependent on the presence of a non-active Voice head. An immediate advantage of this approach is that, unlike theories that rely on particular lexical semantic properties inherent to the ultra-indefinite nature of existential *on*, it can account for the fact that existential *on* is incompatible with unaccusatives and passives (18a). The ultra-indefinite pronoun analysis has to stipulate that ultra-indefinites are restricted to underlying thematic subjects, a fact that remains mysterious given that all other thematic pronouns, including PRO and pro can be derived subjects. On the assumption that existential *on* constructions are in a non-active voice, on the other hand, they are predicted, along with passives, to be incompatible with unaccusatives because they crucially involve demotion of an external argument. Further, the fact that existential *on* is incompatible with passivization (6) can be attributed to the impossibility for a sentence to express two distinct voices (i.e., the non-active voice signaled by existential *on* and the passive voice encoded by the *be* auxiliary and the passive participle). In other words, the ungrammaticality of (6) is on a par with that of (19c), which combines the middle voice in (19a) with the passive voice in (19b).

(19) a.   Ce   vin   se   boit   frais.   (MIDDLE)
            this   wine   SE   drinks chilled
      b.   Ce   vin   est   bu   frais.   (PASSIVE)
            this   wine   is   drunk   chilled
      c.   *Ce   vin   s'est   bu   frais.   (MIDDLE + PASSIVE)
            this   wine   SE-is   drunk   chilled

But is there independent evidence that suggests that existential *on* sentences are not active sentences? Merchant (2013) argues, based on data concerning the availability of voice mismatches in ellipsis, that ellipsis requires identity between syntactic phrase markers. The data in question show that while voice mismatches are licit in low ellipsis such as VP-ellipsis in (20), they are prohibited with high ellipses such as sluicing, as shown in (21), and stripping, as shown in (22).

(20) a.   This should have been brought up long ago but apparently,
            nobody did Ø.
            Ø = <bring this up long ago>

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discourse inertness of existential *on* is accounted for by the Pronominal Agreement Condition of Collins & Postal (2012:92) given in (i).

    (i)   If P is a non-expletive pronominal, then P agrees with some source in those phi-features for which P is not inherently valued.

Thus, (i) predicts that phi-feature endowed pronouns cannot be anteceded by the implicit argument of a short passive or by existential *on* because by assumption, these are ultra-indefinites with no phi-features. But again, it remains unclear how the scope inertness of ultra-indefinites might follow.

      b.   Nobody here can cook venison the way it should be Ø.
           Ø = <cooked>

(21)   a.   *They were robbed, but they don't know who Ø.
           Ø = <robbed them>
      b.   *Someone robbed them, but they don't know who by Ø.
           Ø = <they were robbed>

(22)   a.   Someone bought roses for the wedding, but not (*by) Joe.
      b.   Roses were bought for the wedding, but not *(by) Joe.

This, Merchant argues, follows from the fact that ellipsis is subject to identity between phrase markers. That is, in VP-ellipsis, since VP is structurally lower than VoiceP, the Voice head is not included in the target of ellipsis and is therefore not subject to elliptical identity. In bigger ellipses that target larger nodes that contain VoiceP, such as sluicing and stripping, Voice is part of the elided structure and is therefore subject to elliptical identity. Thus, the geometry of licit and illicit voice mismatches is as in (23).

(23)   Merchant (2013:89)

      XP   ⇒ Ø: voice mismatch *disallowed*
           VoiceP
      Voice   YP   ⇒ Ø: voice mismatch *allowed*
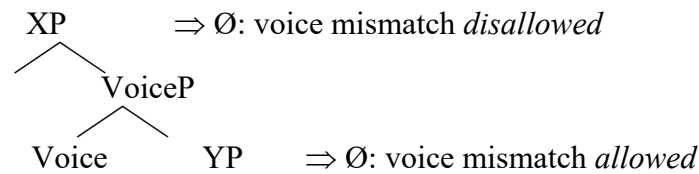
Merchant's theory of ellipsis gives us a way to test whether existential *on* sentences are in a voice different from the active voice. This can be done by using an existential *on* sentence as an antecedent for a high ellipsis while forcing the elided material to be in the active voice. If this results in an illicit voice mismatch, we will have evidence that existential *on* sentences are not active sentences. The ungrammatical status of the examples involving sluicing in (24b) and stripping in (25b) suggests that this is indeed the case. These are to be contrasted with their grammatical active counterparts with an existentially quantified subject in (24a) and (25a).

(24)   a.

Je	sais	pas	qui	Ø,	mais	quelqu'un	a
I	know	not	who		but	someone	has

oublié	d'=éteindre	la	lumière hier	soir.
forgotten	of=turn-out	the	light yesterday	evening

           Ø = <a oublié d'éteindre la lumière hier soir>

      b.

*?Je	sais	pas	qui	Ø,	mais	on	a	oublié
I	know	not	who		but	ON	has	forgotten

d'=éteindre	la	lumière	hier	soir.
of=turn-out	the	light	yesterday	evening

           Ø = <a oublié d'éteindre la lumière hier soir>
           'I don't know who, but someone forgot to turn out the light last night.'

(25) a. Quelqu'un   a   crié   au   secours,   mais   pas
          someone   has   yelled to-the rescue   but   not
          Claire.
          Claire
      b. *On   a   crié   au   secours,   mais   pas   Claire.
          ON   has   yelled to-the rescue   but   not   Claire
          'Someone shouted for help, but not Claire.'

Importantly, proponents of the ultra-indefinite theory cannot argue that ultra-indefinite pronouns do not support sluicing or stripping for semantic reasons since the implicit argument of a short passive allows both sluicing and stripping provided that the voice of the elided material is also in the passive voice (cf. (26)), nor can they argue that some factor other than elliptical voice matching is at work in (24b), given that removing the ellipsis and using *do-it* VP-anaphora instead restores grammaticality, as shown in (27).

(26) a. Ce   document   a   été   modifié,   mais
          this   document   has   been   modified   but
          je   sais   pas   par   qui.
          I   know   not   by   who
          'This document was modified, but I don't know who by.'
      b. Ce   document   a   bien   été   modifié,   mais
          this   document   has   well   been   modified   but
          pas   par   moi !
          not   by   me
          'This document was indeed modified, but not by me!'

(27) Je   sais   pas   qui   a   fait   ça,   mais   on   a
      I   know   not   who   has   done   that   but   ON   has
      renversé   les   poubelles   devant   ma   porte.
      overturned   the   trash-cans   in-front-of   my   door
      'I don't know who did this, but someone overturned the trash cans in front of
      my door.'

Thus, we now have evidence that existential *on* constructions are not in the active voice. In the next section, we offer a theoretical analysis of the relation between non-active voice and existential *on* constructions.

3. Analysis

In this section, we will argue that existential *on* is not a pronoun but rather, the morphological reflex of T failing to Agree (in the sense of Preminger 2009:2014) due to the presence of a non-active Voice head that selects an unsaturated *v* projection.[5]

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[5]   Unlike passives in French, existential *on* constructions cannot express the external argument as a *by*-phrase. This, however, has no impact on our claim that they instantiate a non-active voice, due to the fact that the availability of a *by*-phrase cannot be considered to be

That existential *on* is not a pronoun is not as strange as it may seem. There are, in French, other pronoun-like elements that, on closer inspection, turn out to not be pronouns at all. For example, the question marker *tu* in Québec French, glossed as Q in (28), is homophonous with the pronoun *tu* 'you' and the middle voice marker *se* in (29a) shares the same phonological form as the reflexive pronoun *se* 'herself' in (29b).

(28)   a.   %Tu   as=tu grossi ?
                 you   has=Q swelled
                 'Did you put on weight?'
        b.   %Combien   que   ça   coûte-tu ?
                 how-much   that   it   costs-Q
                 'How much does it cost?'

(29)   a.   La   Seine se=voit   bien   d'=ici.
                 the   Seine SE=sees   well   from=here
                 'The Seine is easily seen from here.'
        b.   Véro   s'=est coupée.
                 Véro   SE=is   cut
                 'Véro cut herself.'

Regarding the middle voice marker *se* in (29a), it is important to point out that it cannot be a pronoun even though it behaves like a typical French clitic in that it attaches to the highest verbal element in the clause in which it appears. The reason why it cannot be a pronoun is that it does not correspond to the thematic object and, because the thematic object has undergone promotion, it cannot possibly be seen as a derived subject either. Thus, middle *se* is a voice affix with clitic-like properties. Our claim is therefore that existential *on* is an affix in the same sense. This, of course, immediately raises the question of how the EPP is satisfied in an existential *on* construction, a question to which we will return shortly.

Before we do so, however, we would like to introduce an additional set of data that involve what appears to be the silent equivalent of existential *on* in ECM contexts. ECM contexts are, in French, restricted to the infinitival complements to perception verbs and *laisser* 'let'.[6] The sentence in (30) illustrates the phenomenon.

(30)   J'ai   entendu   Géraldine   tousser.
         I-have heard   Géraldine   cough
         'I heard Géraldine cough.'

Interestingly, ECM infinitivals can appear without a lexical subject and, in such cases, the external argument of the infinitive must be understood as existentially quantified, as the idiomatic translations in (31a-b) make clear.

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an essential characteristic of non-active voices in general. For example, in many languages, such as Latvian and Classical Arabic, passives do not allow *by*-phrases (see Comrie 1977; Jaeggli 1986:602; Siewierska 1984). Furthermore, the middle voice also disallows *by*-phrases (see Bruening 2013 and references cited there).

6   As well as *faire* 'make' in some dialects of Canadian French (cf. Reed 1992).

(31)   a.   J'=ai   entendu   [ø   tousser].
             I=have heard   cough
             'I heard someone cough.'
       b.   La   seule   fois   que   j'=ai   vu   [ø   pendre
             the   only   time   that I=have seen   hang
             un   homme],   c'=était   en   Irak.
             a   man   it=was   in   Iraq
             'The only time I saw someone hang a man/a man being hanged was
             in Iraq.'

The question then arises as to what, if anything, occupies the subject position of the infinitives in (31). It cannot be pro because French is not a null subject language. It cannot be PRO either because under any theory of control, this would result in coreference between PRO and the matrix subject (i.e., (31a) would mean *I heard myself coughing*, which is not a possible interpretation).[7] And yet such infinitives display all of those restrictions associated with *on* in tensed clauses listed in (18). That is, the type of construction illustrated in (31) is impossible if the infinitive verb is an unaccusative (32a) or a passive (32b), and, as (32c) illustrates, the embedded external argument must be [+ human]. (I.e., The understood agent of destruction in (32c) could not be a fire, for example.)

(32)   a.   *J'=ai entendu   [ø   tomber dans les   escaliers].
             I=have heard   fall   in   the   stairs
             Intended: 'I heard someone fall down the stairs.'
       b.   *J'=ai vu   [ø   être   arrêté   hier].
             I=have seen   be   arrested   yesterday
             Intended: 'I saw someone get arrested yesterday.'
       c.   Ils   ont   regardé   [ø   détruire   tout   ce
             they   have   watched   destroy   all   that
             qu'=ils   possédaient] sans   réagir.
             that=they   owned   without   react
             'They watched everything they owned being destroyed without
             reacting.'

Further, the understood embedded subject cannot antecede a pronoun, as shown in (33a), and it displays scope inertness, as (33b) illustrates.

(33)   a.   *J'=ai vu   [ø   vandaliser   sa   propre voiture].
             I=have seen   vandalize   his   own   car
             Intended: 'I saw someone vandalize their own car,'

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b. J'=ai   vu   [ø   vandaliser   cette   statue   deux   fois
    I=have   seen   vandalize   this   statue   two   times
    cet   été].
    this   summer
    'I saw this statue being vandalized twice this summer.'
    2 times > ∃ <u>only</u> i.e., I saw two instances of some indeterminate
    individual vandalizing this statue.

Thus, it seems reasonable to characterize the infinitives in (31) and (33b) as instantiating the 'silent version' of the tensed existential *on* construction. The next step is, of course, to devise an account that explains why existential *on* is either silent or altogether absent in infinitival clauses. If we analyze *on* as a subject pronoun in tensed clauses, then we must conclude that it must surface as a silent pronominal in infinitivals. However, as we previously pointed out, this silent pronoun can neither be PRO nor pro, which leads us to an impasse. Could *on* then be the lexicalization of a non-active Voice head endowed with clitic-like properties that require that it appear on whatever element lexicalizes T in tensed clauses? While not implausible, this hypothesis would lead us to stipulate that this type of Voice head must be overt in tensed clauses and covert in infinitivals, which is unexpected given that in passives and middles, voice morphology is realized in the same way in tensed and untensed clauses.

There is, however, another way of looking at these facts. An obvious difference between tensed T and untensed T is that only the former is endowed with unvalued φ-features and acts as a probe with respect to Agree. Let us assume, drawing in part from the theory of passives advocated by Bruening (2013), that existential *on* constructions contain a non-active Voice head that selects a projection of agentive *v* that has not yet projected its external argument and that therefore the complement to Voice is an unsaturated *v* projection. Let us further assume that this non-active Voice head has the property of requiring all of the arguments in its complement to be saturated and that it saturates the unprojected external argument of *v* by existentially binding it. Assuming finally that unprojected arguments have no valued φ-features, when tensed T is introduced, it will act as a probe with respect to φ-agree, given that it has unvalued φ-features, but will find no target/goal since unprojected arguments are not eligible goals for the purposes of φ-agreement. Under Chomsky's (2001) conception of Agree, this should lead to a crash. This is because, in Chomsky's proposal, all and only uninterpretable features are unvalued and in accordance with Full Interpretation, unvalued features, which the semantic component cannot interpret, must be eliminated in the narrow syntax. This is done though their deletion, a prerequisite for which is valuation via Agree. This view of Agree is, however, challenged by Preminger (2009, 2014). On the basis of empirical data from Hebrew (Preminger 2009) as well as data from Basque, Kichean and Zulu (Preminger 2014), he argues that the correct characterization of the relation between φ-agreement and (un)grammaticality is as in (34).

(34) '*You can fail, but you must try*' (Preminger 2009:32)
      Applying φ-agreement to a given structure is obligatory, but if the structure happens to be such that φ-agreement cannot culminate successfully, this is an acceptable outcome.

Preminger further argues that when φ-agreement fails, the unvalued features on the probe remain unvalued, retaining their preexisting or default values.[8] Thus, default agreement is the morphology that surfaces when a probe fails to find a goal bearing the appropriate valued features (Preminger 2014:137). Adopting Preminger's assumptions, we would like to suggest that so-called existential *on* is, in fact, the morphological realization of tensed T failing to φ-agree with a goal, resulting in a default 3rd person singular affix on T. This immediately explains why ECM infinitivals do not feature *on*, namely because untensed T is inert with respect to φ-agreement. Under our proposal then, the derivation for a (tensed) existential *on* construction is therefore assumed to be as in (35).

(35)   On   a   vandalisé   le Louvre.
        ON   has   vandalized   le Louvre
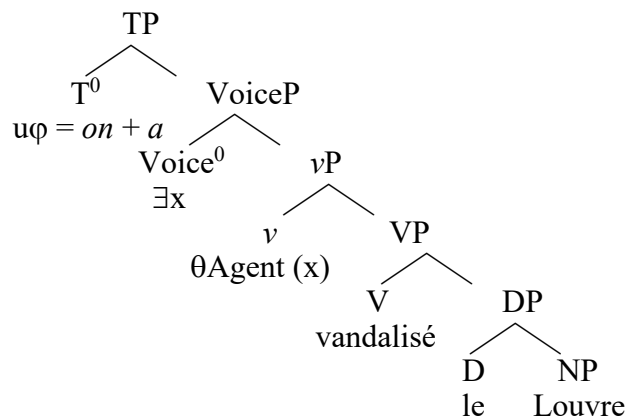
In (35), V merges with the object DP *le Louvre*, which is endowed with lexically valued φ-features and an unvalued Case feature. The VP thus projected in turn merges with an agentive *v* endowed with unvalued φ-features and an unprojected external argument (symbolized as θAgent (x)). Acting as a φ-probe, *v* agrees with the object DP, resulting in the valuation of its unvalued φ-features and in the valuation of the unvalued Case feature of the object DP. Next, a non-active Voice head is merged that existentially binds the unprojected external argument introduced by *v*. Finally, VoiceP is merged with tensed T, which, being endowed with unvalued φ-features, attempts to undergo Agree with a goal bearing valued φ-features. Since all of the features of the object DP have been valued, making it inaccessible to further computation, and since the unprojected external argument has no φ-features, the Agree relation fails and T retains its preexisting or default φ-values, which end up being lexicalized in the phonological component as *on*.

One final issue remains to be addressed, namely how existential *on* sentences satisfy the EPP. We adopt the view defended by Holmberg (2000), Merchant (2001) and Landau (2007) that EPP is not a narrow syntactic condition, but rather, a PF
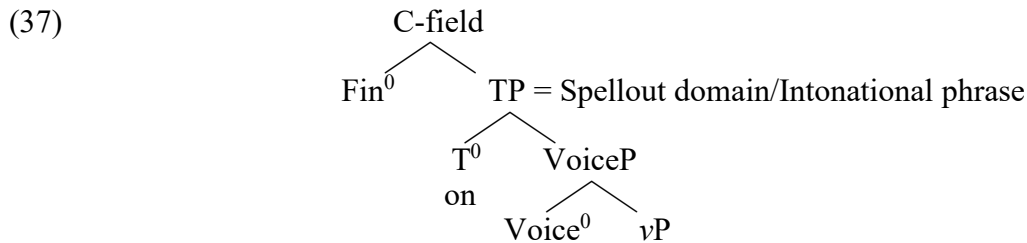
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[8]   It should be mentioned that Preminger also discusses some cases in which failure to agree leads to ungrammaticality. In those cases, however, the Agree relation stands in a feeding relation with a movement operation. This suggests that successful Agree is a prerequisite for (though not necessarily the trigger of) movement.

condition requiring the presence of an overt element under particular circumstances. More specifically, we follow McFadden & Sundaresan (2018) in assuming that EPP is a PF-constraint and that the complement of a phase defining head, which is a spellout domain, constitutes an intonational phrase which must be phonologically overt according to An's (2007) Intonational Phrase Edge Generalization (IPEG) stated in (36).

(36)   *Intonational Phrase Edge Generalization* (IPEG), An (2007:61)
        The edge of an Intonational Phrase (IntP) cannot be empty (where the notion of edge encompasses the specifier and the head of the relevant syntactic constituent).

  Assuming with Haegeman & Danckaert (2017) that FinP is part of the C-domain, the intonational phrase of a tensed on existential construction corresponds to TP, a situation that we illustrate in (37).

(37)

$$
\begin{array}{c}
\text{C-field} \\
\diagup\diagdown \\
\text{Fin}^0 \qquad \text{TP = Spellout domain/Intonational phrase} \\
\diagup\diagdown \\
\text{T}^0 \quad \text{VoiceP} \\
\text{on} \quad \diagup\diagdown \\
\text{Voice}^0 \quad v\text{P}
\end{array}
$$

  We propose that the *on* phonological realization of the default φ-values of T resulting from a failure to agree satisfies the IPEG in that the IPEG has nothing to do with subjects or the [Spec, TP] position but is a PF requirement that the left edge of TP be overt because in (37), it is aligned with the intonational phrase. It therefore follows that overt *on* in T satisfies the IPEG. As for ECM infinitivals containing a non-active Voice head, we assume that they are TPs lacking a CP layer, from which it follows that they do not constitute a spellout domain and are therefore not parsed as intonational phrases. The IPEG is therefore not relevant in this case. This allows the non-agreeing infinitival T head to be phonologically null.

4. Concluding Remarks

To sum up, our analysis of existential *on* sentences captures three syntactic properties of the construction that remain unexplained under the ultra-indefinite approach. First, as the reader will recall, existential *on* is incompatible with unaccusatives. This property follows from the fact that the non-active Voice head present in existential *on* constructions selects a projection of *v* that has not yet projected its external argument. If we assume a uniform structural architecture for transitive and unaccusative clauses, unaccusative *v*Ps are headed by a *v* that does not have the ability to project an external argument, hence it cannot be selected by the type of non-active Voice head found in the existential *on* construction. Second, the fact that passive sentences with *on* can never be interpreted as having an existentially quantified external argument follows from the fact there can only be one Voice head per clause. Third, assuming with Merchant (2013) that ellipsis requires identity between phrase markers, we explain

why existential *on* sentences, being in a non-active voice, cannot serve as the antecedent for a high ellipsis such as sluicing or stripping when the elided material is in the active voice.

This leaves us with two properties of existential *on* constructions with respect to which the ultra-indefinite account and the non-active voice account appear to roughly fare the same. Regarding discourse inertness, we argued that unprojected arguments are not specified for φ-features. A consequence of this is that they cannot agree in φ-features with φ-specified pronouns in the discourse. A somewhat similar argument is given in Collins (2017) who defines ultra-indefinites as pronouns with no φ-features. However, Collins also assumes that implicit arguments are *projected* pronominal arguments that are lexicalized as *on* (or as pro in short passives), a view which we have argued against here. Finally, the scope inertness of existential *on* remains unaccounted for under any theory, as far as we can tell. We could perhaps derive this property from the hypothesis that unprojected quantificational arguments cannot undergo QR, although this move would no doubt have ramifications in other areas of the grammar. This is an issue that we will relegate to further work.

Acknowledgements

References

An, Duk-Ho. 2007. Clauses in non-canonical positions at the syntax-phonology interface. *Syntax* 10: 38-79. https://doi.org/10.1111/j.1467-9612.2007.00096.x

Bruening, Bejamin. 2013. By-phrases in passives and nominals. *Syntax* 16: 1-41. https://doi.org/10.1111/j.1467-9612.2012.00171.x

Bruening, Benjamin & Thuan Tran. 2015. The nature of the passive, with an analysis of Vietnamese. *Lingua* 165: 133-172. https://doi.org/10.1016/j.lingua.2015.07.008

Chomsky, Noam. 2001. Derivation by phase. In M. Kenstowicz (ed.), *Ken Hale: A life in language*, 1-52. Cambridge, MA: MIT Press. https://doi.org/10.7551/mitpress/4056.003.0004

Cinque, Guglielmo. 1988. On *si* constructions and the theory of arb. *Linguistic Inquiry* 19: 521-582.
Collins, Chris. 2017. On the implicit argument in the short passive. Ms., New York University. https://ling.auf.net/lingbuzz/003492

Collins, Chris & Paul Postal. 2012. *Imposters*. Cambridge, MA: MIT Press.

Comrie, Bernard. 1977. In defense of spontaneous demotion. In P. Cole & J. Sadock (eds), *Grammatical relations* (Syntax and Semantics 8), 47-58. New York: Academic Press. https://doi.org/10.1163/9789004368866_004

Creissels, Denis. 2011. Impersonal pronouns and coreference: Two case studies. Paper presented at the *Journée sur les pronoms impersonnels*, Paris, France, September 20, 2011. https://www.academia.edu/18971285/Impersonal_pronouns_and_coreference_two_case_studies

Egerland, Verner. 2003. Impersonal pronouns in Scandinavian and Romance. *Working Papers in Scandinavian Syntax* 71: 75-102.

Gaatone, David. 1994. Passif, impersonnel et passif impersonnel en français: quelques réflexions. *L'information Grammaticale* 62: 42-44.

Haegeman, Liliane & Lieven Danckaert. 2017. Variation in English subject extraction: The case of hyperactive subjects. In *Fuzhen SI. Studies on syntactic cartography*, 303-315. China Social Sciences Press.

Holmberg, Anders. 2000. Scandinavian stylistic fronting: How any category can become an expletive. *Linguistic Inquiry* 31: 445-483. https://doi.org/10.1162/002438900554406

Jaeggli, Osvaldo. 1986. Passive. *Linguistic Inquiry* 17: 587-622.

Koenig, Jean-Pierre. 1999. On a tué le président ! The nature of passives and ultra-indefinites. In B. Fox, D. Jurafsky & L. Michaelis (eds), *Cognition and function in language*, 235-251. Stanford, CA: CSLI Publications.

Koenig, Jean-Pierre & Gail Mauner. 2000. A-definites and the discourse status of implicit arguments. *Journal of Semantics* 16: 207-236. https://doi.org/10.1093/jos/16.3.207

Landau, Idan. 2000. *Elements of Control: Structure and meaning in infinitival constructions*. Dordrecht: Kluwer.

Landau, Idan. 2007. EPP extensions. *Linguistic Inquiry* 38: 485-523. https://doi.org/10.1162/ling.2007.38.3.485

Lasersohn, Peter. 1993. Lexical distributivity and implicit arguments. In U. Lahiri & A. Z. Wyner (eds), *Proceedings of Semantics and Linguistic Theory III*, 145-161. Washington, D.C.: Linguistic Society of America. https://doi.org/10.3765/salt.v3i0.2751

Lasnik, Howard. 1988. Subjects and the θ-Criterion. *Natural Language and Linguistic Theory* 6: 1-17.

McFadden, Thomas & Sandhya Sundaresan. 2018. What the EPP and comp-trace effects have in common: Constraining silent elements at the edge. *Glossa* 3 (1), 43: 1-34. http://doi.org/10.5334/gjgl.419

Meltzer-Asscher, Aya. 2012. Verbal passives in English and Hebrew: A comparative study. In M. Everaert, M. Marelj & T. Siloni (eds), *The theta system: Argument structure at the interface*, 279-307. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199602513.003.0011

Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.

Merchant, Jason. 2013. Voice and ellipsis. *Linguistic Inquiry* 44: 77-108. https://doi.org/10.1162/LING_a_00120

Perlmutter, David & Paul Postal. 1983. Toward a universal characterization of passivization. In D. Perlmutter (ed), *Studies in relational grammar 1*, 3-29. Chicago, IL: University of Chicago Press.

Perlmutter, David & Paul Postal. 1984. The 1-advancement exclusiveness law. In ed. D. Perlmutter & C. Rosen (eds), *Studies in relational grammar 2*, 81-125. Chicago, IL: University of Chicago Press.

Preminger, Omer. 2009. Failure to Agree is not a failure: φ-agreement with post-verbal subjects in Hebrew. In J. Rooryck (ed), *Linguistic variation yearbook, Vol. 9*, 241-278. Amsterdam: John Benjamins. https://doi.org/10.1075/livy.9.07pre

Preminger, Omer. 2014. *Agreement and its failures*. Cambridge, MA: MIT Press.

Reed. Lisa. 1992. Remarks on word order in causative constructions. *Linguistic Inquiry* 23: 164-172.

Reed, Lisa. 2014. *Strengthening the PRO hypothesis*. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9781614510413

Reed, Lisa. 2018. Against control by implicit passive agents. In L. Repetti & F. Ordóñez (eds), *Romance languages and linguistic theory 14*, 279-292. Amsterdam: John Benjamins. https://doi.org/10.1075/rllt.14.16ree

Siewierska, Anna. 1984. *The passive: A comparative linguistic analysis*. London: Croom Helm.

Williams, Alexander & Jeffrey Jack Green. 2017. Why control of PRO in rationale clauses is not a relation between arguments. In A. Lamont & K. Tetzloff (eds), *Proceedings of NELS 47, Vol. 3*, 233-246. Amherst, MA: University of Massachusetts GLSA.

Williams, Edwin. 1985. PRO and the subject of NP. *Natural Language and Linguistic Theory* 3: 297-315. https://doi.org/10.1007/BF00154265

Williams, Edwin. 1992. Adjunct control. In R. Larson, S. Iatridou, U. Lahiri & J. Higginbotham (eds), *Control and grammar*, 297-322. Dordrecht: Kluwer. https://doi.org/10.1007/978-94-015-7959-9_9