

Catalan intransitive verbs and argument realization

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The goal of this paper is to analyze the behavior of the single core argument of intransitive verbs in Catalan, including the mapping between arguments and grammatical functions, verbal agreement, case assignment, and expression by means of clitics. The main claim of the paper is that the single argument of a clause can be a nominative object. The core argument of intransitive verbs (not only of unaccusative verbs, as has sometimes been claimed) alternates between subject and object.

- (1) a. Els estudiants solen sortir puntualment, però avui surten tard.
the.m.pl student.m.pl are-used-to.pl leave.inf punctually but today leave.pl late
'Students usually leave on time, but today they are leaving late.'
- b. Cada dia surten molts trens, però avui només n'ha sortit un.
every day leave.pl many train.pl but today only en.cl-have.sg leave.part one
'Everyday many trains leave, but today only one has left.'
- c. En ploraran sis quan sàpiguen la veritat.
en-cl cry.fut.pl six when know.sbjv.pl the.f.sg truth.f.sg
'Six of them will cry when they find out the truth.'

The possibility of omitting the argument of *sortir* in (1a) is evidence that this argument is the subject of the verb, given subject pro-drop in Catalan. And the possibility of having the *en* clitic related to the single argument of the unaccusative *sortir* in (1b) or the unergative *plorar* in (1c) (from Cortés and Gavarró 1997, henceforth CG1997) indicates that this argument is an object in these examples, as the *en* clitic can only be related to an object (CG 1997) which is semantically indefinite (GLC:697). *En* cannot be related to the subject of a transitive verb, as in (2) (CG 1997):

- (2) *N'aprovaran tres els exàmens. / *N'aprovaran els exàmens tres
en.cl-pass.fut three the.m.pl exam.m.pl en.cl-pass.fut the.m.pl exam.m.pl three
'Three of them will pass the exams.'

Examples like (3) pose a problem, if we assume that the agreement trigger is the subject: *molts* in (3a) would have to be both a subject (for agreement) and an object (for the *en* clitic).

- (3) a. Avui en surten molts. b. *Avui surten molts.
today en.cl leave.pl many today leave.pl many
'Today many are leaving.' 'Today many are leaving.'

However, given current assumptions about agreement in languages like Icelandic or Hindi-Urdu (Zaenen et al. 1985, Mohanan 1994, and Butt and Sadler 2003), it is not necessary to assume that the agreement trigger is the subject; what is required is that it be a nominative argument. Thus we can assume that the verb in (3a) agrees with a nominative object (see Fig. 1, irrelevant features not presented). Additional evidence for the claim that the single argument of an intransitive verb can be object is provided by past participle agreement with an object clitic in forms with *haver* and by the impossibility of being controlled when expressed by means of the clitic *en*.

If the subject-object alternation shown in (1) were a free option, not conditioned by semantic or pragmatic factors, we would expect the *en* clitic to be optional in (3), but in fact, it is obligatory. If the NP *molts* were a subject, nothing would require the presence of the clitic *en*, since *en* can only be related to an indefinite object, as shown in its lexical entry (*En* clitic (7i)). Furthermore, a preverbal NP of an intransitive verb cannot license the *en* clitic, even if it is indefinite (GLC:699):

- (4) Quatre ja (*n') han sortit de l'ou.
Four already en.cl have.pl leave.part of the-egg
'Four of them have already come out of the egg.'

This evidence indicates that there are constraints affecting the choice in the mapping of an argument to subject or to object. In the first place, the mapping to object is favored for an indefinite expression. Within an OT approach (as in Kuhn 2003), we assume this results from a constraint that penalizes an indefinite subject: *SUBJ [DEF -]. So, for example, with an intransitive verb like *sortir* 'leave' or *plorar* 'cry', the core argument can be either SUBJ or OBJ. If the argument is indefinite, this constraint will exclude the subject realization (but see below about the status of preverbal NPs), explaining the obligatoriness of the *en* clitic in (3). This constraint has no effect on an argument that can only map to subject, as is the case with the external argument of transitive verbs: there is only one candidate (with the argument mapping to subject) and it is the optimal candidate, no matter how many stars it may incur. In the second place, adopting the assumption that preverbal NPs in Catalan (such as *quatre* in (4)) are topics (not subjects, Vallduví 2002) anaphorically related to a GF, we can derive the claim that the *en* clitic cannot be related to a topic. A topic is the antecedent of an anaphoric pronoun (possibly null, as with null subjects) and anaphoric pronouns must be definite. Since the lexical information of the *en* clitic specifies that it corresponds to an indefinite object, this makes it incompatible with its being an anaphoric pronoun dependent on the preverbal topic, which explains the ungrammaticality of the *en* clitic in (4) (see Fig. 2, irrelevant features not presented). At this point, one may ask if it is possible to use a definite object clitic in place of the indefinite *en* clitic, as it would qualify as a topic-anaphoric pronoun; the fact is that the definite object clitic *els* is incompatible with

intransitive verbs:

- (5) * Els estudiants, avui els surt/surten tard.
the.m.pl students.m.pl today them.m.pl.acc leave.sg/leave.pl late
'The students, today they are leaving late.'

Whichever the agreement form of the verb may be, the core argument of an intransitive verb cannot be expressed by means of a definite object clitic. The reason is that the definite object clitic *els* is specified to have accusative case, as indicated in the corresponding lexical entry (*Els* (7ii)).

We assume that a core argument maps onto a DGF (direct grammatical function, i.e. subject or object), regardless of whether it is an external argument or an internal argument (the argument of an unergative or the argument of an unaccusative). This gives the subject-object alternation of the argument of intransitive verbs. The assumption that the logical subject of an unergative can map onto an object, as well as a subject, is a departure from standard assumptions in LFG mapping theories such as LMT. It is only in the presence of another DGF that an external argument is required to map onto the subject, as with transitive verbs. An important assumption implied in this analysis is that there is no subject requirement (i.e., no Subject Condition). In this way, there is no subject in the representation of example (3a), and the single argument of the predicate maps to an object (see Fig. 1).

We assume there are two principles concerning structural case assignment (adapting Yip et al. 1987): **i)** Nominative case is assigned to the highest available argument. We are assuming that arguments are ranked at argument structure according to their thematic prominence: the highest available argument is the most prominent argument that lacks case. **ii)** Accusative case is assigned to any remaining argument.

As a result, nominative will be assigned to an object if there is no subject. We are not spelling out here the assignment of dative case and other inherent cases.

We assume that verbal agreement is mediated by the feature bundle AGR, following Haug and Nikitina (2012, 2016), and Alsina and Vigo (2014, 2017). Two general constraints are relevant: the requirement that the clausal AGR feature be shared with that of a dependent GF (AGRSHARE (8i)), and the requirement that the agreeing GF be nominative (*AGRCASE (8ii)). Given these two constraints, the verb can agree with an object in nominative case, which we assume is the situation in (1b) and (3a).

Whereas most intransitive verbs allow their single argument to alternate between a subject and an object, as shown above, there are some verbs that only allow the object realization, as with *haver-hi* '(existential) be':

- (6) a. Parlant de convidats, n'hi havia un a la sala.
talking about guests.m.pl en.cl-hi.cl be.past one.m.sg in the.f.sg hall.f.sg
'Talking about guests, there was one in the hall.'
b. A la sala hi havia la Maria, i *no hi havia al terrat.
in the.sg.f hall.sg.f hi.cl be.past the.sg.f Maria and not hi.cl be.past on-the.sg.m terrace.sg.m
'Maria was in the hall, and she was not on the terrace.'

The obligatory presence of the clitic *en* in (6a) indicates that the corresponding argument is an object, even though nominative, and the ungrammaticality of the pro-dropped argument in the second clause of (6b) shows that this argument cannot be a subject. This fact can be analyzed by assuming that *haver-hi* lexically specifies its argument to map onto an object.

References

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(7) F-structures of clitics (*en* and *els*):

- i. *En*: $\left[\begin{array}{l} \text{OBJ} \left[\begin{array}{l} \text{PRED} \text{ 'PRO'} \\ \text{DEF} \text{ -} \end{array} \right] \end{array} \right]$
- ii. *Els*: $\left[\begin{array}{l} \text{PRED} \text{ 'PRO'} \\ \text{DEF} \text{ +} \\ \text{CASE} \text{ ACC} \\ \text{PERS} \text{ 3} \\ \text{NUM} \text{ PL} \end{array} \right]$

(8) Constraints on verb agreement:

- i. AGRSHARE: $\left[\begin{array}{l} \text{AGR} \boxed{1} \\ \text{GF} \left[\text{AGR} \boxed{1} \right] \end{array} \right]$
- ii. *AGRCASE: $\left[\begin{array}{l} \text{AGR} \boxed{1} \\ \text{GF} \left[\begin{array}{l} \text{AGR} \boxed{1} \\ \text{CASE} \neg\text{NOM} \end{array} \right] \end{array} \right]$

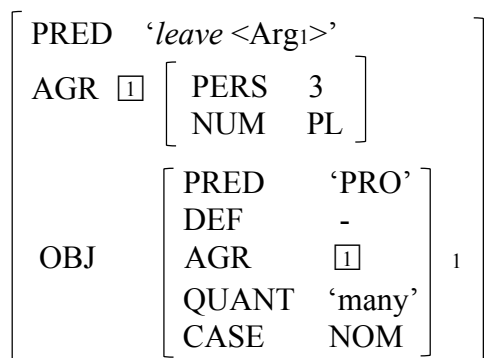


Figure 1: f-structure of example (3a)

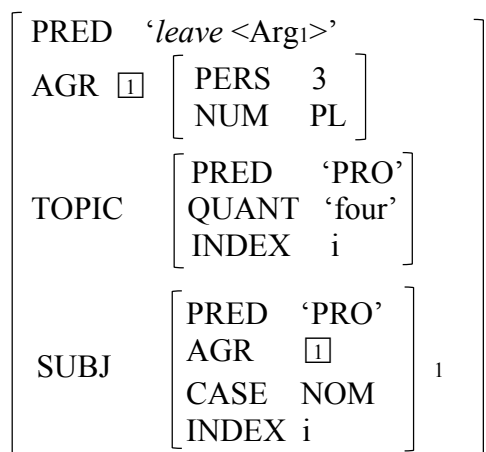


Figure 2: f-structure of example (4)