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Object omission and
the semantics of predicates in Italian
in a comparative perspective

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This paper discusses the semantics of O(bject) omission with divalent verbs in Italian, in relation to (i) the interplay of the inherent and structural aspects of verb meaning with the degree of thematic specification of the subject (i.e., agentivity/control); (ii) the inherent characteristics of the O argument (e.g., animacy); (iii) the degree of semantic implication between the verb and O; (iv) the role played by the linguistic and extra-linguistic context. It is shown that object omission in Italian is highly sensitive to the event structure template of verbs (e.g., the low degree of aspectual specification of verbs) and the elements of meaning lexicalized in the verb, interacting, in turn, with other semantic and discourse-pragmatic parameters. Whereas the constraints on Indefinite Null Instantiation appear to be similar to those at work in other languages (e.g, English and French), those applying to Definite Null Instantiation display more variability.

Keywords: object omission, aspect, event structure, animacy, definiteness, referentiality, discourse pragmatics

1. Introduction

This paper investigates the semantic constraints on object omission in Italian. It is shown that variability in the omissibility of the object reflects both the event structure template of verbs and the elements of meaning lexicalized in the verb root, interacting, in different but principled ways, with non-event structure notions such as animacy, control, definiteness, referentiality as well as discourse-pragmatic factors.

The discussion is organized as follows. Section 2 introduces the notions of object omission, transitivity and event structure. Section 3 illustrates the semantic constraints on object omission in Italian and its subtypes, integrating the lexical

semantic and discourse-pragmatic perspectives. Section 4 summarizes the main findings and provides the conclusions.

2.   Object omission, event structure and transitivity: Some current issues and views

2.1   Event structure and the licensing of arguments

Work on event structure and argument linking has shown that the varying encoding of O,[1] as well as its null realization, may be interpreted as reflecting differences in the nature of the event described by the predicate and in the licensing of arguments (Grimshaw 1993 [2005]; Brisson 1994; Levin 1999; Levin & Rappaport Hovav 1998, 2005; Rappaport Hovav 2008, 2014: 278, 280, int. al.). The notion of (In)transitivity, in fact, can be reinterpreted in terms of event structure and described through the interplay of event structure templates, the idiosyncratic aspect of verb meaning (i.e., the root/constant) and the licensing of arguments, implemented with inherent and relational properties of arguments (e.g., animacy, control, affectedness) (Levin 1999; Levin & Rappaport Hovav 2005; Cennamo 2003, among others).

Crucial to the analysis are the distinction between objects (Os) licensed by structure and constant/'root' participants (Brisson 1994; Rappaport Hovav & Levin 1998; Levin 1999; Levin & Rappaport Hovav 2005) and the assumption that argument realization reflects event complexity. This, in turn, only partially correlates with the number of arguments of a verb and its telicity, a notion that has been recently redefined in terms of a scalar view of the change subcomponent associated with dinamic eventualities,[2] and referring either to (a change in the value

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1. S, A O (P in Comrie 1989: 70) are syntactico-semantic primitives, the sole participant of an intransitive predicate and the agent/patient-like participant of a transitive predicate, coinciding with the grammatical categories of subject and object in the languages where these relations can be identified (Dixon 1994: 6–8; Mithun & Chafe 1999, among others, further references in Cennano 2003: 93 and, more recently, Haspelmath 2015: 137; Malchukov 2015).

2. More specifically, the following verb classification has been proposed, complementing the traditional Vendler 1967/Dowty 1979 predicate classification: two-point, multi-point scalar changes, corresponding to achievements and accomplishments, respectively, non-scalar changes, corresponding to activities, and states, which do not involve change (see Rappaport Hovav 2008, 2014; Cennamo & Lenci forthc. for its application to verbs of motion in Italian, and references therein).

of) a property, a path or a volume/extent.[3] In this view, thus, the telicity of a verb refers to a specified degree of change along a scale (Levin 1999; Rappaport Hovav & Levin 1998; Levin & Rappaport Hovav 2005; Rappaport Hovan 2008; Rappaport Hovav & Levin 2010; Demonte & McNally 2012; Rappaport Hovav 2014: 275, among others and Section 2.1.1).

2.1.1   *Structure vs constant/root participants and argument realization*

The starting point is the bipartite nature of a verb meaning, consisting of a 'structural' and an 'idiosyncratic' aspect – the former representing the grammatically relevant aspect of the verb meaning (the so-called event structure template or event schema), common to other verbs of the same semantic class (i.e., of the same ontological type) –, the latter instantiating the verb's core meaning, the 'constant' (Grimshaw 1993 [2005]; Brisson 1994; Levin 1999; Levin 2009; Rappaport Hovav & Levin 1998: 107) or 'root' (Levin & Rappaport Hovav 2005: 71–72), which differentiates it from other verbs of the same semantic and grammatically relevant type.

The event structure of a verb is determined by the ontological type of its root (e.g., manner, instrument, place, state, container, etc.), which gives rise to a limited number of event structure templates, as illustrated (to the right of the arrow) in the 'canonical realization rules' in (1) and (2), from Rappaport Hovav & Levin (1998: 109). Thus, a manner and instrument root is always associated with an activity event structure template, as in (1a–b), whilst an externally caused state is associated with an accomplishment/achievement event schema, depending on the durative/punctual nature of the verb eventuality, associated with the BECOME/INGR operators, as in (1f) (partially adapted from Rappaport Hovav & Levin 1998: 109):[4]

(1)   a.   manner → [x ACT $_{<MANNER>}$]
            (Engl.. *jog, run, creak, whistle*; It. *correre, fischiare, scricchiolare, cigolare* …)

      b.   instrument → [x ACT $_{<INSTRUMENT>}$ y]
            (Engl.. *brush, hammer, saw, shovel*; It. *spazzolare, scodellare, martellare* …)

      c.   thing/stuff (placeable object in Rappaport Hovav & Levin 1998: 109) → [x CAUSE [BECOME] [y WITH < *THING*>]]]
            (Engl. *butter, oil, paper, tile, wax*; It. *imburrare, oliare, incartare, piastrellare, cerare* …)

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3. In the last class the scalar properties stem from the object rather than the verb eventuality (Rappaport Hovav 2014: 278, among others).

4. In order to differentiate durative from punctual telic causative changes of state, i.e., transitive accomplishments and achievements, I adopt the INGR operator used in Role and Reference Grammar (Van Valin & La Polla 1997: 102–112; Van Valin 2005: 42–49).

    d.   place → [[x ACT] CAUSE [BECOME] [y <*PLACE* >]]]
        (Engl.. *bottle, box, cage, pocket*; It. *imbottigliare, inscatolare, intascare, ingabbiare …*)

    e.   internally caused state → [x BECOME < *STATE*>]
        (Engl.. *bloom, blossom, decay*; It. *fiorire, sbocciare, decadere …*)

    f.   externally caused state →
        [[x ACT$_i$] CAUSE [INGR/BECOME] [y <*RES-STATE*>]]]
        (Engl. *break, close, crack, open, split*; It. *rompere, aprire, spezzare, spaccare …*)

Resultative (i.e., causative change of state) verbs such as the English *break*, *open*, have the same event structure template (2a), but differ in the realization of the constant/root – the result state (italicised and represented between angle brackets), denoting a non-reversible and reversible change, respectively – and in the nature of the operator in the change subcomponent of these verbs' event schemas, INGR for punctual, telic verbs such as *break*, BECOME for non-punctual, telic verbs such as *kill, change, open* (2b-d) (from Rappaport Hovav & Levin 1998: 107; Levin & Rappaport Hovav 2005: 71–72):

  (2) a.   [[x ACT] CAUSE [INGR/BECOME [y < *RES-STATE*>]]]
       b.   [[x ACT] CAUSE [INGR [y <*BROKEN* >]]]
       c.   [[x ACT] CAUSE [BECOME [y <*OPEN* >]]]
       d.   [[x ACT] CAUSE [BECOME [y <*DEAD* >]]]

As pointed out in Section 2.1, an important distinction in this approach, building on insights from Grimshaw 1993 [2005] and Brisson 1994, is the difference between *simple* and *complex event structures*, which does not coincide with the number of the arguments of a verb but involves the nature of the temporal relation between the subevents identifiable in the event structure template of a verb (Pustejovsky 1995; Levin & Rappaport Hovav 2005: 112, among others).

    A verb has a *complex event structure* if the two subevents it consists of do not necessarily unfold together (e.g., *kill*, *break*), as in (3a), whereas it has a *simple event structure* if they are temporally dependent, as with incremental theme and directed motion verbs (e.g., *read, eat, sweep, run to*) (3b-d) (Levin 2000; Levin & Rappaport Hovav 2005: 115):

  (3) a.   *Mark broke the chair*-complex event structure: non-simultaneity between the two sub-events (the act of breaking and its result)
       b.   *Mark ran home*-simple event structure: unfolding together of the two sub-events (the act of running and its result)
       c.   *Mark ate the bun* – simple event structure
       d.   *Mark swept the floor* – simple event structure

e.   *Mark swept the floor clean* – complex event structure (the act of sweeping and its result)

Evidence in favour of the distinction is provided by the existence of causative markers in several languages in order to express the relation of causality rather than sequentiality between the two subevents identifiable in a transitive verb (Van Valin & La Polla 1997: 99–100). Syntactically, the distinction is brought out by the different interpretations associated with time adverbials, such as *again* and *for*. The former is associated with a repetitive reading if the verb has a simple event structure (i.e., with states and activities), but is ambiguous between a repetitive and a restitutive interpretation if the verb has a complex event structure (i.e., with accomplishments and achievements), as illustrated in (4) for English (Levin & Rappaport Hovav 2005: 113 and references therein).

(4)   a.   *Mark opened the door again* (repetitive/restitutive interpretation)
       b.   *Mark swept the floor again* (repetitive interpretation only)

In (4a) the sentence is ambiguous between a repetitive reading, whereby Mark carries out the activity of opening the door once again, and a restitutive meaning, whereby Mark brings about the opening of the door again (but he may not have opened it the first time) (Levin & Rappaport Hovav 2005: 113).

Durational adverbs like *for*, instead, specify the duration of an eventuality with states and activities, i.e., with simple event structure verbs, but may also indicate the duration of the result state with accomplishments and achievements, i.e., with complex event structure verbs, as in (5) (Levin & Rappaport Hovav 2005: 113–114 and references therein).

(5)   a.   *They imprisoned/jailed him for two years*
       b.   *They swept the floor for an hour*

Whereas in (5a) *for* specifies the duration of the result state only, in (5b) it refers to the duration of the sweeping activity, thereby pointing to the existence of a change subevent in the event structure of the verbs *imprison* and *jail*, that is lacking with *sweep*, that has a simple event structure instead. Interestingly, two different adverbs are employed in German for these uses, *für* and *lang,* respectively (see discussion and references in Levin & Rappaport Hovav 2005: 114).

In this approach every argument in the syntax must correspond to a participant in the event structure of a verb and is associated with a well-identified subevent (the so-called *Argument Realization Condition*, a refinement of well-formedness conditions proposed in previous literature) (Rappaport Hovav & Levin 1998: 113; Levin & Rappaport Hovav 2005: 112–115 and references therein). Thus, arguments belong to two types. They may reflect the grammatically relevant aspects of

the verb meaning, i.e., they may realize so-called *structural participants*, or they may reflect the verb's core meaning, the root, so-called *root participants*. The arguments of complex causative event verbs (e.g., *kill, break*) (6e) are licensed both by the verb's event structure template and by the verb's core meaning, i.e., they realize structure participants. With two-argument simple event verbs (e.g., English *sweep*) (6b), only the A argument is licensed by both components of the verb's meaning and therefore realizes a structure participant; the O argument instead is licensed solely by the root, so it exemplifies a pure root participant.

(6)   <u>Simple event structure templates</u>
   a.   x ACT $_{<MANNER>}$ (one-argument activity) (*run, sleep*)
   b.   x ACT $_{<MANNER>}$ ɏ (two-argument activity) (*sweep, wipe*)
   c.   x <*STATE*> (state) (*love*)
   d.   BECOME x <*RES-STATE*> (achievement) (*be born, die*, (intr.) (*break*)
   <u>Complex event structure template</u>
   e.   x ACT $_{<MANNER>}$ CAUSE [INGR/BECOME [y <*RES-STATE*>]] (accomplishment) (*kill*, (trans.) *break*)

The different event structure status of O with these verbs is viewed as accounting for their different behaviour in English as regards object omission. Resultative verbs such as *kill, break*, whose arguments are both structure participants, do not allow the omission of their objects (7b), (8b). Unlike *break*, however, *kill* allows the omission of its object under an iterative, habitual interpretation (Cennamo 2003: 94, note 4; Goldberg 2005: 30), as in (8c-d). This might reflect the presence of the operator BECOME rather than INGR in the change subcomponent of its event schema, i.e., it might be related to its lower degree of aspectual specification (since it is non-punctual), compared with achievements like *break,* which never allow object omission in English, unless in an idiomatic, non-literal sense, where the verb means 'stop', as in (7c-d).[5]

(7)   a.   *John broke the chair*
   b.   * *John broke*
   c.   *Before we break here*
   d.   *We broke for lunch*

(8)   a.   *John killed ten people*
   b.   * *John killed*

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5. Interestingly, the omission of O with accomplishments like *kill* appears to be a counterexample/exception to the Monotonicity Hypothesis (Koontz-Garboden 2012: 143), whereby verb meaning can only be compositionally augmented in a monotonic way and grammatically relevant aspects of verb meaning cannot be removed (Rappaport Hovav & Levin 1998: 105, note 5 and recent discussion in Koontz-Garboden 2012).

    c. *John has killed, this is why he is in jail*
    d. *A tiger only kills at night*   (Goldberg 2005: 30)

Verbs of surface contact through motion such as *sweep*, and verbs of consumption such as *eat*, and creation like *write* (i.e., incremental theme verbs), whose O instantiates a root participant, allow unspecified object deletion instead (9b), (10b). In addition, the objects of the *sweep* class are not fixed, i.e., these verbs have a wider range of objects than verbs of the *kill, break* class (Levin 1999: 237–238, 2000: 425–426 and, more recently, Rappaport Hovav 2014: 278–281). Thus, verbs such as *kill, break* have a complex event structure template (cf.6e). They consist of two subevents, the causing event (an activity) and the resulting change of state. In contrast, verbs such as *sweep, eat* have a basic simple event structure (cf. 6a) in both their occurrences (with and without an object) (9a-b), (10a-b). As already pointed out (cf. p. 256), of the two arguments associated with them, only the subject (A) realizes a structure participant; the object (O) realizes instead a pure constant/root participant (which is underlined in the event structure schema of the verb (6b)). Their event structure template can be augmented, leading to the complex event structure template illustrated in (6e), as in the accomplishment use of *sweep* (9c) and *eat* (10d).

(9)   a. *John swept the floor*
      b. *John swept*
      c. *John swept the floor clean*

(10) a. *Mary ate buns*
      b. *Mary ate*
      c. *Mary ate two buns*
      d. *Mary ate the buns up*

Verbs of consumption such as *eat*, behave like activities with an indefinite object (10a), and like accomplishments with a definite one (10c), but have a simple event structure template, unless they occur in resultative patterns, as in (10d). In (9c) and (10d), in fact, the adjective *clean* and the preposition *up* denote a result state, identifying the second subevent of the verb eventuality. Complex event structures consist, therefore, of two subevents and have two structure participants, one per subevent, realized as subject and object. Simple event structures, on the other hand, include only one subevent and have one structure participant, realized as subject, whilst the other argument is licensed by the root only and may be realized as object/oblique or omitted. Crucial to the different argument realization patterns in English, however, are both the event structure status of the arguments licensed by the verb and the puntual/durative nature of the event itself. Achievements, in fact, never allow object omission, unlike accomplishments like *kill*.

The notions of structure and constant/root participants appear to offer a higher-level generalization for event sensitive aspects of object omission, although with exceptions such as the omissibility of the animate O of accomplishments like *kill* in English and other languages under the habitual, iterative meaning, whereby the focus is on the verb eventuality rather than on its impingement on the O argument.[6] (Cennamo 2003, Sections 2.2 and 3 for Italian).

2.2 The (in)transitivity continuum and the semanto-pragmatics of object omission[7]

As pointed out in 2.1, some aspects of object omission cannot be accounted for only in terms of event schemas and the event structure status of participants. They reflect, instead, semantico-pragmatic notions such as definiteness, referentiality, discourse factors (e.g., context recoverability), the inherent characteristics of objects (e.g., animacy) and the degree of thematic specification of the subject (i.e., agentivity/control).

A framework generally used to describe these parameters is the notion of Instantiation – referring to the pragmatic constraints on the lack of syntactic expression of an argument – proposed by Fillmore (1986), Fillmore & Kay (1993, ch. 7) (in Croft 2001), developed within a constructional approach by Croft (2001: 275–281), Goldberg 2005, 2006, Ruppenhofer & Michaelis 2010, among others.

Three types of null instantiations are recognized in the literature, depending on the pragmatic status of the referent of the unexpressed argument: (i) *Free Null Instantiation,* where the identity of the referent ([± specific]) can be freely identified by the hearer, e.g., accessible in context, as in *She wrote a letter* Ø (e.g., on blue stationery) (example from Croft 2001: 276), (ii) *Indefinite Null Instantiation*, where the referent's identity is indefinite, e.g., unknown or unimportant, 'a matter of indifference' (Fillmore 1986: 96), as in *He ate*, (iii) *Definite Null Instantiation* (corresponding to Matthews' 1981 notion of latency), where the referent must be accessible to the hearer, i.e., contextually recoverable (contextual deletion/suppression in Allerton 1982), as in *I did not finish* (sc. *the job*) (Matthews 1981: 126), *John arrived* (sc. *there*) *at 5 p.m.* (Croft 2001: 277, Lyngfelt 2012 for a recent discussion).

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6. The analysis, however, only addresses and handles core cases. Further investigation is needed in order to detect the meaning components involved in counterexamples concerning activity and state verbs which do not allow null objects such as *attempt, endorse, vow, require*… (see further examples and discussion in Fillmore 1986: 99; Goldberg 2005: 32–33; Wechsler 2015: 60–64).

7. Abbreviations: F = feminine; IMPER = imperative; IMPF = imperfect (tense); INF = infinitive; M = masculine; NOM = nominative; PL = plural; PP = past participle; PRS = present (tense); PST = past (tense); SG = singular.

Type 2, *Indefinite Null Instantiation,* however, can be further differentiated, according to (i) the generic or (ii) more specific referent/interpretation of the null object (most typically [-animate]), as with incremental theme verbs such as *eat, drink, write, bake.* In point of fact, the null object can be very general, the verb denoting solely the activity itself, as in (11a), or it can instantiate 'degrees of semantic specialization' (Fillmore 1986: 96–97) as in (11b), where the null object of *eat* refers to a meal, whilst the null object of *drink* is alcohol in (11c) (see also Wechsler 2015: 64).

(11)   a.   *I was so sick that I couldn't eat and drink for the whole day*
        b.   *Have you eaten?*
        c.   *He drinks*

Type 3, *Definite Null Instantiation*, is regarded as partly lexical and partly constructional in Fillmore (1986: 98–99), Fillmore & Kay 1993: 7.5, 7.11 (in Croft 2001: 277) and constructional only, although semantically restricted, in Croft (2001: 278) and Goldberg (2006: 195–197). For instance, in Italian, French and Brazilian Portuguese, in imperative constructions a definite, referential O can be omitted (although only if [-animate]), e.g., (12c,d) from Italian), also with verbs with which Definite Null Instantiation is impossible, as in (12b,d) for Italian (Lo Duca 2000: 24; Cummings & Roberge 2005; Lambrecht & Lemoine 2005; Cyrino this volume):

(12)   a.   *Tiens Ø,   lis Ø*   (French; Cummings & Roberge 2005)
            take.IMPER.2SG, read.IMPER.2SG
            'Take (it), read (it)'
        b.   *Prendo Ø   (Italian)
             take.PRES.1SG
             'I take/I am taking (sc. it)'
        c.   *Prendi,   per piacere*!
             Take.IMPER.2SG for favour
             'Please take it!'
        d.   * *Prendi,   per piacere*!
              Take.IMPER.2SG for favour
              'Please take him/her!'
        e.   *Coloque Ø   aqui*!   (Brazilian Portuguese; Cyrino this volume)
             put.IMPER.2SG here
             'Put (it) here!'
        f.   *Avanti, rompi Ø*
             forward break.IMPER.2SG
             qui!   (Italian) (specific object, clearly identifiable by the hearer)
             here
             'Go ahead, break it here!'

In English, with some polysemous verbs, e.g., *win, lose*, a definite object can be omitted only under a specific sense (e.g., a competition) as in (12g), whereas in the more general sense (of losing something) the omission of a definite object is ungrammatical, as in (12h) (Fillmore 1986: 99–100):

(12)   g.   *John lost/won*
         h.   * *John lost* (sc. *his wallet*)

Several languages, on the other hand, allow Definite Null Instantiation with all verbs, provided the omitted object ([±animate] is contextually recoverable and has a definite, pronoun-like interpretation, as in so-called pro-drop or null anaphora (Croft 2001: 276) in languages lacking cross-referencing of verbal arguments on verb morphology, like Japanese (13) or where cross-reference morphemes are agreement markers, like Warlpiri (see discussion in Wechsler 2015: 66–68):

(13)   a.   *Naoki-ga   mi-ta*
         Naoki.NOM see.PST
         'Naoki saw it/him/her/*herself'

Goldberg (2005: 20, 2006: 195), building on similar data from Korean and other languages (e.g., Chinese, Hindi, Hungarian, Lao), underlines the role played in many languages by discourse factors such as the topic or focus[8] function of the null O in allowing Definite and Indefinite Null Instantiation – whereby, for instance any argument can be unexpressed if conveying topical and non-focal information – and puts forward a constructional perspective on argument structure and object omission, integrating pragmatic constraints with lexical semantic and constructional ones.

Central to this approach are the lexical profiling of arguments (i.e., their degree of semantic salience), their discourse prominence and the *semantic coherence* and *correspondence principles*. The former notion requires semantic compatibility between a verb's participant roles (associated with a sense of the verb) and a construction's argument roles (e.g., theme, patient, agent, …), the latter concept ensures the alignment of profiled participants with discourse pragmatics, whereby lexically profiled (i.e., semantically salient) participants are encoded by 'grammatical relations that provide them … discourse prominence' (Goldberg 1995: 44–48, 2005: 25).

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8. The term *focus* refers to the emphasis on the part of the message that is meant to be informative (Goldberg 2005: 29–30). Thus it is the 'pragmatically non-recoverable component of a proposition', generally conveying new information (Lambrecht 1994: 218 and discussion in Goldberg 2005: 28–34).

In this account null objects may result from the topical function of the unexpressed O for Definite Null Instantiation, as in Hindi, where continuing topics and backgrounded information can be unexpressed (Butt & King 1997; Goldberg 2006: 195) and Brazilian Portuguese, where discourse-pragmatic factors interact with the inherent properties of the unexpressed O, whereby Definite Null Instantiation is only possible with topical Os if [−animate], as in (13b) (unlike with animate Os, with which it is only available if their antecedent is [-specific], as shown in (13c) vs (13d), with a [+specific], animate antecedent (Farrell 1990; Cyrino this volume):

(13) b. *Os bolinhos não estão   aqui porque a   Maria*
          the cupcakes not be.PRS.3PL here because the Maria
          comeu Ø   (Cyrino this volume)
          eat.PST.3SG
          'The cupcakes are not here because Maria ate (sc. them)'

    c. *O policial   insulta   presos$_i$ ante   de torturar Ø$_i$*
          the policeman insult.PRS.3SG prisoners before of torture.INF
          */*eles*   (id.)
          them
          'The policeman insults prisoners before torturing them'

    d. *O policial   insultou preso$_i$ ante   de torturer * Ø$_i$ /ele*   (id.)
          the policeman insult.PST.3SG prisoner before of torture.INF him
          'The policeman insulted the prisoner before torturing him'

Indefinite Null Instantiation, on the other hand, is viewed as resulting from the low discourse prominence of unexpressed objects, i.e., their non-topical and non-focal nature. This would account, for instance, for object omission in English with the patient argument of result verbs such as *kill, murder,* in the habitual, iterative interpretation of the pattern in which they occur, with emphasis on the event rather than on its effect on O (e.g., *that serial killer only kills at night*) (see also Section 2.1.1).

Recent work within a Sign-based Construction Grammar (Sag 2007, 2010) has also highlighted the role played by genre contexts in determining null complementation (Ruppenhofer & Michaelis 2010). In particular, it has been noted that valency constraints on object omission can be overriden by specific narrative genres. Thus, for instance, instructional imperatives (directives in Fillmore 1986: 95) (14a), match reports (14b) and quotative clauses (14c) allow Definite Null Instantiation with verbs that generally only accept Indefinite Null Instantiation (e.g., activity verbs like *eat, drink, read*) (see also (13c) from Brazilian Portuguese, where Definite Null Instantiation with these verbs is not confined to a particular genre, unlike in English):

(14) a. *Store Ø away from direct sunlight/cool briefly, then eat warm*
(Ruppenhofer & Michaelis 2010: 170)
  b. *He smashed Ø into the net when a close call went against him*   (id.: 170)
  c. *Nice work, boys, she prais*ed *Ø with a little smile*   (id.: 160)

In addition, with some verbs null objects are only possible in some genres. For instance, resultatives from directed motion verbs appear to allow object omission in match reports (15a), but not in other genres, while the objects in predicative constructions are only omissible in instructional imperative contexts (15b) (examples from Ruppenhofer & Michaelis 2010: 164):

(15) a. *Paramatti put the ball back into the box and Panadic headed Ø into the net*
  b. *Phil's Cherry Pie: cool Ø briefly, then eat Ø warm*

The inherent characteristics of unexpressed Os (e.g., animacy) and discourse-pragmatic factors, however, can be overridden by thematic notions, as a reflex of the construction in which the antecedent of the unexpressed O occurs. For instance, in Brazilian Portuguese, where, alongside the animacy and specificity constraints illustrated in (13c-d), there also operates a syntactic condition – whereby null objects whose antecedents are the subject of a matrix clause are unacceptable (Cyrino, thi volume) –, the above constraints do not apply if the subject antecedent of the omitted object in the matrix clause is an Undergoer (theme/patient), as with unaccusative patterns. This is exemplified in (15c) (where the matrix clause is an anticausative structure, featuring an Undergoer/patient subject, antecedent of the unexpressed object), to be contrasted with the ungrammaticality of (15d), where the matrix subject antecedent of the null O is an Actor (agent) (examples from Cyrino, this volume):

(15) c. *O canivete$_i$ quebrou   antes de o   Pedro$_j$ pegar Ø$_i$*
      the jackknife break.PST.3SG before of the Pedro take.INF
      'The jackknife broke before Pedro took (it)'
  d. **Pedro$_i$ quebrou   o   canivete$_j$ ante   de ele$_j$ machucar Ø$_i$*
       Pedro break.PST.3s the jackknife before of it   hurt.INF
      Pedro broke the jackknife before it hurt (him)

The discourse and semantico-pragmatic approach discussed above can be fruitfully combined with the event structure perspective illustrated in Section 2.1, leading to interesting insights and generalizations on unexpressed objects in Italian, as discussed in the following sections.

3.   The semantics of predicates and object omission in Italian

The omissibility of the object with divalent verbs in Italian appears to reflect the interplay of aspectual, thematic and discourse-pragmatic parameters, such as (i) the *inherent* and *structural aspects of verb meaning*, (ii) the *degree of thematic specification of the subject* (i.e., agentivity/control), (iii) the *inherent characteristics of the O argument* (e.g., animacy); (iv) the degree of semantic implication between the verb and O ('lexical solidarity', Coseriu 1971, Jezek 2003: 101/Individuation of O, Olsen & Resnik 1997) and (v) the *linguistic and extra-linguistic context* (Levin & Rappaport Hovav 2005, among others). Three types of object omissibility can thereby be identified, illustrated in Section 3.1.

3.1   (Sub)types of object omission

3.1.1   *Indefinite Null Instantiation (Perfective and imperfective contexts)*
In this class the omitted O argument can be [±referential], indefinite or reconstructable from the context (so-called *unspecified/indefinite object*/strong optionality (Allerton 1982: 68–69; Levin 1993: 33). This group includes verbs of different aspectual classes: states (e.g., *vedere* 'see', *amare* 'love'), activity verbs (e.g., *cucire* 'sew', *studiare* 'study', *cucinare* 'cook', etc.), as well as activity verbs allowing an accomplishment use (e.g., *scrivere,* write', *mangiare* 'eat', *disegnare,* 'draw', *dipingere* 'paint', *costruire* 'build', etc), i.e., incremental theme verbs, verbs of consumption and creation (16):

(16)   a.   *Marco mangiò   e   poi   uscì*
           Mark   eat.PST.3SG and then go-out.PST.3SG
           'Mark ate and then went out'
       b.   *Marco leggeva,   Anna scriveva   e   Ugo studiava*
           Mark   erad.IMPF Ann   write.IMPF.3SG and Ugo study.IMPF.3SG
           'Mark was reading, Anna was writing and Ugo was studying'

These verbs allow both a generic (16a–b), (16c) and a specific interpretation of the unexpressed object:

(16)   c.   *Durante il   Ramadan i   fedeli   non mangiano e   non*
           during   the Ramadan the devotees not eat.PRS.3PL and not
           *bevono   fino al   tramon*to
           drink.PRS.3PL till   to.the sunset
           During the Ramadan the devotees do not eat and drink till sunset'

    d.   *Marco mangia   sempre al   ritorno dalla   palestra, non prim*a
        Mark eat.PRS.3SG always at.the return from.the gym   not before
        'Mark always eats (sc. a meal) when he gets back brom the gym, not
        before'

In their intransitive use activity verbs with an unexpressed inanimate O denote
'general attitudes, abilities, dispositions'(Lo Duca 2000: 227; Jezek 2003: 97):

  (17) *Marco dipinge*
       Mark paint.PRS.3SG
       'Mark is a painter (lit. paints)'

These verbs allow the omission of O both in imperfective and perfective contexts,
i.e, with unbounded and bounded eventualities:[9]

  (18) *Marco spazzò   e   lavò   a fondo   prima di partire*
       Mark sweep.PST.3SG and wash.PST.3SG thoroughly before of leave.INF
       'Mark swept and washed the house thoroughly before leaving'

This class comprises various subtypes of verbs with a generic O, which is seman-
tically implied by the verb, e.g., verbs of saying (*borbottare* 'grumble', *gridare*
'yell', *sussurrare* 'whisper') and shows a clear similarity with cognate object verbs,
which take a narrow and fixed range of objects, specified by the semantics of the
verb, e.g., *vivere* 'live', *dormire* 'sleep', *combattere* 'fight', *cantare* 'sing', etc. (Lo
Duca 2000: 228):

  (19) a. *dormire il sonno del   giusto*
          sleep.INF the sleep of-the just
          'To sleep the sleep of the just'
      b. *combattere una battaglia*
          fight.INF   a   battle
          'To fight a battle'
      c. *cantare una canzone*
          sing.INF a   song
          'To sing a song'
      d. *vivere   una vita serena*
          live.INF a   life happy
          'To lead a happy life (lit. live)'

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9. The notion of (un)boundedness refers to the presence/lack of a temporal boundary in the
eventuality described by the verb. Although often identified with the related notion of (a)telic-
ity, it differs from the latter, that denotes the presence/lack of an endpoint in an eventuality
(Depraetere 1995: 2; Rappaport Hovav & Levin 2010: 30–32, among others).

With activity verbs allowing a resultative use such as *bere* 'drink', the ([± human]) nature of the subject and the discourse context allow one to understand whether the pattern refers to an activity involving a type of liquid (alcohol in (20a), petrol in (20c)) or whether the unexpressed object has a definite interpretation, as in (20b):

(20) a. *Secondo   me hai   bevuto*   (sc. alcohol)
          according-to me have.PRS.2SG drink.PP.M.SG
          'I think you are drunk (lit. you have drunk)'
      b. *Hai   bevuto*?   (sc. l'acqua) *Posso   mettere la bottiglia*
          have.PRS.2SG drink.PP.M.SG (sc. water)   can.PRS.1SG put.INF the bottle
          in   frigorifero?
          into fridge
          'Have you drunk? Can I put the bottle of water back into the fridge?
      c. *La mia macchina beve*   (sc. benzina)   (Jezek 2003: 100)
          the my car   drink.PRS.3SG (sc. petrol)
          'My car consumes a lot (lit. drinks)'

Unlike the other aspectual classes, achievements do not allow null objects, unless they are used in in a methaphorical sense (both in imperfective and perfective contexts), where they are aspectually reclassified as activities, behaving morpho-syntactically as such in relation to unexpressed objects, as shown in (21a-b) for the verb *rompere* 'break' and in (21c) for the verb *spaccare*:[10]

(21) a. *Marco ruppe   per ore   finché non ottenne   ciò che*
          Mark break.PST.3SG for hours until   not obtain.PST.3SG that which
          voleva
          want.IMPF.3SG
          'Mark insisted/tired us/them out for hours until he obtained what he wanted'
      b. *Marco rompe   molto*
          Mark break.PRS.3SG a lot
          'Mark is really trying (lit. Mark breaks a lot)'
      c. *Fedez spacca   sul   palco*[11]
          Fedez break.PRS.3SG on.the stage
          'Fedez is very good on the stage (i.e, a great performer)'

In its use as an achievement, in its literal meaning, *rompere* 'break' also occurs with a specific unexpressed O, meaning 'break something', in imperfective tenses only, as in (21d):

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10. The discussion is confined to core cases, thus it does not consider activity verbs that do not take null Os, an issue that I leave for further investigation.

11. I thank Michela Balzarano for bringing this example to my attention.

(21) d. *Giovanna prima rompe*   (sc. oggetti) *e   poi   aggiusta*
Jane   before break.PRS.3SG (sc. things) and then repair.PRS.3SG
'Jane first breaks things and then she repairs them'

This verb also takes a null object in a highly idiomatic pattern, meaning 'break up a relationship', both in imperfective and perfective tenses, as in (21e–f):

(21) e. *Rompiamo   se continua   così*
break.PRS.1PL if continue.PRS.3SG thus
'We'll break up if we go on like this'
f. *Abbiamo   rotto*
have.PRS.1PL break.PP.M.SG
'We broke up'

3.1.2   *Indefinite Null Instantiation (Imperfective contexts only)*

This class, also referred to as *'Generalized' null objects'* (Lo Duca 2000: 228–232), comprises activity verbs (e.g., *visitare* 'visit') and different types of accomplishments (e.g., psych verbs such as *affascinare* 'enchant', change of state verbs such as *corrodere* 'corrode'). The unexpressed O is [± human][+ generic] (most typically) [+ plural] and is either an experiencer, as with psych-verbs (e.g., *abbrutire* 'abase', *angosciare* 'grieve', *annoiare* 'bore') or a patient (e.g., *corrodere* 'corrode', *graffiare* 'scratch', *mordere* 'bite'). This group only allows the intransitive variant in imperfective contexts (21g–j) (Lo Duca 2000: 229; Jezek 2003; Cennamo 2011). Therefore it may be regarded as a subtype of Indefinite Null Instantiation, confined to unbounded contexts/eventualities:

(21) g. *Giovanna affascina*   (**ha   affascinato*)
Jane   enchant.PRS.3SG have.PRS.3SG enchant.PP.M.SG
'Jane is charming'(lit. enchants)
h. *l'eccessivo   lavoro abbrutisce   /logora*
the-excessive work abase.PRS.3SG /wear-out.PRS.3SG
(**ha   abbrutito   /ha logorato*)
(*have.PRS.3SG abase.PP.M.SG /wear-out.PP.M.SG)
'Too much work dulls the mind/wears you out'
i. *l'acido/l'invidia corrode* (*ha corroso)
the-acid/the-envy corrode.PRS.3SG (*have.PRS.3SG corrode.PP.M.SG)
'Acid/envy is corrosive'
j. *Questo cane morde*
this   dog bite.PRS.3SG
'This dog bites'

The A or O nature of the unexpressed argument/optional argument with some verbs is signalled by past participle agreement with the unexpressed human

argument in predicative structures. If the predicative element, the past participle, is in the masculine singular form, it refers to the A argument, the subject, *il pittore* 'the painter' in (22a); if the past participle is in the masculine plural ending, it refers to the unexpressed O argument, as in (22b) (*pro-arb null object* in Rizzi 1986; see also Levin 1993: 37–38; Lo Duca 2000: 229–230):

(22) a. *Il pittore ritrae   /ritrasse   vestito*
the painter draw.PRS.3SG /draw.PST.3SG dress.PP.M.SG
di bianco   (Lo Duca 2000: 229)
white
'The painter draws/drew (the painting) in a white dress' (lit. the painter draws/drew dressed.SG of white)

   b. *Il pittore ritrae   /ritrasse   vestiti   di bianco*
the painter draw.PRS.3SG /draw.PST.3SG dress.PP.M.PL of white
'The painter draws/drew people wearing white clothes' (lit. the painter draws/drew dressed.PL of white)

3.1.3 *Definite Null Instantiation*

This class includes verbs that only allow the intransitive variant if O is recoverable from the linguistic context (*anaphoric null object*), as in (23a-b) or from discourse, as in (23c), where the unexpressed O may refer to the Speech Act Participants (speaker and/or hearer) (*deictic null object*) (Fillmore 1986; Lo Duca 2000: 233–234, Jezek 2003: 100):

(23) a. *Ho   ascoltato   la proposta e ho   rifiutato*
have.PRS.1SG listen.PP.M.SG the proposal and have.PRS.1SG refuse.PP.M.SG
'I listened to the proposal and I turned it down'

   b. *aumenta per piacere* (sc. the volume)
increase for favour (the volume)
'Please turn the volume up'

   c. *Marco stanca   /ha   stancato*
Mark tire.PRS.3SG /have.PRS.3SG tire.PP.M.SG
'Mark wears me/us out/has worn me/us out'

With other activity verbs the intransitive variant does not refer to a generic activity, but to an event, whose semantic feature(s) is/are encoded and made explicit by the object (lexical solidarity (Coseriu 1971; Jezek 2003: 99–100)/(low degree of) Individuation of O (Olsen & Resnik 1997)). It may concern single elements, e.g., *tavola* 'table' in *sparecchiare/apparecchiare* 'clear the table/lay the table' (24a), *personale* 'staff' in (24b) or a (narrow) range of objects, such as vehicles (e.g., *macchina* 'car', *moto* 'motor-cycle') for *parcheggiare* 'park' (24c) (Jezek 2003: 99):

(24) a.   *Ho   dimenticato   di sparecchiare/apparecchiare*
           have.PRS.1SG forget.PP.M.SG of clear/   lay the table
           'I forgot to clear/lay the table'

      b.   *Non assumono   più   in quella azienda*
           not employ.PRS.3PL no-longer in that   firm
           'They no longer employ people in that firm'

      c.   *Marco ha   parcheggiato lontano*
           Mark have.PRS.3SG park.PP.M.SG far-away
           'Mark parked far away'

Also the linguistic and situational context as well as the nature of A (the subject) (e.g. animacy) play an important role in determining the interpretation of the unexpressed O.

   The omission of the object with this subtype is only possible in literal uses, as in (25a) (Lo Duca 2000: 233; Jezek 2003: 100). In figurative uses, instead, O must be expressed, as shown in (25b-c):

(25) a.   *Marco frenò/ha frenato bruscamente* (sc. *la macchina*)
           Mark brake.PST.3SG/have.PRS.3SG brake.PP.M.SG (sc. the car)
           'Mark suddenly braked'

      b.   *Marco ha   frenato   il   loro l'entusiamo*
           Markhave.PRS.3SG restrain.PP.M.SG the their enthusiasm
           'Mark restrained their enthusiasm'

      c.   **Marco ha   frenato*
            Marco have.PRS.3SG restrain.PP.M.SG
          * 'Mark has restrained'

Not only activity verbs, but also accomplishments taking an animate O, such as *uccidere* 'kill', *ammazzare* 'murder' allow its omission in order to express the event itself, as in (26a):

(26) a.   *Marco ha   ucciso   (più volte), ecco perché è*
           Mark have.PRS.3SG murder.PP.M.SG repeatedly here why be.PRS.3SG
           in carcere
           in jail
           'Mark has killed several times, that is why he is in jail'

The possibility of omitting the O argument with these verbs might be regarded as reflecting the degree of thematic specification of the A argument, which is low for *uccidere* 'kill', but high for *assassinare* 'assassinate', whose subject is highly agentive. This appears to account for the non-omissibility of O with this verb, as in (26b):

(26) b. *?*Marco ha   assassinato,   ecco perché è   in*
          Mark have.PRS.3SG assassinate.PP.M.SG here why   be.PRS.3SG in
          carcere
          jail
          '*Mark murdered several times, that is why he is in jail'

Interestingly, with this verb object omission is ungrammatical also in particular genres such as instructional imperatives, in which null objects usually occur also with verbs which do not allow them such as *prendere* 'take' , as in (26c) (cf. Section 2.2 (ex. (12c):

(26) c. * *Assassina*!
          Assassinate.IMPER.2SG
          * 'Assassinate!'

Some accomplishments allow an intransitive variant with optionality of O and an instrumental subject (e.g., *tagliare* 'cut', *aprire* 'open', *chiudere* 'close', *pulire* clean', *scrivere* 'write') (Lo Duca 2000):

(27) a. *Questo coltello non taglia bene* (< *Ho tagliato il pane con il coltello*)
          this knife not cut.PRS.3SG well (< I cut the bread with this knife)
          'This knife doesn't cut'
      b. *La penna verde non scrive* (< *Ho scritto con la penna verde*)
          the pen green not write.PRS.3SG (< I wrote with the green pen)
          'The green pen doesn't write'
      c. *Questa chiave non apre/chiude* (< *Ho aperto/chiuso il portone con questa chiave*)
          this key not open/lock.PRS.3SG (I opened/locked the gate with this key)
          'This key does not open/lock'
      d. *Lo straccio nuovo* (non) *pulisce bene* (< *Ho pulito il pavimento con lo straccio nuovo*)
          the mop new (not) clean.PRS.3SG well (< I cleaned the floor with the new mop)
          'The new mop does not clean well'

In these patterns the predicate refers to the event itself and to the suitability of the instrument to realize it (Levin 1993: 40 on an analogous pattern in English). This appears to account for the presence of modal and polarity specifications (27d), without which an instrumental cannot occur as subject (27e):

(27) e. * *Lo straccio nuovo pulisce/*La penna scrive/*La chiave apre/ *La chiave chiude*
          * The new mop cleans/*The pen writes/*The key opens/*The key locks

3.1.4   *Unexpressed objects and event structure in Italian*

The data investigated reveal a general tendency: the optionality of O obtains with verbs denoting states (e.g., *vedere,* 'see', *conoscere* 'know', *amare* 'love') and dynamic situations lacking an inherent final/terminal point, as with activity verbs (e.g., *spazzare* 'sweep', *strofinare* 'rub', *lavare* 'wash', *studiare* 'study') and activity verbs allowing an accomplishment use, i.e., active accomplishments (Van Valin & La Polla 1997: 111–113; Van Valin 2005: 32–33) (e.g., verbs of consumption and creation, *costruire* 'build', *mangiare* 'eat', *scrivere* 'write'), accomplishments with [± animate] objects (either experiencers or patients) (e.g., *affascinare* enchant', *uccidere* 'kill', *corrodere* 'corrode', *tagliare* 'cut'), and accomplishments denoting a reversible change (e.g. *aprire* 'open', *chiudere* 'close'). The focus is on the event itself rather than on its impingement on the O argument (Levin 1993: 33; Lo Duca 2000; Cennamo 2003, 2011, 2015; Jezek 2003: 94–104, among others). Achievements (e.g., *rompere* 'break', *spaccare* 'shatter'(to the exception of few highly idiomatic uses), *infrangere* 'smash, infringe') on the other hand do not allow omission of O. All aspectual classes, however, allow null objects in particular genres, e.g., instructional imperatives if the subject of the verb is not thematically highly specified, as with *assassinare* 'assassinate' and *infrangere* 'smash, infringe'.

A possible generalization for the omission of objects in Italian emerges from the data investigated: O is optional if it is licensed by the idiosyncratic aspect of verb meaning (the root) only (i.e., if it is a root participant), as with states, activities, active accomplishments and generally with verbs which do not lexicalize a final/terminal point. O can also be omitted if is it is licensed by the structural aspect of a verb meaning (i.e., its event structure template), thus if it is a structure participant, if animate and if A is not thematically highly specified, as with the verb *uccidere* 'kill', as well as in habitual, iterative contexts. These characteristics interact, in turn, with other features such as definiteness and referentiality as well as with discourse-pragmatic parameters in determining optionality of the O argument. Achievements instead do not appear to allow omission of their O argument, unless used in a methaphorical sense, whereby therey undergo aspectual reclassification.

4.   Conclusions

Adopting an event structure perspective on objecthood and transitivity (Rappaport Hovav & Levin 1998; Levin 1999), variability in the omissibility of O in Italian can be shown to reflect both the event structure template of verbs (e.g., the low degree of aspectual specification of verbs) and the elements of meaning lexicalized in the verb (e.g., the type of result encoded), interacting with non-event structure notions such as animacy, definiteness and referentiality.

However, a more fine-grained investigation is needed of the elements of meaning lexicalized in the root, as well as a thorough, corpus-based study of the different aspectual classes undergoing this intransitive alternation, in order to test the analysis put forward and the trends detected.

More specifically, a preliminary comparative analysis reveals that the constraints on Indefinite Null Instantiation in Italian appear to be similar to those at work in languages like English, with three main interacting parameters: animacy, aspect, genre. In both languages indefinite null objects are most typically [-animate], and are generally excluded with achievements and accomplishments whose subject is thematically highly specified (i.e., highly agentive) (e.g., *infringe*, *crack* and *assassinate*).

In contrast, Definite Null Instantiation displays a higher degree of language specific variability, with the parameters of animacy, specificity, aspect and thematic specification (of the subject) intertwining in different and sometimes contrasting ways, as in Brazilian Portuguese, where unaccusativity appears to be the key notion at work, overriding the inherent characteristics of the unexpressed O, (e.g., animacy), pragmatic notions (e.g., definiteness/specificity) and syntactic properties (e.g., the constraints on matrix subject antecedents of null objects).

Further indepth, comparative investigation of this type of valency alternation will contribute to further uncover and bring together the different parameters of variation and possible emerging generalizations in this valency domain, in line with the contrastive typological perspective on valency classes put forward in the contributions in Malchukov and Comrie 2015.

Acknowledgements

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