ANOTHER PIECE OF THE IMPLICIT ARGUMENT PUZZLE: THE CASE OF EXISTENTIAL *ON*

MARC AUTHIER & LISA REED
The Pennsylvania State University

This paper aims to analyze those French *on* constructions in which *on* signals existential value for the understood Agent, as it does in (1). On this interpretation, *on* has been referred to as arbitrary *on* (Egerland 2003), ultra-indefinite *on* (Koenig 1999) and a-definite *on* (Koenig & Mauner 2000).

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

Existential *on* constructions differ from any other type of *on* in that (a) diachronically, the quasi-universal reading of *on* in generic contexts preceded its existential reading (Welton-Lair 1999) and (b) the syntactic and semantic properties of existential *on* do not match those of its referential and quasi-universal counterparts. For example, existential *on* is unavailable with unaccusative verbs (Cinque 1988:552), but this restriction is not found with its referential and quasi-universal counterparts.

(2) a. On est tombé(s) dans les escaliers.
ON is fallen in the stairs
OK 'We fell down the stairs.' *'Someone fell down the stairs.'
b. Quand on tombe, on se blesse parfois.
when ON falls ON self hurts sometimes
'When one falls, one gets hurt sometimes.'

At first blush, the semantic contribution made by existential *on* appears to be the same as that of an existentially quantified noun phrase denoting the external argument of the predicate (e.g., *quelqu'un* 'someone'). However, as shown in (3), existential *on* always takes narrow scope with respect to other scope-taking elements in a sentence.

(3) On a empoisonné tous les points d'eau. (unambiguous)
ON has poisoned all the points of-water
a. *$\exists x\ \forall y$ poison (x,y) (Same poisoner for all the water holes.)
b. OK $\forall y\ \exists x$ poison (x,y) (Different poisoners for different water holes.)

Interestingly, the interpretation of (3) is identical to that of the implicit argument of the short periphrastic passive in (4), a sentence that also has (3b) as its sole interpretation.

(4) Tous les points d'eau ont été empoisonnés.
all the points of-water have been poisoned
'All the water holes have been poisoned.'

In this paper, we explore the hypothesis that existential *on* is dependent on the presence of a non-active Voice head. Merchant (2003) 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 ellipses such as VP-ellipsis, they are prohibited with high ellipses such as sluicing and stripping. We can therefore test whether or not existential *on* sentences are in a voice different from the active voice 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 ungrammaticality due to a voice mismatch, we will have evidence that existential *on* sentences are not active sentences. The ungrammatical status of the examples involving sluicing in (5a) and stripping in (5b) suggests that this is indeed the case.

(5) a. *?Je sais pas qui Ø, mais on a oublié d'éteindre la lumière hier soir.
I know not who but ON has forgotten of-to-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.'

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

We will argue that a non-active voice head, of which existential *on* is an instantiation, selects a *v* projection whose head introduces the external argument theta-role semantically (restricted to agentive *v* in the case of existential *on*) but does not project it syntactically as a phrase in Spec,*v*P. Syntactically unprojected indefinite arguments can only be property denoting indefinites that undergo existential closure via RESTRICT (cf. Chung & Ladusaw 2003). That is, when an external argument is not syntactically projected, it is an unsaturated argument slot i.e. a free variable that can only be well-formed if it is existentially closed. This is achieved via RESTRICT, a mode of composition that separates semantic saturation from syntactic saturation. The scope of an indefinite composed with RESTRICT is not fixed by RESTRICT but by existential closure at the point at which the composition reaches the event level. This level is such that negation, adverbial quantification and nominal quantification are interpreted above it and therefore scope over it. Both existentially closed event variables (6) and existential implicit arguments (7) systematically scope lower than other operators in the sentence. This cannot be a coincidence. We propose that the event variable binder is also the implicit argument binder and therefore that (7) is a case of polyadic quantification.

(6) Paul didn't talk. (can only be interpreted as (a), not (b))
a. There is no past event in which Paul talked.
b. *There is an event in which Paul didn't talk.

(7) On a pas toussé. (can only be interpreted as in (a), not (b))
ON has not coughed
a. No one coughed. b. *Someone didn't cough.

Thus, using polyadic existential quantification, the semantic representation of a sentence like (8a) will be as in (8b).

(8) a. On marche au premier. b. $\exists$ <x,e> [human (x) $\wedge$ walking (e) $\wedge$ Agent (e) = x]
ON is-walking on-the first (floor)

To determine what position harbors the existential quantifier needed to existentially close the event variable, we will follow Gast (2006:141) in assuming that T corresponds semantically to the position of the existential quantifier binding the event variable. The semantic correlate of T takes 'untensed' predicates as an argument and maps them onto 'tensed' predicates; i.e. predicates whose event variable is existentially bound. Having implicit arguments and event variables be existentially bound from T while taking obligatory narrow scope with respect to negation is only a problem if the syntactic Neg head is assumed to host the negative operator at LF. The problem disappears if, following Moscati (2006), we release the LF representation of the negative operator from its PF realization and assume that universally, there are negative features in the C-field that trigger covert movement of the negative operator in Neg to the left periphery via an operation akin to QR (or, alternatively, the Voice head harbor the silent operator binding the event variable and the implicit argument – see Bruening 2013 for this option). Finally, the *on* phonetic realization of non-active Voice has a default 3rd person φ-feature. When the Voice head raises to T, it values the φ-features of T without projecting a Spec,TP since this is head movement. This operation satisfies EPP on the assumption that EPP is a phonological intonational phase edge requirement. For evidence that EPP is a PF phenomenon, see Merchant (2001) and Craenenboeck & den Dikken (2006). For the claim that it reduces to An's (2007) Intonational Phase Edge Generalization (where the definition of edge encompasses the Spec and the head of the relevant syntactic constituent), see McFadden & Sundaresan (2018).