‘How do you miss your external argument?’
Non-active voice alternations in Italian*

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Impersonal-passive SI constructions of the type In Italia si leggono pochi giornali (In Italy SI read.3pl few newspapers) are traditionally likened, if not even reduced, to canonical (participial) passives (for instance, Belletti 1982) or to middles (Manzini 1986). This work shows the syntactic differences among those constructions through an articulated set of diagnostics. Such a systematic comparison also indicates that impersonal-passive SI constructions, canonical passives and middles share two features: they lack the external argument (in different ways) and they contain a result state phrase. The paper is mainly concerned with the first characteristic and parametrizes Embick’s (1997, 1998) system of non-active voice/unaccusative syntax by arguing that there are different ways in which a predicate can lack an external argument.

1 Introduction

Impersonal-passive SI constructions1 of the type In Italia si leggono pochi giornali (In Italy SI read.3pl few newspapers) ‘In Italy one reads few newspapers/In Italy few newspapers are read’ are a classical topic in Romance syntax, and this paper, which focuses on Italian, aims to define their syntax. The choice of perspective is novel.

* This paper represents the first attempt to spell out some of my thoughts about a classical puzzle in Italian syntax. It opens up theoretical questions instead of answering them. Its core is the syntactic investigation of non-active voice alternations in Italian. This work has been supervised by Elizabeth Cowper and Diane Massam, whom I greatly acknowledge. A special thank you goes to Yves Roberge, who agreed to be part of the Generals committee. The stimulating discussion we had during the defense may let this paper grow (there still is so much to develop and wonder about)! Thank you, Magda, for your keen eye and for the comments to come! Many thanks also go to my supporters in Stuttgart (Swabian home this year): Artemis Alexiadou for not letting me quit; Florian Schäfer for sharing readings, questions and excitement; and Robert Schmaus for just being there. All shortcomings and errors are my own.

Impersonal-passive SI constructions are not analyzed within the superset of impersonal SI constructions (Burzio 1986, Cinque 1988, Dobrovie-Sorin 1998, and D’Alessandro 2004, to cite only a few); rather they are systematically contrasted to passives and middles, to which they are traditionally likened, if not even reduced (for instance, Belletti 1982, Manzini 1986, Jaeggli 1986 and Baker, Johnson and Roberts 1989).2

The systematic testing conducted in the present work, however, reveals that Italian impersonal-passive SI constructions, canonical (participial) passives and middles form three distinct classes within the non-active diathesis.3 Essentially, as the core syntactic feature of non-active constructions is to lack the external argument projection (Embick 1997, 1998, 2004), this paper shows that impersonal-passive SI, passives and middles do so in different ways. In particular, impersonal-passive SI and canonical passive retain external argument semantics, which I formalize as external argument theta-role present on the relevant functional head (v/Voice), while middles do not (that is, middles are analyzed as inherently non-agentive, as proposed, among others, by Ackema and Schoorlemmer 1995). However, I show that impersonal-passive SI itself is syntactically an external argument in a specifier position which does not coincide with the edge of the verbal domain phase under T, and that such a configuration derives the unaccusative nature of such a construction, together with the third person constraint it undergoes. Instances of the three members of the non-active diathesis in Italian are reported below.

<table>
<thead>
<tr>
<th>non-active diathesis</th>
<th>impersonal-passive SI</th>
<th>canonical passive</th>
<th>middle SI</th>
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<tbody>
<tr>
<td></td>
<td><em>Stanotte si scrutinano i voti</em></td>
<td><em>Stanotte vengono/sono scrutinati i voti</em></td>
<td><em>I voti si scrutinano facilmente</em></td>
</tr>
<tr>
<td></td>
<td>tonight SI count.3pl [the vote]m.pl</td>
<td>tonight come/are.3pl counted.m.pl [the vote]m.pl</td>
<td>[the vote]m.pl SI count.3pl easily</td>
</tr>
<tr>
<td></td>
<td><em>I voti si scrutinano stanotte</em></td>
<td><em>I voti vengono/sono scrutinati stanotte</em></td>
<td><em>Si scrutinano facilmente, i voti</em></td>
</tr>
<tr>
<td></td>
<td>[the vote]m.pl SI count.3pl tonight</td>
<td>[the vote]m.pl come/are.3pl counted.m.pl tonight</td>
<td>SI count.3pl easily, [the vote]m.pl</td>
</tr>
<tr>
<td></td>
<td>‘The votes are counted tonight.’ / ‘One counts the votes tonight.’</td>
<td>‘The votes are counted tonight.’</td>
<td>‘The votes count easily.’</td>
</tr>
</tbody>
</table>

3 In this context, I choose the term ‘diathesis’ over ‘voice’ to make explicit I am referring to a syntactic/semantic class, rather than a morphological one. “There are two notions collapsed under or associated with the term ‘voice’, based on (1) morphological form and (2) syntactic/semantic form (sometimes referred to as diathesis).” (Embick 1997:2).
With respect to impersonal-passive SI constructions, this paper presents evidence against two previous claims, namely, (i) that SI equals passive morphology (dominant Government-Binding view; cf. Chomsky 1981 and Belletti 1982, for instance) and (ii) that SI is nominative in those constructions (Burzio 1986, Cinque 1988), thus proving Dobrovie-Sorin’s (1998) alternative analysis of the distribution of impersonal SI to be correct.

The paper is structured as follows. Section 2 introduces impersonal-passive SI constructions and canonical passives as they have been equated to each other in the Government and Binding (GB) tradition (Belletti 1982, Chomsky 1981, among others). It will be shown that while both preserve external argument semantics (the so-called ‘implicit’ Agent) (2.1), only impersonal-passive SI constructions have the external argument syntactically present (2.2.1). Further distinguishing characteristics of the two passive constructions are outlined in 2.2.2 and 2.2.3.

Section 3 illustrates the theoretical framework: argument structure is syntax (3.1), unaccusativity is a configurational matter (3.2), agentive and manner semantic features are introduced by two distinct functional heads (3.3), and, accordingly, there exist two external argument merging sites (3.4).

The derivation of impersonal-passive SI construction is presented in section 4, and the ones for canonical passive and impersonal-active SI constructions in section 5 and 6, respectively.

The analysis is further discussed in section 7, and contrasted with the analyses of Cinque (1988) and by Dobrovie-Sorin (1998): particular attention is given to the distribution of impersonal-passive SI constructions, passives and middles in control infinitivals (7.1).

Middles are subjected to the relevant syntactic and semantic diagnostics in section 8, and a tentative syntactic analysis is also proposed. Conclusions follow.

2 Two passive constructions

As discussed in Belletti 1982, Italian has two passive constructions: a ‘copular’ passive (1), parallel to the English one, and a ‘morphological’ passive (2), also referred to as the impersonal-passive SI construction (Cinque 1988:559).4

(1) I voti sono scrutinati
    the.m.pl  vote.m.pl are.3pl counted.m.pl
    ‘The votes are counted.’

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4 Belletti (1982, footnote 8) justifies her choice for the term ‘morphological’ as follows: “The term ‘morphological’ is used here to suggest that, due to properties of clitic pronoun si [...], the same effect as the one produced by the copular passive morphology in the general case is produced here in this case also [...]. The use of the term is somewhat metaphorical, though: strictly speaking; in fact, the verbal morphology is not affected by clitic si.” As in Burzio 1986 and Cinque 1988, I adopt the graphic convention of writing Italian impersonal ‘si’ in capital letters (thus, henceforth SI) within both text and glosses, in order to distinguish it from reflexive, reciprocal, inherent-reflexive and unaccusative si.
The passive character of (2), which Italian shares with other Romance languages, has been recognized both by language descriptions and by early generative work (as reported in Belletti (1982, fn. 2): for Italian, Rizzi 1976, Cinque 1976; for Spanish, Aissen and Perlmutter 1976; for French (see, the ‘middle’ construction), Kayne 1975 and Ruwet 1972).

Belletti (1982) discusses the impersonal-passive SI construction in (2) in parallel with copular passives (1). Belletti puts forth the hypothesis that SI is a clitic pronoun base-generated in INFL, i.e., that SI is the pronominal instantiation of INFL. Being pronominal, SI must satisfy both the Theta-Criterion and the Case-Filter. SI in INFL satisfies these two computational requirements by being “assigned the theta-role otherwise assigned by VP to the subject NP” (1982:5) and by being Case-marked as object by virtue of ‘absorbing’ objective Case (somehow SI deprives V of the ability to assign objective Case to its NP complement). In Belletti’s model, thus, SI acts exactly like passive morphology, i.e., it absorbs the theta-role for the subject and Case for the object. In the case of English passives, those properties are attributed to the passive morpheme – en (Jaeggli 1986, Baker, Johnson and Roberts 1989).

In Belletti’s paper, the passive nature of SI constructions as in (2) (I voti si scrutinano ‘The votes are counted’) seems to follow from the compatibility of such a construction with the analysis of passives as in Chomsky (1981:2.7). According to Chomsky’s (1981) analysis, passives coincide with syntactic configurations in which the subject of the sentence does not receive a theta-role, and the object of the verb does not receive Case within VP.

A systematic comparison between canonical passives as in (1) and impersonal-passive SI constructions as in (2), however, indicates that those two structures cannot be reduced to each other.

2.1 Sharing passive features

Let us compare canonical and SI impersonal passives with respect to the salient properties of passives, as reported by Baker, Johnson and Roberts (1989:220).6

5 On the other hand, Burzio (1986), Cinque (1988), and more recently D’Alessandro (2004) focus on the relationship between the impersonal-passive SI construction and its active counterpart in (i), that is, the impersonal si construction not showing agreement between verb and object, but rather default agreement (3 person singular) on the verb:

(i) Si scrutina i voti
   SI count.3SG the.M.PL vote.M.PL
   ‘Somebody/people counts/count the votes.’

6 BJ&R (ibidem) list a fourth property: “verbs that have derived subjects cannot be passivized”, as “only one argument can acquire subject status in the derivation of any given clause” (1989:228) (that is, the 1-Advancement Exclusiveness Law of Relational Grammar (Perlmutter 1978)). As it is impossible to provide
(3) a. The logical-subject argument is not realized by an NP in passives
b. The phenomenon of “implicit arguments” in passives
c. The fact that the subject position is nonthematic in passives, permitting NP movement into this position

What we shall see is that canonical passive and SI passive match the properties listed in (3) in different ways. While in the present section I simply describe these mismatches, I return to them for an in-depth analysis in the next paragraph.

The first property, (3a), is manifested by both canonical and SI passive: the logical-subject is realized in both cases by a PP, rather than by a NP. Note however, that the PP is headed by *da* ‘by’ in the case of the canonical passive, (4a), and by the complex preposition *da parte di* ‘on the part of’ in the case of SI passive (4b) (Belletti 1982, fn. 14).

(4) a. I voti sono scrutinati da due segretari
   the.m.pl vote.m.pl are.3pl counted.m.pl by two officers
   ‘The votes are counted by two officers.’

b. I voti si scrutinano da parte di due segretari
   the.m.pl vote.m.pl SI count.3pl on the part of two officers
   ‘The votes are counted on the part of two officers.’

As for the second property, (3b), when an external argument is not introduced by a PP, it is nevertheless understood. Therefore the literature refers to an “implicit external argument” within passives (Jaeggli 1986:611, and references therein; BJ&R 1989:221, and references therein). The common tests for the implicit external argument in passives are two: (i) compatibility with what Jackendoff (1972) labeled as agent-oriented adverbs (e.g., *willingly, deliberately, on purpose*, etc.), and (ii) combinability with control infinitival adjuncts known as ‘rationale clauses’ (BJ&R) or ‘purpose clauses’ (Jaeggli). In the latter case, the possibility of control infinitivals indicates the presence of a controller in the matrix passive clause. Crucially, the controller of the subject of the infinitival adjunct appears to be the implicit external argument.

Both canonical (5) and SI (6) passives pass these two tests, thus indicating an implicit external argument (in (5) I provide the Italian counterpart of the examples of BJ&R):

(5) a. agent-oriented adverbs
   Questo burocrate fu corrotto deliberatamente
   this.m.sg bureaucrat.m.sg was.3sg bribed.m.sg deliberately
   ‘This bureaucrat was bribed deliberately.’

any counterexample to this law—thus confirming that the subject in both canonical and SI passives is derived—I do not address it. However, this feature is relevant for the comparison of SI passives (which show agreement between the object and the verb) with their non-agreeing active counterpart (the verb shows default 3sg agreement), and is therefore discussed in that section.

7 Chomsky 1981 (chap.2, fns. 60 and 101) attributes the observation to Manzini (1980), whose insights are further elaborated in her 1983 LI paper.
b. control in rationale clauses

Questo burocrate fu corrotto [per PRO evitare il serviziomilitare]
this bureaucrat was.3sg bribed.m.sg [to PRO avoid the draft]
‘This bureaucrat was bribed to avoid the draft.’

(6) a. agent-oriented adverbs

Gli elettori si corruppero deliberatamente
the.m.pl elector.m.pl SI bribe.past.3pl deliberately
‘The voters were bribed/ One bribed the electors deliberately.’

b. control in rationale clauses

Gli elettori si corruppero [per PRO pilotare le elezioni]
the.m.pl elector.m.pl SI bribe.past.3pl [to PRO fix the elections]
‘The voters were bribed/ One bribed the voters to fix the elections.’

As Jaeggli (1986:611) points out, the term ‘implicit argument’ is misleading: in passives, the external theta-role “is not realized on a lexical NP in an argument position.” Thus, what the above tests really show is the presence of the external argument theta-role (which I equate to external argument semantics), rather than the presence of the external argument position. Quoting Embick (1997:174), “the most striking syntactic property of the passive agent is that it has no syntactic properties. What passives have is agentivity, which [...] can be divorced from the presence of an actual agent.” This conclusion is supported by the fact that ‘purpose’ infinitival adjuncts are subject to thematic control, rather than argument control, as shown by Jaeggli (1986:615-620). In fact, “argument control involves control from argument positions, whereas thematic control does not” (1986:615). In the next section, I will show that while both canonical and SI passives retain the external argument theta-role, only SI passives realize this theta-role in argument position, as only SI passives allow argument control.

As for the third property, (3c), that the object NP moves into the non-thematic subject position, what can be shown is that the object NP is assigned nominative Case, and not accusative case, both in canonical (7a) and SI (7b) passives.

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8 As shown by Jaeggli (ibidem), argument control and thematic control should be distinguished as they systematically differ along the following dimensions (for the examples illustrating each point I refer to Jaeggli):

<table>
<thead>
<tr>
<th></th>
<th>argument control</th>
<th>thematic control</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘implicit argument’</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>c-command configuration</td>
<td>required</td>
<td>non-required</td>
</tr>
<tr>
<td>possible at a distance</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>possible into passive</td>
<td>✓</td>
<td>*</td>
</tr>
</tbody>
</table>

(7) a. *Li/Essi furono corrotti
    them.m.acc.cl/they.m.nom were.3pl bribed.m.pl
b. *Li/Essi si corruppero
    them.m.acc.cl/they.m.nom SI bribe.past.3pl

Both structures can therefore be regarded as unaccusative, as their predicate is somehow unable to assign accusative case to its object. The ne-cliticization test confirms the unaccusative analysis of these two constructions:9

(8) a. Ne furono corrotti molti, di politici
    of-them.cl were.3pl bribed.m.pl many.m.pl, of politicians
    ‘Of politicians, there were bribed many.’
b. Se ne corruppero molti, di politici
    SI of-them bribe.past.3pl many.m.pl, of politicians
    ‘Of politicians, there were bribed many/one bribed many.’

So far, canonical passive constructions and impersonal-passive SI constructions have been shown to imply the presence of external argument semantics (external argument theta-role), according to the tests synoptically reported in Table 1.

<table>
<thead>
<tr>
<th>external argument semantics → θ_{extA}</th>
<th>canonical passive</th>
<th>impersonal-passive SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) ext A introduced by P</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(ii) agent-oriented adverbs</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(iii) thematic control</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 1: External argument semantics diagnostics

Some crucial differences between canonical and SI passives with respect to the prepositional phrase and the control diagnostics have been briefly addressed and will be explored in depth in the next section. Those differences are argued to follow from one specific structural difference between the canonical and the SI passive, namely the syntactic projection of the external argument position in the case of the latter but not of the former construction. Note that a structural hypothesis formulated in terms of presence/absence of the external argument projection clashes with the unaccusative

9 Ne-cliticization extracts internal arguments only and therefore it discriminates between transitive and unaccusatives on the one hand (Ho visto tre amici ‘I saw three friends’ → Ne ho visti tre ‘I saw three of-them’; Arrivano molti ospiti stranieri ‘Many foreign guests arrive’ → Ne arrivano molti ‘Many of-them arrive’) and unergatives on the other one (Finora hanno telefonato poche persone ‘Up to now few people phoned’ → *Finora ne hanno telefonato poche ‘Up to now few of-them phoned’).

10 <Se>, [se] in (8b) is the harmonized allophone of /sì/, because of the middle vowel in the following partitive clitic ne. Vowel harmony suggests that the two clitics, the impersonal si and the partitive ne, cluster on the same functional head. In other words, they are an instance of ‘clitic cluster’, rather than ‘clitic split’ (Kayne 1994:21, Terzi 1999, Cardinaletti 2000).
analysis of both canonical and SI passives illustrated in (7) and (8) above. This paper faces this puzzle and proposes a solution.

2.2 Highlighting the differences

We saw already that the prepositional phrase responsible for the introduction of the otherwise understood external argument is different: in the case of canonical passives this preposition is *da ‘by’, whereas for impersonal-passive SI constructions it is *da parte di ‘on the part of’. The syntactic difference between these two prepositional heads is not trivial and it leads us to the series of diagnostics presented in the next section.

As pointed out by Belletti (1982, fn. 14; the examples in (9) are quoted from there), the complex prepositional phrase *da parte di ‘on the part of’ can appear in active sentences (9a), a context in which *da ‘by’ is impossible, and in canonical passives (9b), where *da ‘by’ is the default preposition.

(9) a. active
Ti saluto *da parte di/*da Mario
you.2sg.acc greet.1sg on the part of/*by Mario
‘I say hello to you on the part of Mario.’

b. passive
Sono state dette cose impensabili a quel meeting
are.3pl been.f.pl said.f.pl [thing unthinkable].f.pl in that meeting
da parte di tutti
on the part of all
‘Unthinkable things have been said at that meeting on the part of everybody.’

According to Belletti, the asymmetrical distribution of *da ‘by’ versus *da parte di ‘on the part of’ is derived by the theta-assigning properties of the two prepositions.11 Da parte di assigns a theta-role to its DP complement by itself, whereas da is not able to assign a theta-role inherently.12 Thus, when an external theta-role is present in the structure but not assigned to an argument position, as in the case of canonical passives, da transmits it to its complement. In active sentences, where the external theta-role is assigned to its corresponding argument, da is ruled out as its complement violates the Theta-Criterion (it remains theta-less). On the other hand, this situation is never produced by da parte di, as its complement is always theta-marked.

11 Maybe this asymmetry could be captured also in terms of Case-assignment properties (Yves Roberge, p.c.).
12 Again, as pointed out by Belletti (1982:8), when da can inherently assign a theta-role, as it happens in the case of da meaning ‘from’ (theta-role: source), the asymmetry disappears, and the prepositional phrase is fine in both active (Mario ha ottenuto la stessa risposta da tutti ‘Mario obtained the same answer from everybody’) and impersonal-passive SI constructions (Risposte del genere si ottengono sempre da tutti ‘Answers of this kind are always obtained from everybody’).
From the asymmetry highlighted by the prepositional phrase diagnostic, then, it appears that the external theta-role is assigned to an argument position in the case of impersonal-passive constructions, but not in the case of canonical passives. This claim contradicts Belletti (1982), Jaeggli (1986) and BJR (1989), who liken the Italian impersonal clitic SI to passive morphology. Further evidence for the structural contrast between canonical and SI passives in terms of external argument realization is presented in the next section.

2.2.1 How implicit are you, external argument?

As previously discussed, the external argument theta-role is present in both canonical and SI passives, as they allow (i) the insertion of adverbs compatible with such a theta-role, and (ii) thematic control of ‘purpose clauses’ (see (5) and (6) above).

In this section, however, I show that the external theta-role is assigned to an argument position in the syntax of SI passives, in contrast to canonical passives. The details of the syntactic analysis are outlined later on in the paper. Right now I concentrate on the tests providing evidence for this theta-role assignment.

Before introducing the relevant syntactic tests, a terminological clarification is in order. As anticipated above, I agree with Jaeggli (1986:611) in considering the term ‘implicit argument’ as inappropriate. However, together with Jaeggli, and for ease of exposition at this point in the discussion, I stick with the current usage (Roberts 1986, Chomsky 1986, BJ&R 1989) and adopt the term ‘IMP(licit) argument’ to refer to the external argument semantics (due to the external argument theta-role) detectable in canonical and SI passives (as shown in the previous section). The following tests show that IMP is syntactically realized only in SI passives.

Roberts (1986) identifies four tests which distinguish between IMP and PRO. In substance, these tests distinguish between an argument realized semantically but not syntactically (IMP) and an argument realized both semantically and syntactically (PRO). Only a syntactically projected argument (i) can be predicated (the so-called depictive secondary predication), (ii) can bind anaphors, (iii) can be a controller, and (iv) can be a controllee.

As pointed out by Stroik (1992: 132, fn.7), the predication test is not a reliable diagnostic. Although the test is usually thought to bring up a clear contrast between IMP and PRO as in (10), IMP can indeed be the subject of secondary predication, as (10’) shows (examples from Stroik, as cited above):

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13 Note that IMP for Jaeggli is nothing but the external theta-role itself which is realized on the passive suffix –en (1986:614), as he demonstrates that IMP cannot be identified with any empty category (in contrast to BJ&R who assume IMP to be an arbitrary PRO; a detailed discussion will follow later on). Thus, my position coincides with Jaeggli’s as far as the nature of the ‘implicit argument’ in passives is concerned (again: the implicit external argument is the external argument theta-role), but departs from his in identifying the locus of the external argument theta-role in the syntax of canonical passives (on the passive suffix –en, for Jaeggli, on a functional head for me).

The room was left IMP\(_k\) sad\(_k\)

They expected to PRO\(_k\) leave sad\(_k\)

That painting was painted IMP\(_k\) blindfolded\(_k\)

I can tell that this letter was written IMP\(_k\) [in a good mood]\(_k\)

This bank-job wasn’t done IMP\(_k\) alone\(_k\)

Italian presents the same situation: sometimes the prediction test reveals a contrast, as in (10) and sometimes it does not, as in (12):

11. a. canonical passive

*I voti sono stati contati attenti/allegri

the.m.pl vote.m.pl are.3pl been.m.pl counted.m.pl [attentive/cheerful].m.pl

‘The votes have been counted attentive/cheerful.’

b. SI passive

I voti si sono contati attenti/allegri

the.m.pl vote.m.pl SI are.3pl counted.m.pl [attentive/cheerful].m.pl

‘The votes have been counted/one has counted the vote attentive/cheerful.’

12. a. canonical passive

Le partite sono state vinte ubriachi

[the match].f.pl are.3pl been.f.pl won.f.pl [drunk].m.pl

‘The matches have been won drunk.’

b. SI passive

La partite si sono vinte ubriachi

[the match].f.pl SI are.3pl won.f.pl [drunk].m.pl

‘The matches have been won/one won the match tired.’

There seem to be too many factors to take into account to explain why predication is possible in (10’) and (12), such as the nature of the adjective involved, whether it can work adverbially and why it can do so. As such an explanation goes beyond the scope of the present paper, I simply follow Stroik (1992) and do not rely on this test.

The anaphor binding test reveals an interesting asymmetry between canonical passives and SI passives. A short digression on arguments with generic interpretation (impersonals) and anaphors thereof is in order here. English resorts to one, oneself and one’s in order to express an impersonal argument, an impersonal anaphor and an impersonal possessive modifier respectively. As shown in (13), the Italian impersonal counterparts are si, sé stessi and proprio (which agrees in number with the N it modifies).

13. a. Si ama sé stessi/ *loro stessi

SI love.3sg SE self.m.pl/ them self.m.pl

‘One loves oneself.’
b. Si fanno i propri/ *loro interessi
   SI do.3sg the.m.pl one’s.m.pl/ their interest.m.pl
   ‘One works for one’s own interests.’

As for the morphological analysis of such impersonal elements, Burzio (1986) assumes that they lack a person feature, while for Belletti (1982) and Cinque (1988) they have an unspecified person feature. I return to this in section 4.1.

In (14), the impersonal anaphor sé stessi expresses the goal argument in both passive constructions. The dative impersonal anaphor produces ungrammaticality within the canonical passive (14a), but is acceptable within the SI passive (14b). The same point is illustrated in (15) by the anaphoric possessive adjective.\(^{15}\)

(14) a. canonical passive
   *Certe delusioni sono prourate solo a sé stessi
   [such disappointment].f.pl are.3pl given.f.pl only to SE self.m.pl
   ‘Such disappointments are given only to oneself.’

   b. SI passive
   Certe delusioni si procurano solo a sé stessi
   [such disappointment].f.pl SI give.3pl only to SE self.m.pl
   ‘Such disappointments are given/ one gives only to oneself.’

(15) a. canonical passive
   *Quanti sacrifici sono fatti per i propri figli!
   [how-many sacrifice].m.pl are.3pl done.m.pl for [the one’s kid].m.pl
   ‘How many sacrifices are made for one’s own children!’

   b. SI passive
   Quanti sacrifici si fanno per i propri figli!
   [how-many sacrifice].m.pl SI do.3pl for [the one’s kid].m.pl
   ‘How many sacrifices are done/ one does for one’s own children!’

\(^{15}\) When a specific time reference, which enforces the requirement for a referential subject (Cinque 1988:542-ff.), is added to the sentences in (15), another kind of asymmetry between canonical and SI passive arises. The canonical passive improves to grammaticality, as in (i.a), and the contrast between the passive constructions now lies in the interpretation of the ‘implicit’ external argument. The generic (arbitrary) interpretation of the implicit argument of the canonical passive cannot include the speaker, while it can in the case of SI passive. The arbitrary external argument in (i.b) is thus interpreted as “unspecified set of people including the speaker (‘we’),” as sketched by Cinque (1988:542).

(i) a. canonical passive
   Quanti sacrifici furorò fatti per i propri figli, a quei tempi!
   [how-many sacrifice].m.pl were.3pl done.m.pl for [the one’s kid].m.pl in those times
   ‘How many sacrifices were done for one’s own children!’

   b. SI passive
   Quanti sacrifici si fecero per i propri figli, a quei tempi!
   how-many.m.pl sacrifice.m.pl SI did.3pl for [the one’s kid].m.pl in those times
   ‘How many sacrifices were done/one did for one’s own children!’

A further contrast between the two constructions arises when thematic versus argument control is taken into consideration. Jaeggli (1986:616-617, examples (69)-(70), here reported as (16)-(17)) shows that argument control is possible into passive infinitivals (16) whereas thematic control is not (17).

(16) a. John wants [PRO to be loved by everyone]
   b. Bill tried [PRO to be introduced to Mary]
   c. John persuaded Bill [PRO to be arrested by the KGB]

(17) a. The gifts were brought [to PRO impress the Indians]
   b. *The gifts were brought [to PRO be admired by the Indians]

In the case of thematic control, the implicit agent of the matrix passive can control into active infinitivals (17a); however, it cannot do so in passive infinitivals (in (17b), PRO is not intended to be interpreted as the gifts, rather as the implicit agent of the matrix passive). Again, the understood agent of the matrix passive clause is able to thematically control PRO in active infinitivals, but not PRO in passive infinitivals. PRO in this case is necessarily controlled by the subject of the matrix, the gifts, rather than by the understood agent of the matrix, the givers. Can the understood argument of a matrix canonical passive, and that of a matrix SI passive, control PRO in passive infinitivals? If it cannot, the understood agent under investigation can exert only thematic control: it thus is a semantic entity. If it can, the understood agent is argument-controlling PRO in the embedded clause, thus indicating that it has a syntactic status.

In (18a), the matrix is a canonical passive and the sentence is interpreted with the non-thematic subject of the passive main clause (‘the gifts’)—and not the understood givers—controlling PRO within the dependent infinitivals. In other words, it is an instance of thematic control. In (18b), on the other hand, where the matrix is SI passive, givers controls PRO. Thus, the understood external argument of SI passive controls into the passive infinitival as an argument.

(18) a. canonical passive
   I regali furono portati [per PRO essere ammirati [the gift].m.pl were.3pl brought.m.pl for PRO be admired.m.pl dagli Indiani]
   ‘The gifts were brought to be admired by the Indians.’

   b. SI passive
   I regali si portarono [per PRO essere ammirati dagli Indiani [the gift].m.pl SI brought.3pl for PRO be admired.m.pl by-the Indians]
   ‘The gifts were brought/one brought the gifts to be admired by the Indians.’

More evidence in this respect is provided by the examples in (19), where the embedded infinitivals are no longer ‘purpose clauses’ and thus no thematic control is available. The implicit argument of the matrix canonical passive (19a) is not able to control PRO in the
infinitival dependent clause, and thus the sentence is ungrammatical. This is, however, not the case for the implicit argument of the matrix SI passive in (19b).

(19) a. canonical passive
*I libri sono riposti negli scaffali [dopo PRO aver-li catalogati]
[the book].m.pl are shelved.m.pl after PRO have-them.m.pl classified.m.pl
‘The books are shelved after having classified them.’

b. SI passive
I libri si ripongono negli scaffali [dopo PRO aver-li catalogati]
[the book].m.pl SI shelf.3pl after PRO have-them.m.pl classified.m.pl
‘The books were shelved/One shelved the books after having classified them.’

What about the possibility of IMP being controlled by an argument of the matrix clause? The following examples show that the implicit external argument of the canonical passive cannot be controlled by the matrix subject. In (20a), ‘Luca was hoping that poems would be read aloud after dinner’, Luca cannot belong to the set of poem-readers, whereas it may in the case of SI passives (20b):

(20) a. canonical passive
Luca sperava che dopo cena fossero declamate poesie
Luca hoped.3sg that after dinner would-be.3pl read-aloud.f.pl poem.f.pl
‘Luca was hoping that poems would be read aloud after dinner.’

b. SI passive
Luca sperava che dopo cena si declamassero poesie
Luca hoped.3sg that after dinner SI would-read-aloud.3pl poem.f.pl
‘Luca was hoping that poems would be read aloud/that one would read poems aloud after dinner.’

To sum up, canonical passive constructions and impersonal-passive SI constructions have been compared with respect to the nature of the implicit external argument they both manifest (recall the agent-oriented adverbs and the thematic-control diagnostic). As the following table summarizes, only the impersonal-passive SI construction appears to have the external argument theta-role anchored to an argument position in the syntax, as anaphor-binding and argument-control tests reveal.

<table>
<thead>
<tr>
<th>external argument syntactically realized</th>
<th>canonical passive</th>
<th>impersonal-passive SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) predication test</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(ii) anaphor-binding</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>(iii) controller (argument control)</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>(iv) controller</td>
<td>*</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 2: External argument syntax diagnostics
Given that the external argument of impersonal-passive SI constructions appears to be present in the syntax, two questions arise: (i) where is the external argument projected, and (ii) what is it?

The first question is extremely intriguing because it apparently reduces to a paradox: where is the external argument projected in a construction which is apparently unaccusative under the relevant tests? As for the second question, let us assume that the external argument detectable in impersonal-passive SI sentences is SI itself. The question remains open: what is SI?

I believe that the right way to go in providing an answer to this question is to further investigate the nature of the impersonal-passive SI construction. As reported in the Romance linguistic literature, impersonal-passive SI constructions are constrained at the semantic level (the external argument must be human), and at the syntactic level (the full DP in the structure cannot be anything but 3rd person).

### 2.2.2 Semantic and syntactic restrictions

It is well-known in the literature on impersonal-passive SI constructions that the external argument must be interpreted as human. All other possibilities are ungrammatical (21). The same semantic restriction does not hold for the understood external argument of canonical passives, as shown in (22).

1. **Le macchine si sono distrutte**
   
   [the car].f.pl SI are.3pl destroyed.f.pl
   
   ‘The cars have been destroyed/one has destroyed the cars.’
   
   - a. da parte di Daniele ‘on the part of Daniele’
   - b. da parte dei massi precipitati sulla strada ‘on the part of the rocks that fell on the road’

2. **Le macchine sono state distrutte**
   
   [the car].f.pl are.3pl been.f.sg destroyed.f.pl
   
   ‘The new car has been destroyed.’
   
   - a. da Daniele ‘by Daniele’
   - b. dai massi precipitati sulla strada ‘by the rocks that fell on the road’

At the morphosyntactic level, on the other hand, one of most striking features of these constructions is the so-called ‘third-person constraint’, as the nominative object can only be third person (23a,b) (examples from Burzio 1986:49). This is not the case of the nominative object of canonical passives (24a,b).

---

16 This restriction is not valid only in Italian but also in Spanish impersonal-passive SI constructions (see, for instance, Cuervo 2003:200).
(23) a. I Rossi si invitano volentieri
[the Rossi].3pl SI invite.3pl willingly
‘The Rossis are invited/willingly invites the Rossis willingly.’

b. *Noi si invitiamo volentieri
[we].1pl SI invite.1pl willingly
‘We are invited/willingly invites us willingly.’

(24) a. I Rossi sono invitati volentieri
[the Rossi].3pl are.3pl invited.pl willingly
‘The Rossis are invited willingly.’

b. Noi siamo invitati volentieri
[we].1pl are.1pl invited.pl willingly
‘We are invited willingly.’

The ‘third-person constraint’ on nominative objects in Italian arises in impersonal-passive SI constructions and with the unaccusative class *piacere* (Anagnostopoulou 2003:308). As argued by Anagnostopoulou (2003: Chapter 5), the person restriction on nominative objects parallel the Person-Case Constraint (Perlmutter 1971, Bonet 1991) found in the context of ditransitives with phonologically weak direct and indirect objects (also known as the *me lui* constraint).

2.2.3 Word order

The comparison between canonical passives and impersonal-passive SI constructions ends with word order considerations. In both cases, the full DP (the nominative object) can appear pre- and post-verbally: this holds for imperfective as well as perfective predicates.

(25) a. I voti si scrutinano (stasera)
[the vote]m.pl SI count.3pl (tonight)
‘The votes are being counted/count tonight.’

b. (Stasera) si scrutinano i voti
(Tonight) SI count.3pl [the vote]m.pl
‘The votes are being counted/count the votes tonight.’

(25’) a. I voti si sono scrutinati (ieri)
[the vote]m.pl SI are.3pl counted.m.pl (yesterday)

b. (ieri) si sono scrutinati i voti
(yesterday) SI are.3pl counted.m.pl [the vote]m.pl
‘The votes have been counted/count has counted the votes yesterday.’
2.3 Interim summary

The main goal of the present work is to propose syntactic representations for canonical passives and impersonal-passive SI constructions which are able to derive all the properties outlined in Table 3 below.

<table>
<thead>
<tr>
<th></th>
<th>copular passive</th>
<th>impersonal-passive SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTERNAL ARGUMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• $\theta_{extA}$</td>
<td>$\checkmark$</td>
<td>$\checkmark$</td>
</tr>
<tr>
<td>• ext A</td>
<td>$*$</td>
<td>$\checkmark$</td>
</tr>
<tr>
<td>• semantic restriction</td>
<td>none</td>
<td>[+human]</td>
</tr>
<tr>
<td>NOMINATIVE OBJECT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• person restriction</td>
<td>none</td>
<td>3rd person</td>
</tr>
<tr>
<td>• order relative to V</td>
<td>per- and post-V</td>
<td>pre- and post-V</td>
</tr>
</tbody>
</table>

Table 3: Synoptic comparison

3. Theoretical assumptions

3.1 The syntax of argument structure

Consistent with Hale and Keyser’s (henceforth H&K) enterprise (1993, 1998, 2002), I assume argument structure to be syntactic. In particular, argument structure is realized in the lowest domain of syntax, what H&K call “(lexical)-syntax”. The syntactic approach to argument structure attempts to answer two questions: why the set of theta-

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17 The venire ‘to come’ auxiliary helps the eventive (non-stative) reading of the sentence. The stative character of the auxiliary essere ‘to be’ blurs the distinction between verbal and adjectival participle constructions, as this distinction in not morphologically encoded on the participles themselves in Italian. Thus, the passive auxiliary venire ‘to come’ is preferred by native speakers in order to avoid the confusion when a by-phrase is missing (by-phrases are allowed only with verbal passives, never with adjectival ones, and thus pre-empt the ambiguity).
As developed further by Borer (1994 and subsequent work), Harley (1995), Marantz (1997), Travis (2000), Nash (2002), Pylkkänen (2002) and Cuervo (2003) among others, l-syntax is finely layered. Although the model of argument structure I refer to is the product of a collective effort inspired by H&K’s vision over the years, the specific organization of the elements of argument structure used here is Cuervo’s (2003). I first introduce the elements and principles of the syntactic approach to argument structure and then outline the specific model.

First of all, H&K propose that an argument is introduced by a head, either as its complement or as its specifier. This view conforms with a compositional approach to verb semantics (also known as the neo-Davidsonian method)\(^\text{18}\), where verbs themselves describe eventuality types (actions, states, events proper) and “arguments are associated with their verbs via secondary predicates that denote general thematic relations like ‘agent of’, ‘theme of’, etc.” (Kratzer 2002:6).\(^\text{19}\) According to Kratzer (1993, 1996, 2002, 2003), however, there is a crucial asymmetry between external arguments, such as an agent, and internal arguments, such as a theme: while the former are associated to the event argument according to the neo-Davidsonian method, the latter are not. Kratzer proposes that this difference in composition derives the asymmetry between subjects and objects first noted by Marantz (1984).

There are three kinds of heads involved in the realization of the argument structure: heads introducing events, heads introducing DP arguments, and roots.

As proposed by H&K (1993), Harley (1995) and Marantz (1997), a verb is semantically and syntactically composed of a core lexical semantic element called a root—expressing either a property, or a state, or a manner, or an entity—and a functional head introducing the event argument proper of a verb, labelled \(v\) (little \(v\)).\(^\text{20}\) \(v\) denotes the type of eventuality (Bach 1967), and thus can be viewed as the syntactic layer responsible for \textit{Aktionsart} (see below for types of event introducers).

On the other hand, external arguments and dative arguments are introduced by specific functional heads.\(^\text{21}\) The external argument is licensed as the specifier of the head

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\(^{18}\) Traditionally, logicians viewed verb meanings as relations between individuals. Davidson (1967) claims that in this way predicates are only partially defined: the event argument must also be included in the computation of the predicate. Thus, in a sentence like \textit{We purchased those slippers}, the predicate \textit{purchase} must be analyzed as a three-place predicate, including the purchasee (\textit{those slippers}), the purchaser (\textit{we}) and the event of purchasing (\(e\)). Castañeda (1967) and Parson (1990 and earlier work) develop what has then been called neo-Davidsonian method (Dowty 1979), where verbs express eventualities only (e.g. purchase(\(e\))), and all other arguments are introduced by secondary predicates (e.g. agent(x)(\(e\)), theme(y)(\(e\))).

\(^{19}\) Kratzer (2002, 2003) discusses at length the asymmetry between external and internal arguments in terms of neo-Davidsonian method: while it is evident that external arguments are associated to the event argument via a secondary predicate, this does not seem to be the case of internal arguments.

\(^{20}\) The terminology adopted, i.e., root and \(v\), is Marantz’s.

\(^{21}\) Dative arguments are introduced as specifiers of Applicative heads (Pylkkänen 2002, Cuervo 2003) which can merge at different levels in the structure. When the Applicative head (henceforth Appl) establishes a relation between two individuals, so that the argument it introduces in specifier position is interpreted as Recipient, Source or Possessor of the argument it takes as its complement, Appl is assumed to merge under the root (Low Appl, Pylkkänen 2002). When, on the other hand, Appl denotes a relation between an event
Voice (Kratzer 1993, 1996, and later work) that takes the $v$+root complex as its complement. “Voice is special in that it defines a boundary after which no more participants can be added to the event described by the verb.” (Pylkkänen 2002:127). Voice is the edge of I-syntax; it then merges with T, the functional head in charge of computing agreement relations.

\[
\text{(27)} \quad \begin{array}{c}
\text{VoiceP} \\
\text{external arg} \\
\text{Voice} \\
\text{v+root}
\end{array}
\]

Note that what Kratzer (1996), Pylkkänen (2002) and Cuervo (2003) label as Voice corresponds to Chomsky’s (2000) $v$: the functional head that introduces the external argument and assigns accusative Case. The change from $v$ to Voice is a consequence of using $v$ for any functional head that is of verbal category, as proposed by Marantz (1997).

The nature of the event argument is directly encoded by the type of the functional $v$ head that introduces it (H&K 1993, Harley 1995). The literature often refers to these types of ‘flavors’ of $v$ (see for instance, Folli and Harley 2002, Arad 2002). In this paper I adopt the system elaborated by Cuervo (2003). Event arguments can be simple, that is single-headed, or complex, that is double-headed. Among the simple types it is possible to distinguish between dynamic events such as activities (instantiated by $v_{DO}$) and changes ($v_{GO}$), and stative events, such as states ($v_{BE}$).

\[
\text{(28)} \quad \begin{array}{ccc}
\text{three types of vs} & \text{three types of events} & \text{examples} \\
\text{$v_{DO}$} & \text{ACTIVITIES} & \text{dance, sweep, run...} \\
\text{$v_{GO}$} & \text{CHANGES} & \text{fall, go, die, grow...} \\
\text{$v_{BE}$} & \text{STATES} & \text{like, admire, lack...}
\end{array}
\]

On the other hand, causatives and inchoatives are bi-eventive structures, where a $v$ combines with another $v$. While the complex event structure is evident in analytical causatives such as make wash and make grow, it is detectable, even if not visible, in causative predicates such as transitive break, burn and close. In this respect, Cuervo’s model substantially differs from Folli and Harley (2002) and Arad (2002) which posess the existence of $v_{CAUSE}$.

and an individual, so that the argument it introduced as its specifier is interpreted as the Experiencer or the Ben(mal)efactive of the event it takes as its complement, Appl is assumed to merge under Voice and above the $v$+root complex (High Appl, Pylkkänen 2002). When Appl merges within bi-eventive structures such as causatives and inchoatives, it introduces a dative argument interpreted as affected (Affected Appl, Cuervo 2003). In the case of the causative structure Pablo le rompió la radio a Valeria ‘Pablo broke the radio on Valeria (Lit. Pablo broke Valeria the radio),’ “The dative DP is applied to the end state of the object DP [...] the dative DP is the ‘possessor’ of the end state of the object.” (Cuervo 2003:121).

\footnote{\text{Linguists in favor of a bi-eventive analysis of causatives have often relied on adverb modification as a diagnostic for a structure where a causing event embeds a caused state (see, for instance, Fodor 1970, Hale and Keyser 1993, Higginbotham 1997). As discussed in Cuervo (2003:§3.1.1.3), the adverb ‘almost’ is a good candidate for testing the bi-eventive structure of causatives, as it can modify both activities (causing event) and state predicates (caused state). Given this peculiarity, ‘almost’ is predicted to give rise to an ambiguous predicate modification only in complex structures like causatives.}}
(29) possible combinations possible complex events examples

\[ v_{DO} + v_{DO} \] CAUSATIVES \[ \text{make wash} \]
\[ v_{DO} + v_{GO} \] CAUSATIVES \[ \text{make grow} \]
\[ v_{DO} + v_{BE} \] CAUSATIVES \[ \text{tr. break, burn, close} \]
\[ v_{GO} + v_{BE} \] INCHOATIVES \[ \text{intr. break, burn, close} \]

Roots, functional heads introducing event arguments, and those introducing DP arguments are the atoms of argument structure.

The two structural relations admitted among those elements are complement and specifier (H&K). Moreover, some combinatorial restrictions imposed by the event argument introducers apply. In the model elaborated by Cuervo, in fact, the labels on \( v \)--DO, GO and BE---correspond not only to event types, but also to syntactic types. While \( v_{DO} \) is compatible with an external argument, and thus corresponds to both transitive and unergative configurations, \( v_{GO} \) and \( v_{BE} \) are inherently unaccusative.\(^{23}\)

Let us now illustrate the model introduced so far by considering one predicate at a time. Cuervo conforms to Nash (2002) and analyzes canonical transitive as causatives. As Nash points out, the verbal model \( v + \text{root} \) can derive in structural terms the distinction between canonical and non-canonical objects discussed by Levin (1999). In particular, non-canonical objects (objects of activities, such as the floor in Leslie swept the floor (Levin 1999)) are semantically licensed by the lexical meaning of the verb itself. In Nash’s terms this is equal to being licensed as the complement of the root (30a). Canonical objects, on the other hand, are licensed twice: by the lexical meaning of the verb and also by the event structure of the predicate. Prototypical canonical objects are effected patient (as in write a letter) consumed patient (as in eat an apple) and affected patient (as in touch a cat), where ‘effected’, ‘consumed’ and ‘affected’ refer to a result, that is an element of event structure. In this sense Nash proposes that canonical objects are licensed by the \( v + \text{root} \) complex in Spec,\( v \) as in (30b).

\(^{23}\) Notice however that, in order to maintain the asymmetry between external and internal arguments both semantically and syntactically, as in Kratzer (1993 and subsequent work), Cuervo (2003:19, footnote 2) must assume that the contrast among \( v \)s with respect to the external argument parameter is encoded as (in)compatibility with the functional head Voice, as illustrated in (i.a). However, the types of \( v \) differ without resorting on Voice (i.b).

(i) a. \[ \text{VoiceP} \]
\[ \text{ext arg} \]
\[ \text{Voice} \]
\[ v_{DO} \]
\[ v_{DO} \]

b. \[ v_{DO} \]
\[ \text{ext arg} \]
\[ v_{DO} \]
\[ v_{GO} \]
\[ v_{BE} \]

In the following sections, I shall argue for the possibility of both Spec,\( \text{VoiceP} \) and Spec,\( v_{DO} \), as merging sites for external arguments. \( v_{DO} \) is not transitive via Voice as in (i.a); it is transitive by itself.
For Cuervo, thus, canonical transitive predicates are bi-eventive, as illustrated in (31).

(31) *Valeria broke the radio*

However, transitive activity verbs, which display non-canonical objects, look as follows:

(32) *Valeria swept the floor*

In unergative activity predicates, v_DO takes the bare root, rather than the root phrase, as its complement.

(33) *Valeria danced*

3.2 Unaccusative syntax

In syntactic terms, to be unaccusative means to lack an external argument. In terms of the syntactic atoms introduced above, this would imply that an unaccusative structure lacks the external-argument introducers, that is, v in Chomsky’s terms, or Voice in Kratzer’s terms.
However, it has been recently proposed that \( v/Voice \) is also present in unaccusatives, as a defective functional head (see Embick 1997, 1998, 2004). \( v/Voice \) is defective since it lacks the property that enables it to (i) syntactically license the external argument as its specifier, and (ii) to assign accusative Case. \( v/Voice \) is thus assumed to be the locus of Burzio’s Generalization (henceforth BG). In phrase-structural terms the defectiveness of the functional head translates as the inability to license a specifier. In this scenario, even if the external argument theta-role (external argument semantics) is present on \( v/Voice \), as in the case of passives, it cannot be assigned to the external argument in Spec,\( v/Voice \), as this position is not projected. As predicted by BG, then, accusative Case cannot be assigned in this configuration.

The argument in favor of assuming that \( v/Voice \) is present, but defective, in unaccusative predicates, is twofold. On the one hand, \( v/Voice \) may host other semantic properties independently from the presence/absence of the external argument (its specifier). As Alexiadou and Anagnostopoulou (henceforth A&A, 2004:119) extract from the relevant literature (Harley 1995; Collins 1997; Marantz 1997; Embick 1998 and 2004; Arad 1999; Travis 1999; Alexiadou 2001), \( v/Voice \) may bear “features related to eventivity” and “features related to the licensing of a manner component (manner adverbs).” On the other hand, unaccusatives share those semantic properties with transitives, and thus if \( v/Voice \) is present in transitives, it should also be present in unaccusatives. “In this approach, the difference between transitives, passives, reflexives, and unaccusatives is analyzed in terms of differences in the feature specification of \( v \) and the presence or absence of an external argument” (A&A, ibidem). Embick (1998 and 2004), for instance, shows that the morphological syncretism of passives, unaccusatives and reflexives in Modern Greek can be derived as a reflex of the common unaccusative syntax, the structural core they share.

Following this system, I therefore assume that a functional head bears the semantics related to a given argument – that is, its theta-role and any relevant semantic correlate – and can be present in the syntax even if it does not project a specifier, site where the argument itself is merged. When a specifier-less functional head is included in the structure, it is present for semantic reasons.

The diagrams in (34) outline the model. An unaccusative structure corresponds to a defective, i.e., specifier-less, \( v/Voice \). The external argument theta-role (\( \theta_{extA} \)) is optional (present in passives, as claimed here, but not in other unaccusative predicates) and therefore in brackets. In the transitive structure, \( \theta_{extA} \) is not optional and is assigned to the corresponding argument.\(^{24}\) This non defective \( v/Voice \) assigns accusative Case to the DP object.

---

\(^{24}\) The way I assume theta-roles to be assigned is not relevant for the purpose of this work.
According to Larson (1988) and Baker (1998), theta-roles are ordered by a template, where the theta-role introduced by the higher verbal-phrase shell (here v/Voice) is the Agent. Following such a convention, Embick 2004 and A&A 2004 label the \( \theta_{\text{extA}} \) in (34a,b) as Agent. I prefer to refer to such a theta-role in a neutral fashion by calling it ‘external argument theta-role’ (\( \theta_{\text{extA}} \)), or ‘event-originator theta-role’. In the next section, in fact, I argue for two distinct external-argument introducers, one sensitive to the feature [+human], and the other not, based on adverbial distribution patterns. In this split hypothesis, the label ‘Agent’ fits only [+human] event-originators.

### 3.3 Agentive and manner features

Let us concentrate on the semantic features [agent] and [manner] which have been ascribed to v/Voice, the head introducing the external argument. The presence of those semantic features within the functional structure of verbs can be detected through adverbial distribution tests (Alexiadou 1999, A&A 2004). As proposed by Travis (1988), in fact, the verbal domain hosts the two relevant classes of adverbs, namely, the agent-sensitive adverbs and the true manner adverbs (right-hand column of Table 4 below).

<table>
<thead>
<tr>
<th>Travis 1988</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Licensed in the inflectional domain</strong></td>
</tr>
<tr>
<td>• subject-sensitive adverbs</td>
</tr>
<tr>
<td>• epistemic adverbs</td>
</tr>
<tr>
<td>• event-modifying adverbs</td>
</tr>
</tbody>
</table>

*Table 4: Travis’ (1988) adverb taxonomy*

Some examples of agent-sensitive the true manner adverbs are listed in (35) and (36) respectively.

(35) a. **agent-oriented adverbs:**
   e.g., intenzionalmente ‘intentionally’, deliberatamente ‘deliberately’, di proposito ‘on purpose’

b. **agentive manner adverbs:**
   e.g., rudemente ‘rudely’, attentamente ‘attentively’, intelligentemente ‘cleverly’
Note that I distinguish between true manner adverbs above, which modify an event, and the inherent manner/instrumental component of certain verbs. According to the syntactic approach to argument and event structure adopted here, true manner adverbs make reference to the level of event-introducing heads, whereas the inherent manner/instrumental component is to be ascribed to the root level.

What I aim to define through the next examples is the distribution of those verbal-domain adverbs relative to the [+human] feature of the external argument. The sentences in (37) and (38) show that when the external argument introduced by a prepositional phrase is marked as human, both agent-sensitive and pure manner adverbs are possible.

(37) human external argument with canonical passives
   a. Le macchine sono state distrutte di proposito da Luca
      ‘The cars have been destroyed on purpose by Luca.’
   b. Le macchine sono state distrutte completamente da Luca
      ‘The cars have been destroyed completely by Luca.’

(38) human external argument with SI passives
   a. Le macchine si sono distrutte di proposito da parte di Luca
      ‘The cars have been destroyed on purpose on the part of Luca.’
   b. Le macchine si sono distrutte completamente da parte di Luca
      ‘The cars have been destroyed completely on the part of Luca.’

On the other hand, when the external argument is not human (an option available only with canonical passives), only pure manner adverbs are allowed (39).

(39) non human external argument
   a. Le macchine sono state distrutte *intenzionalmente dalla grandine
      ‘The cars have been destroyed intentionally by the hail.’
   b. Le macchine sono state distrutte completamente dalla grandine
      ‘The cars have been destroyed completely by the hail.’

This set of facts could be accommodated by making the structural hypothesis in (40). Basically, there is only one functional head responsible for the introduction of the external argument, and depending on its semantic specification as [human], which is optional, the agentive semantics follows. When the external argument is human, both manner and agent-sensitive adverbs are allowed. When the external argument is not specified for such a semantic feature, on the other hand, only manner adverbs are possible.

25 Verbs such as cut, carve and crush, for instance, are analyzed as inherently specifying “the means or manner involved in bringing about the action described by that verb” (Levin and Rappaport Hovav 1995:103).
However, there are two arguments against clustering manner and agentivity on a single functional head. First, when agentive and manner adverbs co-occur as in (41), the former always take scope over the latter; in this specific case, then, what is done on purpose is to destroy the car completely.

(41) Le macchine sono state (completamente) distrutte (completamente) di proposito
    ‘The cars have been completely destroyed on purpose.’
    *The cars have been completely destroyed and this was done on purpose

The unordered clustering of agentivity and manner on v/Voice cannot predict any scoping. To account for the scope facts in (41), the functional head responsible for the agentive semantics should be assumed to be higher in the structure than the head bearing the [manner] feature.

The second argument comes from Greek event nominalizations (Alexiadou 2001 as cited in A&A 2004:132), which are compatible with manner adverbs but not with agent-sensitive ones:

(42) a. I katastrofi ton arhion prosektika
    the destruction the documents.gen carefully
b. *I katastrofi ton arhion epitides
    the destruction the documents.gen deliberately

Greek “process nominals present evidence for the existence of a verbal domain, which allows for the occurrence of adverbs and excludes adjectives” (Alexiadou 1999:83). If manner and agentivity were to be present on the same functional projection, the availability of the feature, [manner], would predict the presence of the latter one as well. As (42) shows, this is not the case, and thus two distinct functional projections must be assumed (see next section for details).

The distributional and scoping facts illustrated in this section are summarized in the following table:

<table>
<thead>
<tr>
<th></th>
<th>agentivity</th>
<th>manner</th>
</tr>
</thead>
<tbody>
<tr>
<td>human event-originator</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>¬ human event-originator</td>
<td>*</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Table 5: agent vs. manner*
3.4 External argument introducers

Assuming that agentive and manner features are introduced by two different event-introducing functional heads means assuming two different merging sites for external arguments.

The proposal may appear controversial, but in the next section, dedicated to the syntactic analyses of canonical passives, impersonal-passive SI constructions (agreement between the verb and the DP object), impersonal SI constructions (no agreement between verb and DP object), and middles, it will be shown that such a layered external-argument introducing domain can capture the differences among all the above constructions in a principled manner. Let us first describe the system.

When the event-originator, that is the external argument, is human, it is assigned its theta-role by a functional head which I conventionally label Voice (but it could be also called ‘\(v_{agent}\)’), which is the locus of the agentive feature. When the external argument is not human, it is theta-marked by a different event-introducing head, which I label \(v\) (but it could also be called ‘\(v_{manner}\)’), which is the locus of the manner feature. Moreover, as we saw, these two heads are hierarchically organized with respect to each other, with Voice taking scope over \(v\), since the presence of Voice (detected through agent-sensitive adverbs) implies \(v\) (detected through manner adverbs), but not the other way around.

Transitive constructions are thus depicted as in (43). The external argument is introduced in the specifier position of the head responsible for manner features, \(v\), when this is of the right syntactic type (that is, DO, which is syntactically transitive). \(v\) can theta-mark all semantic types of external argument except the human ones. In the latter case, Voice must be merged, as \(v\) cannot satisfy the theta-assignment requirement. Therefore, the external argument must move from Spec,\(v\) to Spec,Voice, where it becomes theta-marked (the copy left behind is in grey shading in (43b)). The head assigning the theta-role to the argument in its specifier (either \(v\) or Voice, depending on the relevant semantics) is also the head assigning accusative Case to the DP object down within the verbal domain.\(^{26}\)

(43) a. non human external argument  

\[
\begin{align*}
&vP \\
&\text{extA} \\
&\theta_{ext} \\
&[\text{manner}] \\
&[\text{Acc}] \\
&\text{DP}_{\text{obj}}
\end{align*}
\]

Recall that, following Embick (1997, 1998, 2004), I assume that unaccusative predicates and unaccusative constructions (such as passives) lack the external argument projection without lacking the external-argument-introducing head, as this head appears to

\(^{26}\) As for the DP object position, recall that I follow Nash (2002) and Cuervo (2003).
be present and bears semantic features (see section 3.2). The structure proposed for unaccusative predicates are given in (44), there \( v \) is of the unaccusative syntactic type GO or BE.

(44)  

\[
\begin{array}{ll}
\text{a. unaccusative predicate: } & \neg \text{human} \\
\text{b. unaccusative predicate: } & \text{human} \\

\end{array}
\]

I analyze passives as unaccusative constructions retaining the external argument theta-role (the known ‘understood’ or ‘implicit’ external argument):

(45)  

\[
\begin{array}{ll}
\text{a. canonical passive: } & \neg \text{human} \\
\text{b. canonical passive: } & \text{human} \\

\end{array}
\]

In terms of the combinatory options of the two event-introducing heads, transitive (44b) and unaccusative (45b) fill the cells (a) and (d) in table 6 respectively. However, the system predicts also options (b) and (c). What about them?

<table>
<thead>
<tr>
<th></th>
<th>+Spec Voice</th>
<th>-Spec Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td>+Spec v</td>
<td>(a) ✓</td>
<td>(c) ?</td>
</tr>
<tr>
<td>-Spec v</td>
<td>(b) ?</td>
<td>(d) ✓</td>
</tr>
</tbody>
</table>

Table 6: combinatorial possibilities

In principle, options (b) and (c) should be impossible, because the syntactic type of the lower ever-present event-introducing head should not be contradicted by the syntactic configuration of the higher functional head. Option (b) would amount to an unaccusative predicate to which a human external argument is added. Since unaccusative predicates lack an external argument by definition, option (b) is impossible \textit{a priori}.

Option (c) translates as a transitive predicate showing unaccusative patterns only when the external argument is interpreted as human. I claim that this option is realized by impersonal-passive SI constructions. The systematic survey of the syntactic properties of impersonal-passive SI constructions has in fact revealed a paradox: those constructions behave like unaccusatives (under the \textit{ne}-cliticization test), while they appear to show an external argument syntactically present (under the binding and argument control tests). Recall that the syntactic activity of an external argument, as proved for impersonal-passive SI constructions, is not derivable from an analysis which equates SI to passive morphology (that is, ‘absorbing external argument theta-role and accusative Case’; Belletti 1982, Cinque 1988). Moreover, from the present syntactic proposal, which is
outlined in detail in the next section, the third person constraint and the human constraint on impersonal-passive SI constraint (presented in 2.2.2) follow automatically.

4 Deriving impersonal-passive SI constructions

The diagram in (46) presents option (c) of Table 6, where a specifier-less Voice head, bearing the semantic feature [human] and the external argument theta-role, takes as its complement a transitive event-introducing head v_{DO}.

\[
\begin{array}{c}
\text{VoiceP} \\
\text{Voice} \\
\theta_{ext} \\
[\text{human}] \\
\rightarrow \text{SI} \\
\rightarrow v_{DO} \\
[\text{manner}] \\
\rightarrow \text{DPobj}...
\end{array}
\]

As (46) shows, I follow D’Alessandro (2004) in arguing that SI is merged as an external argument (for details on the introducing-head proposed by D’Alessandro see later on). Because SI is referential (contra Dobrovie-Sorin 1998)—it refers to ‘group of people’ (Chierchia 1995), it needs to be considered an argument. Also, since SI is a clitic, after having taken part in valuing and matching operations, it must move to the Probe.27

Such a claim conflicts with the traditional assumption about Romance SI, namely that SI is a clitic base-generated in a non-argumental (A-bar) position within the inflectional domain (Belletti 1982, Cinque 1988, for instance). According to this traditional analysis, by virtue of its anaphoric nature, SI in INFL can always bind either an empty category in object A-position (instances of accusative SI, according to Dobrovie-Sorin 1998:400)28 or an empty category in subject A-position (instances of nominative SI, as in Dobrovie-Sorin 1998:403).29

---

27 Chomsky (1995:249) proposes to consider clitics as maximal projections (in their theta-position) and heads (when they are then hosted to a functional head) at the same time.

28 French illustrates Romance in Dobrovie-Sorin (ibidem):

(i) a. Jean se lave e
b. Le grec se traduit e

c. Il s’est traduit trois romans

d. La branche se cassée e

e. Jean s’est souvenu e de Marie

(i) a. ‘Jean washes himself.’ [reflexive se]
    b. ‘Greek translates easily.’ [middle se]
    c. ‘Three novels were translated.’ [passive se]
    d. ‘The branch broke.’ [ergative se]
    e. ‘Jean remembered Marie.’ [inherent se]


(i) a. Non si, e è mai contenti

not SI is ever satisfied
‘One is never satisfied.’

b. Spesso si, e è traditi dai falsi amici

frequently SI is betrayed by false friends
‘One is frequently betrayed by false friends.’

c. In questa università si, e studia le materie letterarie

in this university SI studies the humanities
‘In this university one studies the humanities.’
Considering SI to be an argument itself amounts to making it directly involved in the computation with the functional heads Voice and T, and this analysis derives the person constraint in SI constructions (Anagnostopoulou 2003 and reported below; also adopted by D’Alessandro 2004). The theoretical tools which allow SI to be treated this way are Distributed Morphology (Halle and Marantz 1993) and a feature-geometric theory of pronouns and clitics (Déchaine and Wiltschko 2002). 30

4.1 What is SI

As pointed out by Burzio (1986:80-81) and Cinque (1988:537), SI should be considered a pronominal clitic not specified for any person feature, as it is incompatible with third person pronouns (47). Rather, si is assigned the third person feature by default.

(47) a. Si ama *suoi/*loro/propri eroi
   SI love.3sg the.m.pl 3sg.poss/3pl.poss/one’s heroes
   ‘One loves one’s own heroes.’

   b. Si è contenti quando ci scrivono
   SI is happy.pl when (they) to-us write
   ‘One(=we) is happy when they write to us.’

I agree with Burzio’s (1991:399) claim that “reflexives are distinct from pronouns except for impersonal ones.” According to Burzio, neither reflexives nor impersonals have any phi-feature specification. Reflexives inherit those features from their binder (a c-commanding DP), while impersonals are assigned a default value, a third person feature. For impersonals, Burzio (1991:406) further postulates a semantic feature specification for first person plural, given the agreement facts shown by (47b). 31

I take the position that there is no semantic feature specification. I follow Sauerland (2003) in considering certain ‘surface’ pronominal specification as resulting from the pragmatic maxim Maximize Presupposition (Horn 1972, Grice 1989, Heim 1991), i.e., “Presuppose as much as possible”. To presuppose a first person means to comprise first, second and third person (it thus appears that Italian has a 1st>2nd>3rd Person Hierarchy; the corresponding geometry (Harley and Ritter 2002) is given in (48a)). To presuppose plural means to imply singular, with singular being the unmarked value for number (48b).

30 Déchaine and Wiltschko (2002) elaborate the pronoun taxonomy proposed by Cardinaletti and Starke (1999), strong- vs. weak- vs. clitic-pronoun, in terms of the internal structure of what they call phi-pronouns. See Déchaine and Wiltschko for details. An exhaustive feature-geometric analysis is beyond the scope of this paper.

31 As argued by Chierchia (1995), impersonal SI is an indefinite, whose referentiality value corresponds to ‘a group of people’. As an indefinite, it alternates between a (quasi-)universal (no time reference) and a (quasi-)existential reading (specific time reference) (Cinque 1988, Chierchia 1995). The latter reading enforces the inclusion of the speaker (inclusive SI). For a discussion of this issue, see D’Alessandro (2004, Chapter 5).
I adopt Déchaine and Wiltshco’s (2002:438) proposal for clitics as bare phi-features lacking a maximal projection (49c):

I adopt Déchaine and Wiltshco’s (2002:438) proposal for clitics as bare phi-features lacking a maximal projection (49c):

Zooming in onto clitics, the contrast to be captured is between clitics underlyingly specified as third person (third person clitics) and a clitic unspecified for person (SI, as in Burzio 1986, 1991). I assume $\phi$ to be a hierarchically organized structure, rather than a bundle of features, where proper features (in square brackets) are dominated by organizational nodes (such as $\pi$ for person and # for number, which attaches to a referential root, omitted here). Assuming underspecification, unmarked features are not specified in the structure but are inserted as default only at PF: this is the case for third person and singular. Thus, third person clitics present the nodes $\pi$ and #, the latter of which may be further specified for plurality. SI, on the other hand, consists of the bare person node only.

4.2 Derivation

The structure assumed in (46) is unaccusative in that Voice lacks a specifier, which cannot then assign the external argument theta-role in the canonical position, that is in Spec,VoiceP.

In the derivation I propose, I assume that $\pi$/SI in Spec,$v_{dp}$P receives the external argument theta-role from Voice and is thus assigned accusative Case by the same head, even if there is no way of detecting accusative Case on it. In other words, $\pi$/SI, by being the argument closest to the functional head Voice, leaves the deeper object DP caseless.32

32 In a canonical transitive with a human external argument (see (43b)), the copy of the external argument in Spec,$v_{dp}$P does not block the assignment of accusative Case to the object.
The computation driven by Voice within the verbal domain is completed; Voice does not project a specifier position, as the syntax of those constructions is unaccusative, and now T, the functional head of the inflectional domain, merges. Because of the missing specifier, Voice does not constitute a phase, as it has no edge, and thus T can probe inside the verbal domain. I assume that T probes separately for person and number (Chomsky 2000, Anagnostopoulou 2003).

The present analysis follows Anagnostopoulou’s (2003:308) proposal to derive the third person restriction on nominative objects and the Person-Case constraint found in clitic sequences through the same computation. In both cases, a functional head probing on two separate cycles for person and number finds a defective argument, such as a clitic (recall Déchaine and Wiltchko’s (2002) geometry in (49)), followed by a full argument DP. On the person cycle, the functional head F matches with the clitic, which then obligatorily cliticizes to F. On the number cycle, with the person intervener out of the way, F matches and values the number features on the full DP, which is then assigned case by F as a reflex of the agree operation (Chomsky 2000). As suggested by Anagnostopoulou, the difference between the person restriction on nominative objects and the Person-Case constraint lies in where the intervening argument matches its person feature: with T in the former and with v in the latter case.

The diagram in (52) schematizes the derivation of the person constraint within impersonal-passive SI constructions, that is, a person restriction on the nominative object: the probing head is, in fact, T. π/SI, which has been case-assigned and theta-marked by Voice (recall (51)) is the intervener. T probes for person and matches with the person node π. At PF, this minimal (node) match is implemented by a default third person feature. Thus, π/SI matching with T allows only third person verb agreement in those constructions (and the third person constraint is derived). Again, π/SI is displaced by cliticizing to the probe T. On the second probing cycle, T matches and values its number features with the DP object, which thus determines the number inflection on the verb. As a result of agreeing with T, the DP object is assigned nominative Case in Spec,TP, thus satisfying the EPP. For ease of illustration, in the following diagram I omit the details of the operations which took place underneath VoiceP (see (51)). The copies of moved elements are in grey shading.

---

33 For an analysis of the Person-Case constraint along the same lines as Anagnostopoulou (2003), see Bejar and Rezac (2003).
34 As pointed out by Bejar and Rezac (2003), the displacement of the intervener is attained through its cliticization onto the Probe in Romance languages and in Greek (see references therein).
Given that the nominative object can appear both pre- and post-verbally, I assume that the EPP requirement on T is weak.\textsuperscript{35}

D’Alessandro (2004) proposes an analysis of impersonal-passive SI constructions derivationally identical to the one outlined here. However, she introduces the argument \textit{si} in the specifier position of an aspectual head (E\textsubscript{2}) intervening between a specifier-less \textit{v} (thus unaccusative in the same sense as assumed here) and the lower VP. In other words, we assume the same structure (intervening SI) and derivation, but with different functional heads responsible for the introduction of SI:

\begin{enumerate}
\item D’Alessandro (2004)
\begin{enumerate}
\item \([\text{TP Spec,TP T} [\text{vP} \text{ [E2P } \text{ si } \text{ E2 } \text{ [VP ...DPobj...]}]]]\)
\item \([\text{TP Spec,TP T} [\text{VoiceP Voice [vDOP si} \text{ vDO [vBEP DPobj } \text{ vBE \text{ root]}]]]\]
\end{enumerate}
\end{enumerate}

For D’Alessandro E\textsubscript{2} is what distinguishes between impersonal passive (showing V-Obj agreement) and impersonal-active (no V-Obj agreement) constructions, as the former are accomplishments (complex event structure: +E\textsubscript{2}P) and the latter activities (simple event structure: -E\textsubscript{2}P). I rather argue that this contrast (which D’Alessandro correctly reveals) can be accounted for without resorting on the aspectual head E\textsubscript{2}. The aspectual differences between impersonal-passive and impersonal-active SI constructions can be derived by analyzing the DP object and Subject-of-Result (i.e., as merged in the specifier position of a result state phrase, Borer 1998; see (53b)) in the former but not in the latter case (see structures in (54) and (55)). This assumption correctly groups the impersonal-passive SI with the canonical passive, with respect to eventuality type specification: they are both sensitive to tests discriminating accomplishments. I assume that the nominative DP of the impersonal-passive SI construction is merged in the specifier of a result state phrase headed by the event-introducing head v\textsubscript{be} (54), and the

\textsuperscript{35} I am aware this is not an adequate explanation, but for the time being, I stick with it. However, it is interesting to note that whereas impersonal-passive SI constructions allow a free pre-/post-verbal order, the homophonal reflexive constructions strictly require their single DP to appear pre-verbally. Binding requirements may be responsible for this asymmetry (recall Burzio (1991), here in fn. 23). How do we derive those different binding requirements? Alboiu, Barrie and Frigeni’s (2004) proposal for a movement analysis of derived reflexives in Romance may offer an answer.
nominative DP of canonical passives in the specifier of a result state phrase headed by the participial morpheme EN (55).36

(54) VoiceP
  \[\pi/\text{si}\]
  \[\text{vDO}^P\]
  \[\text{vBE}^P\]
  \[\text{DP}_{\text{obj}}\]
  \[\sqrt{\text{root}}\]

(55) vBE/GO^P
  \[\text{EN}^P\]
  \[\text{DP}_{\text{obj}}\]
  \[\theta_{\text{intA}}\]
  \[\text{EN}\]
  \[\sqrt{\text{root}}\]

Impersonal-active SI constructions are to be considered activities (see tests in D’Alessandro 2004) as they are mono-eventive structures and the DP object is not introduced as a Subject-of-Result.

In contrast to D’Alessandro (2004), I pursue the idea of a layered external argument introducing domain where the split between manner and agentivity seems to derive the semantic restriction on impersonal-passive SI construction and the relationship of this with canonical passives and middles.

5 Deriving canonical passives

As reported in Table 2, while impersonal-passive SI constructions manifest their ‘implicit’ or ‘understood’ external argument both semantically and syntactically, canonical passives retain it only semantically. The unaccusative configuration I propose for canonical passives is presented in (45a,b), here repeated as (56):

(56) a. canonical passive: ¬human b. canonical passive: human

\[\text{vP}\]
\[\theta_{\text{extA}}\]
\[[\text{manner}]\]
\[\text{vP}\]
\[\theta_{\text{extA}}\]
\[[\text{human}][\text{manner}]\]

36 Following Cowper (1995), the morpheme EN in passive and perfect participials is a tense feature, more precisely, a past tense feature. The difference between perfects and passives lies in the merging position of EN. In perfect constructions, EN is a T head which takes a VP as its complement. The full TP\text{EN} is then merged as the complement of v. In the passive construction, on the other hand, EN incorporates with the V (‘it might be argued that the [past] feature of EN can be seen in the sense of completion normally associated with passive constructions. The semantic effect of EN in passives has thus to do with aspect, the internal structure of events, rather than tense, the arrangement of events in time’ (Cowper, 1995:11).)
The double option in (56) signifies the absence of any human constraint for canonical passives. Furthermore, canonical passives are not subject to the third person constraint either. According to all the computational assumptions introduced in the previous section, no third person constraint means no defective intervener between T and the DP object. Thus the verbal inflection reflects an agree operation between T and the DP object for both person and number feature. As the result, the DP object is assigned nominative Case. Given the word order facts, I view the EPP requirement as weak in the case of canonical passives as well. Again, for ease of illustration, I abstract from what is shown in detail in (56) above.

\[(57)\]

6 Deriving impersonal active SI constructions

In order to define the syntactic structure for impersonal-active SI constructions, it is necessary to subject them to the same diagnostics used for canonical and SI passives. As the sentences in (58a,b) reveal, impersonal-active SI constructions manifest external argument semantics, i.e. the presence of an external argument theta-role. Those constructions are limited to human agents like impersonal-passive ones, and therefore the external argument theta-role sits on the functional head Voice, which bears the semantic feature [human].

\[(58)\]

a. agent-sensitive adverbs
   Si legge i giornali volentieri
   SI read.3sg [the newspaper].m.pl willingly
   ‘One reads the newspaper willingly.’

b. purpose clauses (thematic control)
   Si legge i giornali [per PRO rimanere informate]
   SI read.3sg [the newspaper].m.pl [to PRO keep informed.f.pl]
   ‘One reads the newspaper to keep informed.’

Moreover, similarly to impersonal-passive SI constructions, and in contrast to canonical passives, the external argument appears to be syntactically realized.
(59)  
\[(59)\]
  \(a.\) anaphor-binding  
  Spesso in estate, si annaffia le piante ai propri vicini  
  ‘Often, in the summer, one waters the plants for one’s own neighbours.’

\(b.\) argument control  
Si legge i giornali [prima di PRO, cominciare a lavorare]  
‘One reads the newspaper before starting to work.’

In contrast with both canonical and SI impersonal-passives, which are available only for transitive verbs, the impersonal-active SI construction is fine with unergative (60a) and unaccusative (60b) verbs as well.

(60)  
\[(60)\]
  \(a.\) Oggigiorno si cammina troppo poco  
  ‘Nowadays one walks too less.’

\(b.\) Si arriva spesso in ritardo  
‘One often arrives late.’

In order to compare impersonal-active and impersonal-passive SI constructions, in the present paper I focus on the transitive option. As reported in the relevant literature, the most evident difference between the two is that in impersonal-active SI constructions accusative Case is assigned to the DP object:

(61)  
\[(61)\]
  \(a.\) Si accusò i colpevoli  
  ‘One accused them.’

\(b.\) Li si accusò  
‘One accused them.’

Accusative case on the object implies a non-defective, active, Voice head. Recall that building on Embick’s model (1998, 2004), non-active diatheses are considered here as involving defective, specifier-less, external-argument-introducing head(s). Voice assigns the theta-role it bears to the external argument \(\pi/\text{SI}\) which has moved to Spec,\(\text{Voice}\) from Spec,\(\text{v}\_\text{DO}\) (its merge position) in order to satisfy the theta-criterion. Recall from section 3.2

\[37\] Impersonal-active SI constructions with transitive verbs (i.a) thus can be passivized, as shown in (i.b):

(i)  
\[(i)\]
  \(a.\) Si colpisce la palla con forza  
  ‘One strikes the ball with strength.’

\(b.\) Si è colpiti dai poliziotti/dalla tempesta  
‘One is struck by the policemen/by the storm.’
that this is what I assume to be the usual derivation for human external arguments of transitive predicates. Voice assigns accusative case to the DO object.38

Voice is thus a phase. T can no longer probe within the verbal domain below Voice. When probing, T can only see Spec,Voice, where it finds π/SI, a bare person node, implemented with a third person feature by default at PF. Against π/SI, T can match and value only its person feature, with π/SI lacking the number node (recall (50b)). I assume that such a partial valuing results in a third person singular default inflection on the verb at PF. Due to Agree with T, π/SI is assigned nominative (this is the conclusion to be drawn from the computational system; however, Italian does not mark SI with morphological case). π/SI must then move to Spec,TP to satisfy the EPP on T. It then cliticizes to T.

7 Nominative vs. accusative SI

The analysis of impersonal-passive and impersonal-active SI constructions outlined above distinguishes between an accusative-marked SI in the former case and a nominative-marked SI in the latter one. Such an analysis coincides with the one proposed by Dobrovie-Sorin (1998), which we believe to be correct in dispensing with the [+arg(umental)] distinction of impersonal SI argued for by Cinque (1988). Cinque maintains Burzio’s (1986) analysis of impersonal SI as always nominative,39 and thus, in order to explain the asymmetry of the distribution of SI in raising untensed contexts where only transitive and unergative verbs are admitted (in contrast to unaccusative, psychological, copular verbs and with passive structures), he has to introduce a distinction on the thematic level (examples are given below).40

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38 Accusative case is the reflex of Agree between the probe Voice and the goal DP object, even if this object-agreement is not overtly manifested in the verbal inflection in Romance.

39 “SI must be linked to a position receiving nominative Case.” (Burzio 1986:53).

40 The other relevant untensed contexts are the so-called Aux-to-Comp constructions (Rizzi 1981), instances of which are omitted here just in order to shorten the exposition. “The Aux-to-C option is allowed (at its peculiar stylistic level) in the infinitival complement of ‘verbs of thinking’, in adjunct gerundive clauses, in
In fact, according to Cinque (1988:530), a [+arg] SI must be associated with a theta-role at any level of representation, whereas [-arg] SI need not. [-arg] SI “serves as a syntactic means to supplement personal Agr with the features able to identify the content of pro as an unspecified (generic) person pronominal.” pro is the empty category in subject position to which the clitic SI is associated to (ibidem). Since [-agr] SI needs combining with personal Agr, it can only be found in finite clauses. Unaccusative, psychological, copular verbs and and passive structures showing impersonal SI are banned from infinitivals because they rely on [-arg] SI. This is Cinque’s story in brief.

The distributional asymmetry is presented through the next examples: transitive and unergative verbs in raising contexts in (63a) and (63b) respectively; unaccusative and copular verb in raising contexts in (64a) and (64b).

(63) a. Sembra non essersi ancora scoperto il vero colpevole
seem.3sg not be-SI yet discovered the true culprit
‘It seems that the true culprit has not yet been discovered.’ [Dobrovie-Sorin 1998]
‘It seems one not to have yet discovered the true culprit.’ [Cinque 1988]

b. Sembra non essersi lavorato a sufficienza
seem.3sg not be-SI worked sufficiently
‘It seems that not enough work was done.’ [Dobrovie-Sorin 1998]
‘It seems one not to have worked sufficiently.’ [Cinque 1988]

Dobrovie-Sorin omits the translation for the following items, I thus report Cinque’s only.

(64) a. *Sembra essersi arrivati troppo tardi
seem-3sg be-SI come too late
‘It seems one to have arrived too late.’

b. *Sembra non essersi benvenuti qui
seem.3sg not be-SI welcome.m.pl here
‘It seems one not to be welcome here.’

The passive translations Dobrovie-Sorin provides for the examples in (63) aim to show that what is actually allowed in raising contexts are impersonal-passive SI constructions as opposed to impersonal-active SI constructions. Verb-object agreement helps distinguishing between the two in (65)-(67):

‘nominalized’ infinitives, and in the infinitival complement of certain nonsubcategorized prepositions” (examples a,b,c,d respectively as in Cinque 1988:524):

(i) a. Ritenevano [CP non essere [IP io/Gianni t idoneo a tale compito]]
‘They thought I/Gianni not to be suitable for that task.’

b. [CP Non essendo [IP io/Gianni t idoneo a tale compito]], ...
‘I/Gianni not being suitable for that task,...’

c. [NP L’] [CP essere [IP io/Gianni t disposto ad aiutarvi]], ...
‘I/Gianni being willing to help you, ...’

d. [PP Per [CP non esser [IP io/Gianni t disposto ad aiutarvi]], ...
‘As I/Gianni was not willing to help you, ...’
(65) a. Sembrano essersi vendute poche auto
seem.3pl be-SI sold.f.pl [few car]f.pl
‘It seems that few cars were sold.’ / ‘It seems one to have sold few cars.’

b. *Sembra essersi venduto poche auto
seem.3sg be-SI sold.m.sg [few car]f.pl
‘It seems one to have sold few cars.’

(66) a. Azioni del genere sembrano criticarsi senza ragione
[action of this kind]pl seem.3pl criticize-SI without reason
‘It seems that actions of this kind are criticized without any reasons.’ [Belletti 1982:14]
‘It seems one to criticize actions of this kind without any reasons.’

b. *Azioni del genere sembra criticarsi senza ragione
[action of this kind]pl seem.3sg criticize-SI without reason
‘It seems one to criticize actions of this kind without any reasons.’

(67) a. Questi articoli risultano essersi già letti
[this article]m.pl turn-out.3pl be-SI already read.m.pl
‘These articles turn out to have already been read.’ [Burzio 1986:52]

b. *Questi articoli risulta essersi già letto
[this article]m.pl turn-out.3sg be-SI already read.m.sg
‘It turns out one to have already read these articles.’

As seen in section 6, unaccusative, psychological, copular verbs and passives are feasible only with impersonal-active SI, and not with impersonal-passive SI. Why is it, though, that unergative verbs are well-formed in impersonal-passive constructions where SI is assigned accusative case, under the assumption that unergative verbs do not project the object position? As Dobrovie-Sorin (1998:408) points out, Hale and Keyser’s (1993) hypothesis that unergatives are universally transitive in their lexical representation, is not enough to explain the impersonal construction facts. She puts forward the idea of syntactic transitivity for unergative verbs (1993: Chap 5). In particular,

“the subcategorization properties do not distinguish between transitives and unergative intransitives [...] The two classes of verbs differ only by their selectional requirements: transitives normally select fully referential objects, which must be projected in the syntax, whereas unergatives select a cognate object [...] The difference in selectional properties between transitives and unergatives can be stated in terms of theta-role assignment: transitives assign either fully referential theta-roles or quasi theta-role to their objects (see fully referential arguments and null prototypical objects, respectively), whereas unergatives can assign only quasi theta-roles to their object (on the necessary distinction between fully referential theta-roles and quasi theta-roles, see Brody’s (1993) relativized theta-Criterion).” (Dobrovie-Sorin 1998: 408-409).
Roberge (2002) has recently proposed that the syntactic component of grammar always requires a transitive configuration for VPs.\footnote{The core intuition is shared by other authors, namely Basilico (1998), Erteschik-Shir and Rapoport (2000) and Bowers (2002), as quoted by Roberge (2002:8).}

(68) **Transitivity Requirement (TR)**

“An Object position is always included in VP, independently of lexical choice of V”

As TR is a syntactic requirement, it must be understood as “the internal argument counterpart of the EPP” (ibidem), with TR operating in the thematic domain and the EPP in the functional domain of the clausal structure. There are two ways in which syntax implements TR: “TR is either the result of an obligatory application of Merge of V and Obj to create a Vmax or is derivable from the obligatory presence of a functional category above Vmax which requires an Obj to value some feature.” Roberge (2003).

The SI distributional facts with respect to non-finite contexts appear to follow only if the Transitivity Requirement is adopted.

### 7.1 Control infinitivals

We just saw that subject-to-subject raising constructions discriminate between impersonal-passive and impersonal-active SI constructions, with the former but not the latter being licit in those constructions. Impersonal-passive SI constructions are, however, impossible in control infinitivals (Rizzi 1980, Burzio 1981, 1986, Belletti 1982):

(69) a. *I ragazzi sostengono di [PRO punirsi senza ragione] [the boy]m.pl pretend.3pl of [PRO punish-SI without reason]

‘The boys pretend to (si) punish without any reason.’  
[Belletti 1982:14]

‘The boys pretend to have been punished without any reason.’

‘The boys pretend one to have punished them without any reason.’

b. *Quei prigionieri vorrebbero [PRO essersi già liberati] [that prisoner]m.pl would-like.3pl [PRO be-SI already freed.mpl]

‘Those prisoners would like to have already been freed.’  
[Burzio 1986:52]

‘Those prisoners would like one to have already freed them.’

According to Rizzi (1980), Burzio (1981,1986) and Belletti (1982), the ungrammaticality of (69a,b) is due to the mutual exclusiveness of PRO and impersonal SI. I take this fact to be a confirmation of the analysis of SI in impersonal-passive constructions as an external argument (it is merged in external argument position and assigned accusative Case, recall 4.2). Active and passive infinitivals can be control predicates (70a,b), because their external argument position is available for PRO; this is not the case with impersonal-passive SI infinitivals.

\footnote{Proposals following the latter track are: Bowers (2002) and Pesetsky and Torrego (to appear), as quoted by Roberge (2003).}
NON-ACTIVE VOICE ALTERNATIONS IN ITALIAN

(70) a. Quei prigionieri vorrebbero [PRO fuggire]  
[that prisoner]m.pl would-like.3pl [PRO escape]  
‘Those prisoners would like to escape.’

b. Quei prigionieri vorrebbero [PRO essere liberati]  
[that prisoner]m.pl would-like.3pl [PRO be freed.m.pl]  
‘Those prisoners would like to be freed.’

On the other hand, control infinitivals are possible with middle SI constructions (Cinque 1998:560-561: examples (89a) and (90a) here reported as (71a) and (71b), respectively), and it is thus incorrect to collapse passive SI with middle SI (Dobrovie-Sorin 1998).43

(71) a. Questo vestito ha il vantaggio di lavarsi più facilmente di altri  
this suit has the advantage of wash-SI more easily than others  
‘This suit has the advantage of washing more easily than others.’

b. *Neanche il nemico ha la proprietà di uccidersi senza rimorsi  
not-even the enemy has the property of kill-SI without regrets  
‘Not even the enemy has the property for one to kill him without regrets.’

If impersonal-passive SI and PRO are mutually exclusive because they both occupy the subject portion of the embedded control infinitival, while middle SI sits somewhere else in the structure. The set of diagnostics introduced in the previous sections confirm the necessary distinction between impersonal-passive and middle SI.

8 Middles

Given that middle as a syntactic category is variable cross-linguistically, Condoravdi (1989) and Lekakou (to appear a,b) propose that ‘middle’ should be regarded as a semantic rather than syntactic primitive. Languages such as Dutch and English exploit unergative predicates to convey the middle semantics (Ackema and Schoorlemmer 1995; but see Stroik 1992 for a movement-based analysis), whereas Modern Greek relies on passive morphology (Embick 1998, Lekakou, to appear a,b). Lekakou claims that ‘middle’ interpretation rests on the following properties:

43 Dobrovie-Sorin (1998) must thus explain the asymmetry with control infinitivals in terms of semantic constraints on control (1998: section 3.2, and 4.1): “in control configurations middle-passive si can take either the habitual or the property reading, but cannot refer to a particular event. Examples such as (37) [Quei prigionieri vorrebbero essersi già liberati, our example (69b)] would be ungrammatical because the verb volere ‘want’ requires an embedded passive to refer to a particular event.” As I discuss in section 8, the middle is a semantic primitive (Condoravdi 1989 and Lekakou 2004) whose core is the property stative reading. There is no semantic constraint on control: middle SI is allowed in control infinitivals, whereas passive SI is not.
(72) The core components of the middle interpretation:
   a. The internal argument is ascribed a dispositional property
   b. An otherwise eventive verb becomes a derived stative and, more precisely, receives a generic interpretation
   c. The agent receives an arbitrary, free choice interpretation.

As far as property (72c) is concerned, Italian middle SI constructions appear to lack the external argument semantics (as demonstrated by Cinque 1998: 562-563, see examples below), and thus an agentive external role is also precluded syntactically. Italian middles thus sharply contrast with Greek middles which appear identical to passives, as they allow *by*-phrases (Condoravdi 1989, Tsimpli 1989).

In order to distinguish between impersonal-passive SIs and middle SIs which are apparently identical, Cinque builds raising structures of the type “X has the advantage/property of V-si”, as follows (b examples). In (73), we test the compatibility with agent-sensitive adverbs, in (74) – with thematic control.

(73) a. impersonal-passive SI
    Questi appartamenti si vendono volutamente occupati
    [this apartment]m.pl SI sell.3pl deliberately occupied.m.pl
    ‘These apartments are sold deliberately occupied.’
    ‘One sells the apartments deliberately occupied.’

    b. middle SI
    Questi appartamenti hanno il vantaggio di vendersi (*volutamente) occupati
    [this apartment]m.pl have the advantage of sell-SI (*deliberately) occupied.m.pl
    ‘These apartments have the advantage to sell-SI (*deliberately) occupied.’

(74) a. impersonal-passive SI
    I burocrati si corrompono per vincere gli appalti
    the bureaucrats SI bribe.3pl to win the contracts
    ‘The bureaucrats are bribed/ one bribes the bureaucrats to win the contract.’

    b. middle SI
    Certi burocrati hanno il vantaggio di corrompersi facilmente (*per vincere gli appalti)
    certain bureaucrats have the advantage of bribe-SI easily (to win the contracts)
    ‘Certain bureaucrats have the advantage to bribe easily (to win the contracts).’

Cinque also exploits the predication test, but I do not rely on it. More tests are available, however. In contrast with English, Italian middles never show agentivity effects. For instance, Italian middles are never possible with *for*-phrases. Rapoport (1999) shows that the debate about the agentive (Stroik 1992) vs. non-agentive (Ackema and Schoorlemmer 1995) nature of English middles is vacuous, as both types are found in the grammar. Rapoport further demonstrates that agentive and non-agentive middles do not imply two different middle constructions. Rather, middles are inherently not agentive, with the agentive reading being a reflex of the eventual agent-implicating component of the verb heading the middle construction. As argued by Levin and Rappaport-Hovav (1995) and Erteschick-Shir and Rapoport (1997), one of such agent-implicating
components is the means or manner (M/M) component. Other verbs can be inherently agentive, such as read and translate. Rapoport (1999) shows that middle constructions headed by agent-implicating verbs (M/M and inherently agentive verbs) show agentivity effects (where the for-phrase is possible but the all by itself phrase is impossible), while middle constructions headed by non agent-implicating verbs do not (all the examples are taken from Rapoport 1999):

(75) middle with M/M verb
a. this kind of cheese cuts (easily) for experienced cooks
b. *this kind of bread cuts easily all by itself

(76) middle with inherently agentive verb
a. Latin texts do not translate easily for Bill
b. *Latin texts translate all by themselves

(77) middle with non M/M verb
a. *this kind of glass breaks (easily) for our factory workers
b. this kind of glass breaks easily all by itself

(78) middle with non-inherently agentive verb
a. *These books don't sell for the average shopkeeper
b. These comic books sell (easily) all by themselves

Italian middles sharply contrast with English ones:44

(79) a. middle with cut-type verb (means/manner verb)
   *Questo tipo di formaggio si taglia facilmente per cuochi esperti
   ‘This kind of cheese cuts easily for experienced cooks.’
b. middle with inherently agentive verb
   *I testi latini si traducono facilmente per Giuliano
   ‘Latin texts translates easily for Giuliano.’
c. middle with break-type verb (~means/manner verb)
   *questo tipo di vetro si rompe facilmente per i nostri operai
   ‘This kind of glass breaks (easily) for our factory workers.’
d. middle with non-inherently agentive verb
   *Quesi libri non si vendono facilmente per il negoziante medio
   ‘These books don’t sell easily for the average shopkeeper.’

Not only is the external argument semantics absent from Italian middle SI constructions, SI is not projected as the external argument in the syntax either: it cannot bind anaphors (80) and it cannot control (argument control) (81):

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44 Mirror situation for tough-constructions: these are always compatible with for-phrases: I testi della tarda latinità sono facili da tradurre per Giuliano ‘Late Latin texts are easy to translate for Giulian’, Questo tipo di vetro è impossibile da rompere per gli operai ‘This kind of glass is impossible to break for the workers’.
(80)  a. middle SI
*Certe poesie hanno il vantaggio di leggersi meglio davanti ai propri fans
Certain poems have the advantage to read-si better in front of one’s own fans

b. impersonal-passive SI
Certe poesie si leggono meglio di fronte ai propri fans
Certain poems SI read.3pl better in front of one’s own fans

Middle SI cannot control PRO in (81a). PRO is controlled by the DP Questi testi in (81b).

(81)  a. Questi testi hanno la proprietà di tradursi meglio (*dopo PRO averli letti più volte)
These texts have the property of translate-SI better after PRO have them.m.pl read.m.pl more times
‘These texts have the property to translate better after having read them more times.’

b. Questi testi hanno la proprietà di tradursi meglio (dopo PRO essere stati letti più volte)
these texts have the property of translate-SI better after PRO be been.m.pl read.m.pl more times
‘These texts have the property to translate better after having been read more times.’

We turn now to other relevant syntactic properties. Middle SI constructions are not unaccusative, as impersonal-passive SI ones are. Ne-cliticization is, in fact, impossible:

(82)  a. *Delle poesie di Montale, hanno la proprietà di tradur-se-ne facilmente tre, in inglese
of-the.f.pl poem.f.pl by Montale have the property of translate-SI-of-them.cl easily three, in English
‘Of Montale’s poems, three have the property to translate easily in English.’

b. *Delle macchine che ho provatofinora, ha la proprieta’ di guidar-se-ne bene solo una
of the cars that I-tried up to now has the property of drive-SI-of-them.cl well only one
‘Of the cars I tried so far, only one has the property to drive well.’

Middles display strict SVO order, as shown in (83). This might be linked to the stative reading of middles; Alexiadou (2000) argues that stative predicates rigidly display SVO order. Post-verbal DP without extraposition intonation as in (83c) reads as impersonal-passive SI only.
(83) a. Le camicie di cotone si stirano facilmente
[the shirt]f.pl of cotton SI iron.3pl easily
‘Cotton shirts iron easily.’

b. Si stirano facilmente, le camicie di cotone
SI iron.3pl easily, [the shirt]f.pl of cotton
‘Cotton shirts iron easily.’

c. Si stirano facilmente le camicie di cotone ➔ impersonal-passive SI
‘Cotton shirts are ironed easily.’ / ‘One irons cotton shirts easily.’

Finally, like impersonal-passive SI constructions, middle SI ones show the third person restriction constraint. Table 7 offers a synopsis of the comparison between middle and impersonal-passive SI.

<table>
<thead>
<tr>
<th>EXTERNAL ARGUMENT</th>
<th>middle SI</th>
<th>impersonal-passive SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>• $\theta^A_{ext}$</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>• $ext A$</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>• semantic restriction</td>
<td>none</td>
<td>[+human]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOMINATIVE OBJECT</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• person restriction</td>
<td>3rd person</td>
<td>3rd person</td>
</tr>
<tr>
<td>• order relative to V</td>
<td>only pre-V</td>
<td>pre- and post-V</td>
</tr>
</tbody>
</table>

Table 7: Synoptic comparison

What, then, is the structure of middles? In substance, I adopt the analysis of middles proposed by Massam (1992:134): “middles...involve a case-marked empty object which is identified by a non-thematic element in subject position” which c-commands it. Massam argues that such identification is made possible by a modal functional head in the inflectional domain, which semantically characterizes middles (together with tough-constructions and recipe-context null-object constructions as well), and which is often overtly expressed and/or adverbially modified (e.g., *Poetry can seldom translate; Poetry translates with difficulty*). Such a modal ‘do-ability’ head is also argued (1992:127-128) to be able to license the non-thematic element in subject position. Furthermore, in the specific case of middles, the empty category in object position is “descriptively a base-generated empty reflexive” (1992:130), as it appears to require co-indexing with the non-thematic element in subject position, even if it does not form a chain with it.

The structure outlined in (84) is tentative. The argument to which a dispositional property is ascribed (Lekakou, to appear a) is merged in a non-thematic position; let us assume this is Spec,TP. This merging hypothesis explains why the single DP in middles appears only pre-verbally. The ‘empty reflexive’, i.e. middle SI (whose feature make-up is $\pi$, and it is thus identical to impersonal SI (and reflexive $si$; but this is another paper)), is merged as a Subject-of-Result, in the specifier position of a result state phrase, which I assume due to the passive semantics of middles and -able adjectives to which middles are
often compared. This result phrase is the complement of a modal v head (modal element in INFL for Massam), also locus of adverbial modification. How do we derive the third person constraint active in middles? Again, tentatively, T values and matches person against SI. As no other target is available in the domain c-commanded by T, once a DP is merged in Spec,TP, T can probe upwards for number. In fact, I adopt Rezac’s (2003) implementation of syntactic cyclicity, which states that the search space for Probes may expand upwards as specifiers are added.

(84) TP

However, many questions remain open. For instance, is middle π/SI to be considered an argument? From the assumption about Probe T depicted in (84), it seems, yes. Is it theta-marked? One could argue that it is theta-marked as Theme by vBE, head of the result phrase. A Theme interpretation that SI then shares with the non-thematic subject by virtue of the identification/predication relation whose pivot is the modal head vCAN/DO. Is it assigned Case? To which element does T assign nominative Case parasitically on one of the Agree cycles? If the non-thematic subject is marked for nominative, is SI caseless or does it share Case-marking with the non-thematic subject?

Why is middle SI available in control infinitivals, such as (85)?

(85) Le Confessioni di S.Agostino dovrebbero [PRO tradursi facilmente]
the Confessions of S.Agostine should.3pl [PRO translate-SI easily]
‘S.Agostine’s ‘Confessions’ should translate easily.’

According to the reasoning followed in 7.1, middle SI is possible within control infinitivals because it does not compete with PRO. The structure proposed in (84) seems to accommodate this, as middle SI is nested in the verbal domain as reflexive (and reflexives are fine in control predicates, e.g., Dovresti [PRO ascoltarti]! ‘You should hear yourself!’).

9 Conclusions

A systematic comparison of three Italian constructions which are often treated as the same, namely impersonal-passive SI constructions, canonical passives and middles, has revealed that while these should be grouped together under the non-active diathesis,

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45 Intuitively, also reflexive si appears to suit such a position, both in derived and inherent reflexive predicates (for instance, think of a sentence such as Annamaria si offende facilmente ‘Annamaria feels offended easily.’).
they are nevertheless to be kept distinct one from another. The non-active features they share, the unaccusative and passive readings, can be structurally defined, the former as the lack of an external argument position (as first proposed by Embick 1997, 1998), the latter as a result state phrase (Borer 1998).

As far as the lack of an external argument is concerned, the three constructions have been shown to differ in the following terms:

<table>
<thead>
<tr>
<th></th>
<th>impersonal-passive SI</th>
<th>canonical passive</th>
<th>middle SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>θ ext A</td>
<td>✓</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>ext A</td>
<td>✓</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

Table 8: how do you miss your external argument

As for the Subject-of-Result module, impersonal SI passive constructions merge the object DP in this position, in a result phrase headed by an event-introducer \( v_{\text{int}} \); canonical passives merge the DP object as well, but the result phrase is headed by the participial morpheme EN, and finally middles merge \( \pi/\text{SI} \) as Spec, \( v_{\text{BEP}} \).

SI is a bare person node in all instances examined. The analysis of impersonal SI proposed by Burzio (1991) has been implemented in feature-geometric terms (within a framework elaborated by Harley and Ritter (2002) and Déchaine and Wiltschko (2002) among others) and extended to middle SI.

References

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