The syntax of argument structure: Evidence from Italian complex predicates[1]

RAFFAELLA FOLLI

University of Ulster

HEIDI HARLEY

University of Arizona

This paper provides an analysis of Italian complex predicates formed by combining a feminine nominalization in -*ata* and one of three light verbs: *fare* 'make', *dare* 'give' and *prendere* 'take'. We show that the constraints governing the choice of light verb follow from a syntactic approach to argument structure, and that several interpretive differences between complex and simplex predicates formed from the same verb root can be accounted for in a compositional, bottom–up approach. These differences include variation in creation vs. affected interpretations of Theme objects, implications concerning the size of the event described, the (un)availability of a passive alternant, and the agentivity or lack thereof of the subject argument.

1. INTRODUCTION

In modern generative grammar, the analysis of argument structure has relied heavily on the decomposition of the VP into (at least) an external-argument–selecting vP and a lower lexical VP. Some of the key evidence for such an approach has come from complex-predicate constructions (see e.g. Butt & Ramchand 2005, Folli, Harley & Karimi 2005, among many others), for which it is argued that the separate projections are independently realized by separate syntactic constituents. However, the question of how complex-predicate constructions differ from simplex verbs in their composition and argument structure has seldom been addressed.

In this paper, we turn to a family of constructions in Italian which provide an ideal laboratory for the investigation of these issues, as we can compare and contrast simplex and complex-predicate constructions side-by-side in a well-understood grammatical system. We argue that a compositional, syntactico-centric approach to these constructions can provide considerable insight into subtle properties of their interpretation and grammatical behavior, previously unaddressed in lexicalist analyses. In addition, we are able to provide several tests which we argue are diagnostic of functional status for the light-verb element in these constructions, thereby shedding light on the perennially vexed question of distinguishing functional elements from lexical elements in complex-predicate constructions involving multiple verbal components.

The construction in question is based on a class of feminine event nominals, usually derived from the past participle of verbs by the suffixation of -a:

(1) PARTICIPLE   NOMINALIZATION
   ha camminato → una camminat-a
   'has walked'   'a walking'

These nominals frequently enter into complex-predicate–like constructions in combination with a light verb, either *fare* 'make' or *dare* 'give':

(2) (a) Gianni ha fatto una risata.
      Gianni has made a   laughing
      'Gianni laughed.'
  (b) Gianni ha dato una lavata alle   camicie.
      Gianni has given a   washing to.the shirts
      'Gianni washed the shirts.'

In this paper we revisit the properties of these constructions and propose an analysis within a compositional view of the syntax/semantics relationship which makes no appeal to special operations of complex-predicate formation in the lexicon or elsewhere. Rather, as we will see, the properties of the light verb (heading vP) and the semantic and argumental properties of the event nominal itself compose to derive the complex characteristics observed in these constructions.

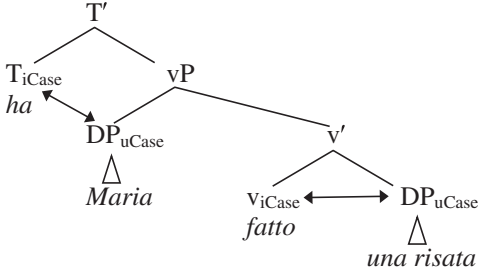One key piece of evidence we will bring to bear on this issue concerns the status of a variant which uses *prendere* 'take' as the light verb, rather than *dare* or *fare*:

(3) Gianni ha preso una sgridata.
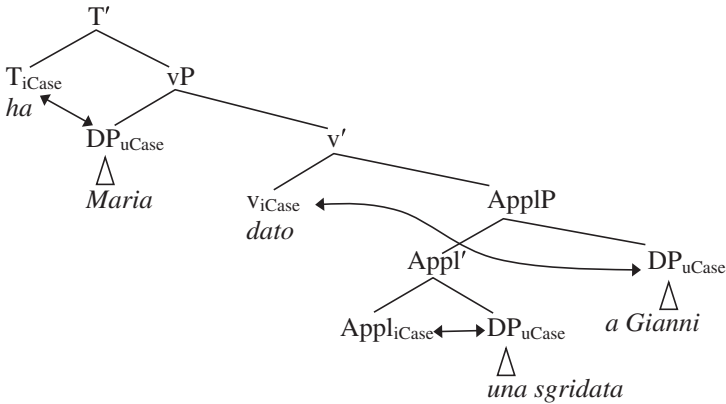   Gianni has taken a   scolding
   'Gianni was scolded.'

We will show that *prendere* is in a paradigmatic relation with *dare* and *fare*, forming a minimal contrast based on the type of v element involved and its

syntactic context. This type of relationship, we argue, is diagnostic of the functional status of these light verbs, given the treatment of blocking and competition adopted in the Distributed Morphology framework (Halle & Marantz 1993). The analysis of the V-*ata* complex-predicate constructions which we propose is illustrated in (4).

(4) (a) *fare* + V-*ata*

```
              T′
          ╱       ╲
      T_iCase      vP
       ha     ╱        ╲
          DP_uCase      v′
            △        ╱      ╲
          Maria   V_iCase ⟷ DP_uCase
                   fatto      △
                           una risata
```

(b) *dare* + V-*ata*

```
              T′
          ╱       ╲
      T_iCase      vP
       ha     ╱        ╲
          DP_uCase      v′
            △        ╱         ╲
          Maria   V_iCase ←   ApplP
                   dato     ╱       ╲
                        Appl′      DP_uCase
                       ╱     ╲       △
                 Appl_iCase ⟷ DP_uCase   a Gianni
                              △
                          una sgridata
```

(c) *prendere* + V-ata

```
              T′
          ╱       ╲
      T_iCase      vP
       ha     ╱        ╲
            v           ApplP
          preso      ╱       ╲
                 Appl′      DP_uCase
                ╱     ╲       △
          Appl_iCase ⟷ DP_uCase   Gianni
                       △
                   una sgridata
```

95
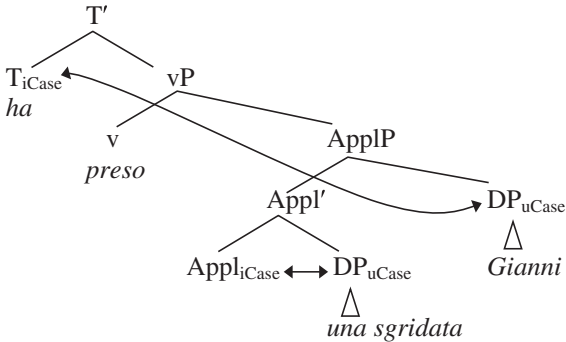
In these structures, the light verbs *dare*, *fare* and *prendere* occupy a v° position. The trees vary in two crucial dimensions. One concerns the particular flavor of v° employed; v_{CAUSE}, which introduces an external argument, and v_{BECOME}, which does not. The other concerns the presence or absence of an Applicative projection introducing the internal argument of the V-*ata* nominal. We will argue that the combinatorial possibilities made available by this structural approach result in a better understanding of a number of properties of these constructions.

The paper first provides some background on the nominals themselves, drawing on previous studies, in Section 2. Section 3 introduces the syntax of the complex-predicate construction, reviewing the only previous syntactic treatment in the literature and introducing the details of our own proposal, including the applicative analysis of the previously unanalyzed third variation on the construction with a distinct light verb. Section 4 discusses the empirical results which follow from the proposed analysis. Section 5 goes into more detail concerning the Case-checking relationships we propose, and Section 6 considers a number of additional issues and properties of the constructions, discussing how they might be accounted for within our analysis. Section 7 concludes.

2. BACKGROUND

Previous analyses of -*ata* nominals have tended to focus either on the formation of the nominals themselves and their morphological and semantic properties (Mayo et al. 1995, Samek-Lodovici 1997, Ippolito 1999, Gaeta 2002, Acquaviva 2003), or else on the syntactic process by which they compose with the light verbs to form the complex construction (Samek-Lodovici 1997, 2003).

We begin our discussion by considering first the formation of the nominals themselves, focusing on the semantic contribution of the -*ata* morpheme(s).

2.1 *The formation of V-*ata *nominals*

All previous analyses concur that when a V-*ata* nominal is formed from a verb, the morphological structure is quite complex, consisting of the verb root with its theme vowel, the past participial morphology of the relevant conjugation class, and the feminine -*a* ending. Below are examples of such nominals from all three conjugation classes. Notice that the nominal form is based on the varying participial forms of each class.

(5) *Infinitive Participle Nominal*
  (a) 1st conjugation: -*are* verbs
      mangiare mangiato mangiata 'eat'
   litigare   litigato   litigata   'quarrel'

(b) 2nd conjugation: *-ere verbs*
aggiungere aggiunto aggiunta 'add'
difendere difeso difesa 'defend'

(c) 3rd conjugation: *-ire verbs*
offrire offerto offerta 'offer'
chiarire chiarito chiarita 'clarify'

Since the majority of verbs which undergo this process are from the first conjugation, these are often termed V-*ata* nominals, but we emphasize that this term includes all such participial formations, no matter the conjugation class.

Interestingly, these nominals are also quite productively formed from nouns, mapping an individual-denoting nominal to an event-denoting one:

(6) notte   ~   nott-ata
    'night'   'night (experience of length of time)'
    gomito   ~   gomitata
    'elbow'   '(an) elbowing'
    asino   ~   asinata
    'donkey'   '(a) foolish act/remark', lit.: 'a donkeying'

Such nominals are invariably formed with *-ata*. Samek-Lodovici (1997) and Ippolito (1999) show that this is due to the independent fact that nonce verbs in Italian, formed by default verb-forming morphology, all fall into the first conjugation, that is, *-are*, which is the default conjugation for the language (Dardano 1978; Scalise 1984, 1994). These noun-based *-ata* nominals, then, are formed in a two-step process, where the stem first receives the appropriate participial suffix and then the feminine *-a* nominalizer.[2] The presence of the participial layer accounts for their event-denoting semantics, which has been remarked on by all previous accounts; the internal structure is illustrated below, next to the structure for an inflected verb stem (ThP = Theme (Vowel) Phrase; $\sqrt{}$ = (Verb) Root):
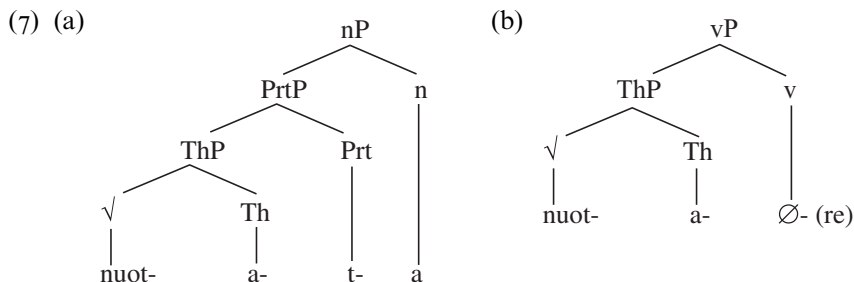
(7) (a)

Some such nominals also refer to quantity, rather than to an event proper:

(8) cucchiaio ∼ cucchiaiata
    'spoon'   'spoonful'
    camera ∼ camerata
    'room'   'big room'

Within the deverbal analysis, however, these can be conceived of as denoting the result of a containment event, consistent with the cross-linguistic observation that event-denoting nominals often give rise to result-denoting ones, when an appropriate result is implied (Grimshaw 1990).

As with much productive derivational morphology, the biggest puzzle with such nominals under this analysis is the existence of gaps: for many such nominals, the predicted fully verbal form does not surface. Hence we have *giornata* 'a day (long)' but not #*giornare* 'to spend a day', *spaghettata* 'a spaghetti feast' but not **spaghettare* 'to feast on spaghetti', etc.

Modern proposals concerning the structure of the verb phrase, however, allow us to understand the existence of such gaps in a somewhat more principled fashion. Because the participle form (containing participializing Prt°) and the fully verbal form (containing v°) are both based on a common stem (ThP), it is possible for a participial form to be constructed independently of the existence of a full verbal form. The participle is not built from the verbalized form, i.e. it does not contain the vP projection. As illustrated in (7a) above, we assume that it is built by attaching the participializing projection to a ThP, not to a vP. Consequently, the existence of a participial form, which selects simply for a ThP complement, does not necessarily imply the existence of a fully verbal infinitival or inflected form, which must include a vP.[3] Other factors, including conceptual knowledge, speaker convention, and usefulness, will enter into a full account of the variation in acceptance and productivity of the corresponding fully verbal form. On the other hand, in the structural approach here, the existence of a verbal participial form does not necessarily predict the existence of the corresponding feminine event nominal in -*a*, and similar factors will govern variation in acceptance of the event nominals as well.[4]

---

[3] Note that similar gaps exist for denominal possessive participles in English, which also need not have a corresponding verb; one can be *blue-eyed* or *long-legged* but there is no corresponding verb **to blue-eye* or **to long-leg*. In several of the Italian cases, a verbal form with the denominal base does exist, though with an interesting twist – often the verbal form requires prefixation with a particle, in the style of a location/locatum verb: *gomitata* 'an elbowing' is based on the same verb stem as *sgomitare* 'elbow one's way into'. Similarly, *camera* 'large room' is based on the same stem as *incamerare* 'put X into a container'. See Samek-Lodovici (1997) and Scalise (1994) for additional discussion.

[4] The syntacticization of morphology which is a central feature of the analysis here, as in many modern approaches to morphosyntax, leaves a fundamental difference between derivational morphology and syntactic structure unaddressed, namely the strong speaker intuition that a meaningful notion of 'gap' exists in the former but not the latter, *pace*

2.2 *The packaging function of the event nominalizer*

The *-a* nominalizer produces a complex event nominal in the sense of Grimshaw (1990), as demonstrated by Mayo et al. (1995) and Ippolito (1999), and assumed in all subsequent work. These nominals can occur as subjects of temporal predicates and co-occur with event-modifying adjectives:

(9) (a) Ogni lavata   di camicie mi   fa   perdere ore   e   ore.
        every washing of shirts   to.me makes lose   hours and hours.
        'Every washing of shirts costs me hours and hours.'
    (b) Gianni comincia ogni seminario con un' interminabile elencata
        Gianni begins   every seminar   with an interminable listing
        dei suoi successi.
        of his   successes
        'Gianni begins every seminar with an interminable listing of his successes.'

Semantically, these nominalizations are said to 'package' the eventuality denoted by the verbal base. Gaeta (2002) and Acquaviva (2003) emphasize that a V-*ata* nominal derived from an unbounded activity predicate does not itself denote an unbounded event, but rather a very saliently bounded, single 'portion' of the event. Accordingly, they treat the -*ata* suffix (unanalyzed) as a semantic packager, in the sense of Jackendoff's (1991) 'Universal Packager', which accomplishes coercion from mass to count nominals. Ippolito (1999), who decomposes -*ata*, as we have seen above, rather attributes this telicity-inducing effect to the presence of the -*t*- past participle morphology.

   Gaeta's (2002) and Acquaviva's (2003) treatments in fact entail that the packaging function of -*ata* can apply productively only to unbounded events – they claim that V-*ata* nominals are generally only formed from activity-denoting predicates, and that other V-*ata* nominals are 'marginal' or 'exceptional' cases. While we agree with the general picture of the packaging/telicizing function of the nominalizer, we will argue below that the proposed restriction to activity verbs is not borne out by the data; in fact, we will see that many change-of-state verbs participate fully in the V-*ata* paradigm.

Marantz (1997) and Borer (2005). Thanks to Andy Barss (p.c.) for pointing this out. One potential line of analysis might appeal to the notion of irregularity: because derivational morphemes are commonly morphologically selected, the relationship between the root and the derivational affix must be memorized by the speaker. For all affixes other than the 'elsewhere' – which is often a zero – the sense that a given root is not on the list of morphologically licit roots accompanying each irregular affix may well produce the 'not a word' effect, in the same way that an irregular tense affix is interpretable but laughable when attached to a stem outside its selected class of roots, for example *mean* ∼ *meant*, *lean* ∼ *leant*, *preen ∼ *prent*.

## 3. COMPLEX PREDICATES WITH -*ATA*: PREVIOUS ANALYSIS AND OUR PROPOSAL

We now turn to the previous work on the syntax of *V-ata* constructions, Samek Lodovici (1997, 1999, 2003), and present our revised interpretation of the adicity facts first described therein. We also introduce a third, non-agentive, variant on the complex-predicate pattern, and show that its properties can be captured with the analytical machinery proposed for the *fare* and *dare* analyses.

3.1 *Complex-predicate formation: Samek-Lodovici (1997, 1999, 2003)*

Samek-Lodovici (1997, 1999, 2003) argues that V-*ata* nominals enter into a lexical process of complex-predicate formation when composed with the light verbs *fare* and *dare*, in the spirit of Grimshaw & Mester's (1988) 'argument transfer' hypothesis. In Samek-Lodovici's treatment, these complex predicates are formed by a process of index suppression and transference: the thematic indices of the arguments of the nominalized verb are transferred to the light verb's indexless arguments. Selection of arguments by the nominalized main verb is thus accomplished through the light verb surrogate, which does not impose any selectional restrictions of its own.

The only contribution the light verb makes in Samek-Lodovici's treatment is to provide an appropriate number of argument slots for the thematic indices of the complex predicate. Therefore, the choice of light verb is determined solely by the transitivity of the nominalized verb. Deverbal nominals with two indices to transfer are composed with *dare* 'give', which has three argument slots; intransitive deverbal nominals, which have only one index, are composed with *fare* 'make', which has two argument slots. The process of thematic index-transfer can be graphically represented as in (11):

(10) (a) Gianni ha fatto una risata/*lavata alle camicie.
    Gianni has made a laughing/cleaning to.the shirts
    'Gianni laughed/*cleaned the shirts.'
  (b) Gianni ha dato una lavata alle camicie/*una risata.
    Gianni has given a cleaning to.the shirts/a laughing
    'Gianni cleaned the shirts/*laughed.'

(11) *dare*   [1, 2, 3]   *fare*   [1, 2]

    +   +

    lavata   [1, 2]   *risata*   [1]
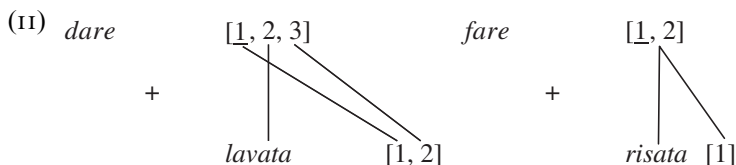
The intuition is that the surplus argument slot in the light verb is required to host the V-*ata* nominal itself, hence intransitives require a transitive light verb and transitives a ditransitive one.

Samek-Lodovici's proposal provides a clear basis for the strong effects of adicity on selection of the light verb in the complex predicate. However, we show below that this approach does not capture several salient generalizations, especially with respect to selectional differences between the complex predicates and their non-complex counterparts, as well as with respect to semantic effects introduced by the properties of *fare* and *dare*. More generally, we will argue that there is no need to posit a special lexical mechanism of complex-predicate formation, as the constructions' properties are better understood as a result of normal syntactic and semantic composition.

3.2 *Our proposal: Building a complex predicate in the syntax*
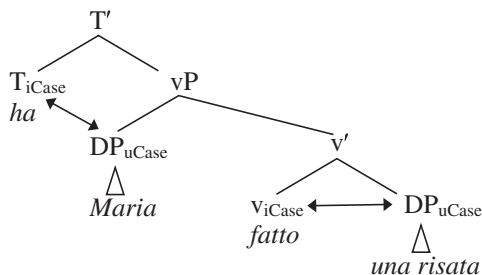
Within the syntax-based framework for argument introduction developed in current generative grammar (see e.g. Hale & Keyser 1993, Kratzer 1996, Marantz 1997, Pylkkänen 2002, among others), operations like Samek-Lodovici's index-transference are unavailable. A compositional approach to the construction of the complex predicate is required.

In its essentials, the complex-predicate construction consists of a light verb composed with a V-*ata* nominal. This fits smoothly with current proposals concerning the decomposition of the verb phrase: the light verb corresponds to the v° head of the vP projection while the V-*ata* nominal realizes the lexical content in the predicate below (Hale & Keyser 1993, Chomsky 1995, Kratzer 1996, Borer 1998, *inter alia*).

3.3 Fare *vs.* dare

We have seen in (2) and (3) above that V-*ata* nominals appear with *fare*, *dare* and *prendere* as light verbs. We begin our analysis with a proposal concerning the *fare/dare* pair. The structures we assume for the basic cases are illustrated again in (12):

(12) (a) *fare* + V-*ata*

(b) *dare* + V-*ata*

Tree diagram:

- T′
  - T$_{iCase}$ *ha*
  - vP
    - DP$_{uCase}$ *Maria*
    - v′
      - v$_{iCase}$ *dato*
      - ApplP
        - Appl′
          - Appl$_{iCase}$ ← DP$_{uCase}$ *una sgridata*
        - DP$_{uCase}$ *a Gianni*
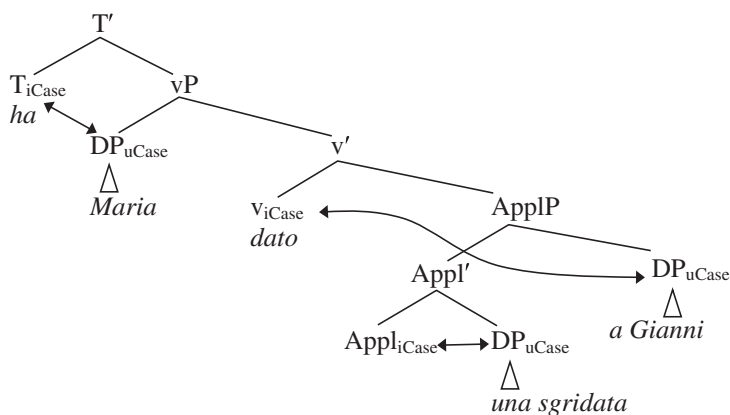
The complex predicates formed with both *fare* and *dare* are agentive, and both these light verbs select an external argument of their own. In combination with the -*ata* nominal, this gives the interpretation 'X agentively does V-*ata*'. The difference between *fare* and *dare* lies in the presence of an Applicative projection between the v head and the nominal in the latter (Marantz 1993, McGinnis 1998, 2001, Pylkkanen 2002, Cuervo 2003, Harley 2012). The Applicative head relates a second argument to the event nominal, expressing an affectedness relation between the applied argument and the event nominal.[5] In previous work (Folli & Harley 2006), we have shown that dative applied arguments in Italian c-command accusative Themes, which are introduced lower in the structure. The affectedness reading introduced by the Applicative head will become especially important when we consider the structure of the *prendere* cases below.

The underlying causative light verb, we claim, is identical in the two cases. The *fare/dare* alternation is purely morphological, simply reflecting the result of incorporating Appl° into v°: *dare* is the spell-out of v + Appl; *fare* is the spell-out of pure causative v°. This is why light verb *fare* is incompatible with a dative argument in these constructions; the dative argument is necessarily

---

[5] Note that the specifier of ApplP appears to the right in this structure. We have argued elsewhere (Folli & Harley 2007: 208) that although this may not be a common approach, there seems to be independent justification motivating it within the vP in Italian. The subject of small clauses in complements to causative verbs, for example, appears to the right of their predicate: *Maria ha fatto felice Gianni* 'Maria has made happy Gianni'. See Folli & Harley (2007) for further discussion. However, nothing of consequence for the proposal here depends on this aspect of our tree diagrams. One could equally analyze these data with a sequence of leftward remnant movements to produce the correct word order without impacting the underlying syntax of argument structure and with no consequences for thematic interpretation which is the focus of the current investigation.

introduced by the Applicative head, and light *fare* is simply (morphologically) blocked from appearing in that context; *dare* wins the competition for spelling out the $v° + Appl°$ head (for discussion of competition within the Distributed Morphology framework, see Halle & Marantz 1993, Embick & Marantz 2008).[6]

(13) *Vocabulary items competing to realize v_{CAUSE} at Late insertion*
  $[v_{CAUSE}\text{-}Appl°]$ $\leftrightarrow$ 'dare'
  $[v_{CAUSE}]$ $\leftrightarrow$ 'fare'

This analysis essentially expresses Samek-Lodovici's (1997, 1999, 2003) insight that the light verb involved is crucially dependent on the number of arguments in the construction, and vice versa, but implements it without positing an extra (pre-syntactic) lexical mechanism of theta-index–transfer.

In Section 4 below, we present several additional generalizations about the *fare/dare* + V-*ata* complex-predicate structure, and argue that in each case, the 'little v' approach can provide important insights into the source of these generalizations.

3.4 *'Unaccusative* dare*':* prendere

We next turn to the third member of the complex-predicate class, involving *prendere* 'take', showing that its behavior cannot be accounted for via index-transference. The choice of light verb in this case instead reflects the presence of a distinct underlying semantic formative, v_{BECOME}.

With certain V-*ata* nominals, the choice of light verb is more flexible. Besides *dare*, the nominal can occur with *prendere* 'take', as illustrated in (14) below. None of the previous analyses considers this variation on the general pattern. The change in light verb is clearly associated with a change in the semantics of the construction.

(14) (a) Gianni ha preso una sgridata.
      Gianni has taken a   scolding
      'Gianni was scolded.'
   (b) Maria ha dato una sgridata a Gianni.
      Maria has given a   scolding to Gianni
      'Maria scolded Gianni.'

Consider in particular (14a) above, where the subject *Gianni* is not agentive. Instead, Gianni is the recipient of the scolding, the internal argument of *sgridare*, which with the simplex verb is a normal accusative object, *Maria ha*

---

[6] Note that this account of light $v°$+Appl predicts that when you do see *fare* in the presence of an applicative argument, as in *La mamma ha fatto una torta a Maria* 'Mother made Maria a cake', the *fare* in question must be 'heavy' *fare*, spelling out the contentful lower predicative V head, as argued in Folli & Harley (2007).

sgridato Gianni 'Maria scolded Gianni'. The sentence in (14a) has a counterpart with *dare*, illustrated in (14b), in which *Gianni* is the dative argument, rather than the subject.[7]

Notice that p*rendere* in Italian has two readings, as shown in (15) below:

(15) (a) Gianni ha preso la sedia.   (agentive reading only)
Gianni has taken the chair
'Gianni took the chair.'

   (b) Gianni ha preso la febbre.   (non-agentive reading)
Gianni has taken the fever
'Gianni got the fever.'

When *prendere* composes with an event-denoting nominal in Italian, it usually has the non-agentive, unaccusative reading, as in (15b). In other words, there is no equivalent to English phrases such as *John took the exam* or *John took a leak* in Italian which use *prendere*.

Similarly, when it occurs with the V-*ata* event nominal, the unaccusative reading is mandatory; there is no agentive *prendere* + V-*ata* combination.

The choice between *dare* and *prendere* here is determined by the intended causative or unaccusative semantics not by the number of arguments of the nominal *sgridata*.

In summary, *prendere* complex predicates are non-agentive and have a subject which is an affected argument or participant. Next, we argue that these constructions fall into place straightforwardly in the larger framework of the vP analysis.

Within this framework, the causative/inchoative alternation seen with verbs like *melt* (tr)/*melt* (intr) is taken to reflect an alternation in light verb type, v_{CAUSE} alternating with v_{BECOME} (Harley 1995, Marantz 1997, Folli & Harley 2005). The latter does not select an external argument, and consequently an internal argument is promoted to subject position.

Pesetsky (1995), Richards (2001), Harley (2002), *inter alia*, argue that ditransitive verbs can have transitive but 'unaccusative' counterparts, where an external Agent argument does not appear and instead the VP-internal Goal/Experiencer argument is promoted. For example, transitive *get* in English (in the 'receive' sense only) is argued to be the unaccusative counterpart of ditransitive *give*. Similarly, in many languages it is morphologically obvious that *learn* is an unaccusative transitive counterpart of a causative ditransitive meaning *teach*.

---

[7] A *JL* referee reports that *fare una sgridata* 'do a scolding' is also possible, albeit without the internal recipient argument expressed; see the discussion of object drop in Section 6.2 below.

Evidence for the causative/unaccusative relationship between *give* and *get* in English comes from pairs like those exhibited in (16):

(16) (a) The Count gives everyone the creeps.
     (b) You get the creeps (just looking at him)   (Richards 2001: 189)

The phrase *the creeps* receives the same idiomatic interpretation in the two sentences in (16), despite the surface difference in the two verbs involved. The proposal advanced by Richards is that the key difference between (16a) and (16b) involves the upper $v°$ projection – causative in the first case, introducing an Agent argument in Spec-vP, and unaccusative v_{BECOME} in the second, without a specifier. This results in the promotion of the Experiencer argument *John* to subject position. The local environment for the NP *the creeps* in the lower part of the VP remains identical (a HAVE relation), and so the idiomatic reading carries over.[8]

We propose that *dare* 'give' and non-agentive *prendere* 'receive' stand in this same relation in Italian, and the difference between the minimal pairs in (17) below is simply in the type of $v°$ head involved. Just as *dare* is the spell-out of $v_{CAUSE} + Appl°$, non-agentive *prendere* is the spell-out of $v_{BECOME} + Appl°$.

(17) (a) Gianni ha   preso una sgridata.
          Gianni has taken a   scolding
          'Gianni was scolded.'
     (b) Maria ha dato una sgridata a Gianni.
          Maria has given a   scolding to Gianni
          'Maria scolded Gianni.'

(18) (a) *prendere* + V-*ata*

---
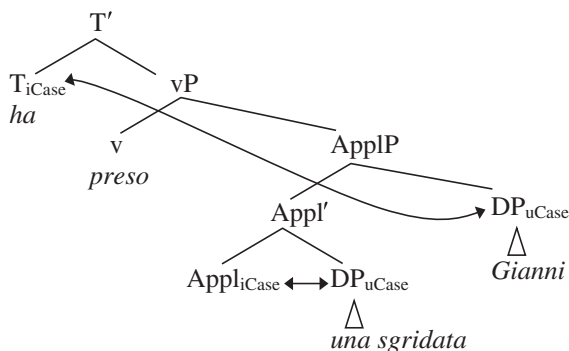
[8] Note that *give* and *get* are not necessarily 'light' verbs here; they might well both be heavy verbs containing a $\sqrt{}$ with the key HAVE semantic content that triggers the idiomatic interpretation; such an approach is perhaps suggested by the fact that *give the creeps* passivizes. Also see the discussion of the cross-linguistic typology of passivization below.

(b) *dare* + V-*ata*
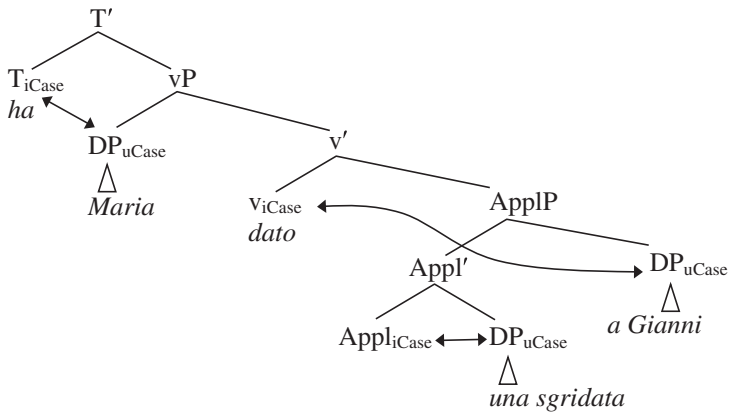
The Vocabulary-Insertion rule for *prendere* is given below, along with a repetition of the rule for *dare*, for ease of comparison:

(19) *Vocabulary items competing to realize v + Appl at Late insertion*
   $[v_{CAUSE}\text{-}Appl^{\circ}]$ ↔   'dare'
   $[v_{BECOME}\text{-}Appl^{\circ}]$ ↔   'prendere'

In the lexical index-transfer approach, the failure to transfer the external argument of the V *sgridata* to *prendere* would presumably predict ill-formedness for (17a), since it is precisely such a failure which accounts for why transitive verbs must compose with *dare* rather than *fare* in the theory.

4. EMPIRICAL RESULTS

We now turn to exploring some of the empirical predictions of the proposal presented above, beginning with an exploration of the proposed functional status of the light verb in V-*ata* complex predicates.

4.1 *Light verbs and passivization (or lack of)*

Folli & Harley (2007) argued that the vP framework entails that light verbs cannot have participial passive forms. Passive participle morphology has the effect of prohibiting the projection of an overt external argument. In their analysis, the passive morphology eliminates the external argument by attaching to the root below the v° level, preventing the projection of v_{CAUSE}.[9]

---

[9] An analysis where the passive morphology somehow 'suppresses' a projected external argument would be impossible to formulate in the framework adopted here; see discussion of the Monotonicity Hypothesis in Koontz-Garboden (2007).

In an Italian passive, *essere* 'be' replaces the upper v°, and the passive participle complement to *essere* is built from the root below, along the lines proposed in Embick (2004) for English and Alexiadou & Anagnostopoulou (2008) for Greek. The two structures are illustrated in (20):

(20) (a) *Active vP*
  Maria compró una torta.
  'Maria bought a cake.'

(b) *Passive vP*
  Una torta è stata comprata.
  'A cake was bought.'

```
        vP                                      vP
       /  \                                    /  \
     DP    v'                              vPass   PrtP
     /\   /  \                               |     /  \
   Maria v    VP                           stare  Prt   VP
         |   /  \                           be    |    /  \
         ∅  V    DP                              -t(a) V   DP
            |    /\                                    |    /\
      compra(re) una torta                        compra- una torta
         buy     a cake                             buy    a cake
```

Consequently, passive participle morphology cannot occur on true light verbs, whose position of base-generation is always v°. Only lexical verbs, whose root is projected low in the split-vP, can have a passive participle form.[10] Folli & Harley (2007) argue that this prediction is borne out by Italian causative constructions with *fare*. Causative constructions with light verb *fare* resist passivization, as shown in (21), in contrast to main verb *fare* (22), which permits it:[11]

(21) (a) Gianni ha fatto ridere   Mario.
      Gianni has made to.laugh Mario
      'Gianni made Mario laugh.'

   (b) *Mario è stato fatto ridere   da Gianni.
       Mario is been made to.laugh by Gianni
      'Mario was made to laugh by Gianni.'

(22) (a) Gianni ha fatto una torta.
      Gianni has made a   cake
      'Gianni made a cake.'

---

[10] We assume that languages with 'stacking' passive morphology, such as Japanese or Turkish, rather than participial passives, form their passives in a different way, by replacing a sub-component of the external-argument–selecting v° which corresponds to a separate Voice head. See Pylkkanen (2002) on 'Voice-bundling' vs. 'Voice-separating' languages.

[11] Note that unaccusative infinitivals embedded under *fare* allow passivization, as in *Maria è stata fatta entrare* 'Maria was made to enter', in contrast with the unergative cases exemplified in (21a). Folli & Harley (2007) show that *fare* with unaccusative infinitival complements is not 'light' *fare*, and argue that the contrast in passivizability of causatives with embedded unaccusatives vs. embedded unergatives is in fact dependent upon the main verb/ light verb distinction which is further developed in this paper.

   (b) Una torta è stata fatta da Gianni.
       a   cake is been made by Gianni
       'A cake was made by Gianni.'

This pattern extends to all the light verbs in the V*ata* constructions under consideration here. As predicted, they also fail to passivize:

(23) (a) *?Una risata   è stata fatta da Giulia.
          a   laughing is been made by Giulia
       'A laughing was made by Giulia.'
    (b) *Una letta   è stata data a Kant da Gaia.
         a   reading is been given to Kant by Gaia
       'A reading was given to Kant by Gaia.'
    (c) *?Una sgridata è stata presa da Gianni.
         a   scolding is been taken by Gianni
       'A scolding was taken by Gianni.'

This pattern is consistent with a little v analysis for *fare* and *dare* (and *prendere*) in these structures, but not with a main V analysis. If *fare* and *dare* (and *prendere*) were true main Vs, they would be expected to have passive forms.

4.2 *Diagnosing light verbs*

Given this account of the failure of passivization in these constructions, we can use the passive to confirm or deny the identity of particular instances of potential light verbs, in combination with other tests.

We can use our passivization test to investigate the status of certain V + *ata* nominals in construction with other verbs, asking whether these V + V-*ata* combinations are true complex predicates or not. One typical example involves V-*ata* nominals of bodily contact, such as *gomitata* 'elbowing' and *testata* 'head-butting'. These nominals can occur as the object of *tirare* 'pull', as in (24) below, as well as with *dare* and *prendere*.

(24) Zidane ha tirato una testata.
    Zidane has pulled a   head.butting
    'Zidane head-butted (someone)'

We might then wonder whether *tirare* + V-*ata* is a complex-predicate construction on a par with the other cases considered so far. Given what we have said above about passivization, we predict that if *tirare* is a light verb, (24) should not passivize. In fact, it can, as shown in (25), suggesting that *tirare* here is not a light verb at all:

(25) Una testata   è stata tirata da Zidane.
    a   head.butting is being pulled by Zidane
    '(Someone) is being head-butted by Zidane.'

This conclusion is supported by interpretive differences between *tirare* + V-*ata* and *prendere* + V-*ata*. Just like main verb *prendere*, in Italian, *tirare* has several interpretations, including the agentive 'throw' and a kind of non-agentive 'get'-type meaning. In (24), then, we see two distinct interpretations, one in which Zidane is the Agent of a head-butting event, and another where he has simply knocked his head against something involuntarily.

This contrasts sharply with the light verb *prendere* cases in (14) above, where ONLY the non-agentive interpretation is available. This, we argue, is because *prendere* is a true light verb, a functional element in paradigmatic opposition with agentive *dare* and *fare*. *Prendere*, since it is not a heavy verb, does not contribute its own encyclopedic content here; its meaning derives from the content of the v° head which it competes to realize.

In contrast, we conclude that *tirare* is a heavy verb even with a V + *ata* complement. Both the passivization test and the different interpretations available for *tirare* in (24) support this conclusion. See Section 6.2 below for further discussion of V + *ata* nominals as independent arguments of main verbs.

4.3 *Thematic change: Verbs of creation with* dare

Another contrast between *dare* + V-*ata* complex predicates and the corresponding non-complex forms can be seen with transitive verbs of creation. It is well known that many verbs of creation typically have two interpretations. On one interpretation, the object is understood as coming into being as the result of the action; on a second interpretation, the pre-existing object is merely affected by the action. Crucially, in the former interpretation, there is no existence presupposition for the object, while in the latter, an existence presupposition is present (see e.g. Lee 1973), as illustrated in (26):

(26) Michelangelo ha scolpito il pezzo di marmo/La Pietà.
      Michelangelo has sculpted the piece of marble/The Pietà
      'Michelangelo sculpted the piece of marble/The Pietà.'

In the corresponding complex predicate, however, the creation reading is impossible; the only reading is the one in which the object is presupposed and is affected:[12]

(27) Michelangelo ha dato una scolpita al   pezzo
      Michelangelo has given a   sculpting to.the piece
      di marmo/*alla Pietà.
      of marble/to.the Pietà.
      'Michelangelo has sculpted the piece of marble/The Pietà.'

---

[12] Of course, (27) has a licit reading according to which Michelangelo came back to the finished Pietà and sculpted it further. What is important here is that (27) lacks the creation reading of its counterpart in (26), which is what the asterisk here indicates.

A similar effect is seen with another set of verbs with canonical Incremental Theme objects. With the simplex forms of such verbs, a completion implication is present (though cancellable) and this is reflected in the relatively degraded status of (28a′) compared to (28a). On the other hand, there is no implication of completion in the complex-predicate form, and therefore (28b) and (28b′) are equally good.[13]

(28) (a) Gianni ha pulito il tavolo.
Gianni has cleaned the table
'Gianni cleaned the table.'

(a′) ??Gianni ha pulito il tavolo ma è ancora sporco.
Gianni has cleaned the table but it.is still dirty
'Gianni cleaned the table but it is still dirty.'

(b) Gianni ha dato una pulita al tavolo.
Gianni has given a cleaning to.the table
'Gianni cleaned the table.'

(b′) Gianni ha dato una pulita al talvolo ma è
Gianni has given a cleaning to.the table but it.is
ancora sporco.
still dirty
'Gianni cleaned the table but it is still dirty.'

Effectively, the Incremental Theme interpretation is not available in V-*ata* complex-predicate constructions. In Samek-Lodovici's framework, it is not clear why the simplex and complex predicates should differ in this regard, since theta-transfer should not be sensitive to the particular thematic relationships at issue. In contrast, we argue that the presupposition of existence in (27), and the lack of an Incremental Theme reading in both (27) and in (28b′), follow from the light-verb approach.

Recall that the fundamental difference between the *dare* and *fare* light verbs has to do with the type of complement they take. *Fare* has a simple DP complement, denoting an event. The interpretation of the construction with *fare* is simply 'X makes/does Y', where Y is an event denoted by the V-*ata* nominal. In contrast, the complement to v° in the *dare* construction is predicative – a small clause introduced by the ApplP projection. The subject of this predication is the dative argument, and the predicate is the relation denoted by the Appl° head together with its complement, the event nominal. Essentially, in *dare* constructions the

---

[13] Thanks to a *JL* referee for suggesting these examples.

complement of v° is a small clause, and the whole is interpreted as [$_{vP}$ X CAUSE [$_{SC}$ Y Appl -*ata*]]. This is the canonical structure associated with a change-of-state event (Hoekstra & Mulder 1990, Harley 2005, among many others).

Thus, the dative object in a *dare* + V-*ata* construction is an 'inner subject', in the terminology of Hale & Keyser (1993) – the (affected) subject of a result state predication. This position is well-known to involve a presupposition of existence, since a non-existent item cannot undergo a change of state (Tenny 1987). Consequently, the creation reading – the Incremental Theme reading – is impossible for the complex construction in (27).[14]

5. CASE ASSIGNMENT AND ARGUMENT LICENSING

We turn now to the general question of argument licensing in these constructions, beginning with our assumptions about Case assignment.

We essentially adopt Samek-Lodovici's (1997, 1999, 2003) view of the case situation in the *fare* and *dare* complex predicates, namely that there are two structural Cases available in the former, and three in the latter, but we differ in terms of the projections which make these Cases available.
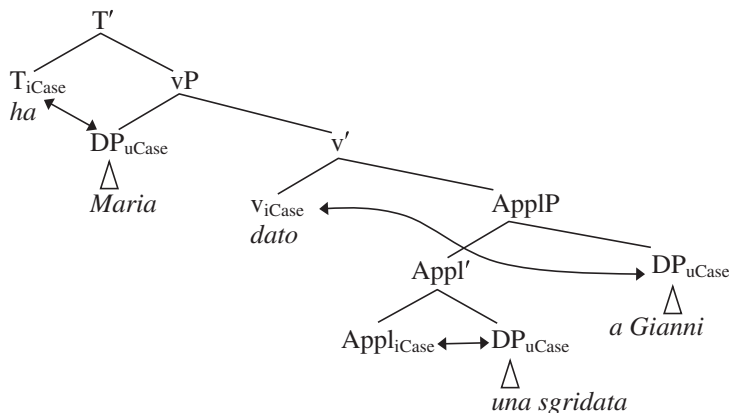
All finite clauses have one structural Case available in Spec-TP, where the highest Case-licensed argument appears. Clauses with and without Applicative heads, however, differ in the number of structural Cases available in the lower portion of the clause. We assume, standardly, that agentive vP has a structural Case available (Chomsky's 1995 v*P), which licenses the accusative object in most transitive constructions. We further assume that the Applicative head carries a structural Case feature, which can license a DP argument as well. It is important for the analysis we are about to present that the Applicative head licenses a normal structural Case, not inherent or quirky dative case.

Following Marantz (1991), Bobaljik (1995), Harley (1995), and Folli & Harley (2007), we assume a relativistic ('dependent') approach to the spell-out of checked structural Case features. Each DP, including the event nominal, enters the derivation with an uninterpretable Case feature, which checks, via Agree, the Case feature of the nearest c-commanding Case-licensing head. Consider the tree below, now attending
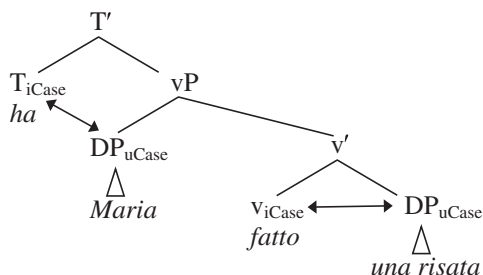
---

[14] See Folli & Harley (2005), Harley (2005, 2010) for a fuller discussion of our assumptions concerning the thematic location associated with objects of verbs of creation or destruction – Dowty's (1991) 'Incremental Themes'.

particularly to the double-headed arrow notations indicating Case checking relationships:
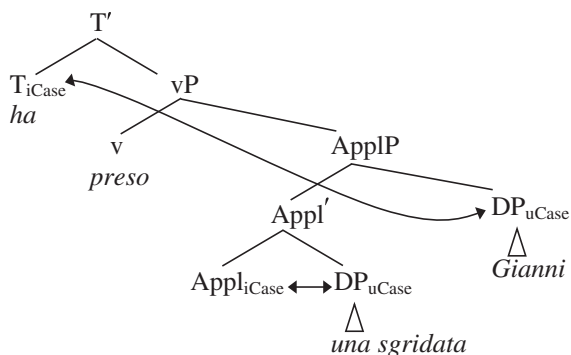
(29)

```
                T′
              /    \
      T_iCase       vP
       ha          /  \
        ↖      DP_uCase  v′
          ↘     △       /   \
              Maria  v_iCase    ApplP
                     dato ←    /      \
                           Appl′       DP_uCase
                          /    \         △
                   Appl_iCase ↔ DP_uCase  a Gianni
                                △
                            una sgridata
```

(30)

```
                T′
              /    \
      T_iCase       vP
       ha          /  \
        ↖      DP_uCase  v′
          ↘     △       /   \
              Maria  v_iCase ↔ DP_uCase
                     fatto       △
                             una risata
```

(31)

```
                T′
              /    \
      T_iCase       vP
       ha    ↖     /  \
              v         ApplP
            preso      /      \
                   Appl′       DP_uCase
                  /    \         △
           Appl_iCase ↔ DP_uCase  Gianni
                       △
                   una sgridata
```

As shown in (29), (30) and (31) above, each argument checks its uninterpretable Case features against the nearest c-commanding Case assigner, in accordance with the Minimal Link Condition. However, spell-out of morphological cases is relativistic, with different winning case-markers chosen depending on how many other Case features are in the competition within a

given clausal domain, and also depending on their configuration with respect to the other DPs in the clause bearing structural Case. A single Case feature in a clausal domain is spelled out with a nominative case marker; two are spelled out with nominative and accusative case markers, and three are nominative, dative and accusative, regardless of which head is responsible for checking the features of a given DP. For a more extended discussion, see Folli & Harley (2007), Bobaljik (2008).

6. EXTENDING THE ANALYSIS

In this section, we consider a number of additional properties particular to the V-*ata* construction, to do with event structure, verb classes, argument composition, and the status and interpretation of the V-*ata* nominal itself.

6.1 *Verb class flexibility of V-*ata *nominalization*

Gaeta (2002) and Acquaviva (2003) both emphasize the notion that it is mostly unbounded activities which participate productively in V-*ata* nominalization. However, this does not seem justified. Consider the following list of nominalizations from various event classes:

(32) *Unergatives*
dormire 'to sleep' → *dormita*
nuotare 'to swim' → *nuotata*
galoppare 'to gallop' → *galoppata*
correre 'to run' → *corsa*
ridere 'to laugh' → *risata*

(33) *Degree Achivements*
salire 'to climb/to rise' → *salita*
crescere 'to grow/to raise' → *crescita*
aggiungere 'to add' → *aggiunta*
allungare 'to lengthen' → *allungata*

(34) *Transitives*
lavare (*una camicia*) 'to wash (a shirt)' → *lavata* (*alla camicia*)
mangiare (*una mela*) 'to eat (an apple)' → *mangiata* (*alla mela*)
studiare (*la poesia*) '*to study* (the poem)' → *studiata* (*alla poesia*)
bere (*il suo sciroppo*) 'to drink (his cough syrup)' → *bevuta*
(*al suo sciroppo*)

(35) *Unaccusatives*
entrare 'to enter' → *entrata*
uscire 'to exit' → *uscita*
venire 'to come' → *venuta*
cadere 'to fall' → *caduta*
scivolare 'to slide' → *scivolata*

   Unergatives fit unproblematically into the activity class, consistently with Gaeta's and Acquaviva's treatments, but the remaining verb types do not. Degree achievements, while arguably unbounded, take *essere* 'be' as an auxiliary, so in some fundamental ways they pattern with change-of-state unaccusatives rather than activities. Similarly, the transitive verbs which work well with *-ata* tend to be object-drop verbs, consistent with the activity hypothesis, but they can also participate in the complex-predicate construction with delimiting object arguments present, on accomplishment-based interpretations.[15] Finally, many clearly unaccusative accomplishment/achievement verbs form felicitous V-*ata* nominals. In fact, Samek-Lodovici (1997) provides a list of several hundred V-*ata* nominals, divided into deverbal and denominal subgroups. Of the first forty cases in the (alphabetically organized) list of V-*ata* nominals he provides, most of them (more than 30) are transitive change-of-state verbs, members of either the bounded change-of-state class or the degree-achievement class. Gaeta (2002) and Acquaviva (2003: 7–8) suggest that these cases are marginal formations, but we see no reason to treat them as less productive than the activity predicates – emphatically the contrary, in fact. We argue below that our account explains the intuition of previous authors that intransitive activity verbs form the central cases of V-*ata* nominalization. The problem has to do with the conditions under which an event nominal can appear in isolation, outside the complex-predicate construction.

6.2 *Independent status of V-*ata *nominal*

Given our observations in Section 6.1 above, it seems incontrovertible that V-*ata* nominals are productively formed from many different classes of verbs, including transitive change-of-state verbs, contra the previous analyses mentioned.[16] However, there is a salient difference between V-*ata* nominals formed from intransitive verbs and those formed from transitive ones: the former seem to have an independent existence as nominals in the language, while the latter are very restricted, tending to occur only in construction with *dare*.

---

[15] Note that the *a*-marked object of such V-*ata* nominals, when it occurs with *dare*, tends to be definite. We ascribe this preference to the 'inner subject' status of the dative argument, discussed in Sections 4.3 and 6.3. This preference contrasts with the indefiniteness requirement imposed by the DP-internal preposition *di*, discussed in Section 6.2 below.

[16] We are applying the term 'productive' to the *-ata* affixation process itself, in the sense of being unrestricted with respect to the stems it may attach to – V-*ata* nominals may be formed from verbs of all classes. We recognize that there are many metrics of productivity, including also frequency of occurrence and (for syntactic productivity) freedom of distribution. Thanks to a *JL* referee for pointing out that we are using only the former (morphological) sense of productivity here.

This distinction is robustly reflected in patterns of distribution of these nominals, including not only their occurrence outside the complex-predicate construction, but also the availability of modification with a strong quantifier. Intransitive V-*ata* nominals appear to be full-fledged nouns, while transitive ones are more constrained in their distribution.

In (36) we see that nominals formed on the intransitive verbs *nuotare* 'swim', *ridere* 'laugh' and *camminare* 'walk' can occur alone and with a strong quantifier.

(36) (a) Che bella nuotata/risata/camminata!
         what good swimming/laughing/walking
         'What good swimming/laughing/walking!'

  (b) Ogni risata   ti   allunga   la   vita.
        every laughing you.DAT lengthens the life
        'Every laugh lengthens your life.'

  (c) La mia nuotata   quotidiana non si   discute.
        the my swimming   daily   not REFL discusses
        'My daily swim is not to be discussed.'

  (d) Il   dottore mi   ha   prescritto molte camminate in
        the doctor to.me has prescribed many walkings   in.the
        montagna.
        mountain
        'The doctor has prescribed a lot of mountain walks for me.'

In contrast, (37) shows that nominals formed from transitive verbs such as *aggiustare* 'fix', *attivare* 'activate' and *assicurare* 'secure' are distinctly degraded in these contexts.

(37) (a) *?Che bella   aggiustata/assicurata/attivata (alla
           what beautiful fixing/securing/activating   to.the
         macchina/carta)!
         car/card
         'What a great fixing/securing/activating of the car/card!'

  (b) *?La frequente aggiustata (alla   mia macchina) mi
         the frequent fixing   to.the my car   me.dat
        permette di passare l'MOT.
        permit   to pass   the.MOT
        'Frequent adjustments to my car allows me to pass the MOT.'

  (c) *?Molte attivate   (alla   carta) possono causare dei
          many activations to.the card   can   cause   of.the
        problemi.
        problems
        'Many card activations can cause problems.'

(d) *?La assicurata (alla macchina) mi è costata molti soldi.
   the insurance to.the car   to.me is cost   much money
  'The car insurance cost me a lot of money.'

The above distributional restrictions are likely to be the source of the impression reported in previous work that activity verbs combine better with -*ata* than change-of-state verbs. However, the constraint is considerably more complex than a simple distinction in morphological productivity. Rather, both types of verb are equally well-formed with -*ata*, but differ in their freedom to occur outside the complex-predicate construction.

 We will argue below that the difference depends on whether a given verb must co-occur with its internal argument, and on the ways in which such an obligatory internal argument can be Case-licensed in the syntactic structure. The account relies crucially on the notion that a DP cannot appear in the syntactic structure without receiving Case from an appropriate licenser, and on the notion that obligatorily transitive verbs are ill-formed without their internal arguments. If there is no source of Case-licensing for an obligatorily transitive verb's internal argument, ungrammaticality is the result. The lack of a Case-licenser explains why transitive event nominals cannot occur with their internal arguments on their own, and also why transitive event nominals cannot occur with *fare*.

 The crucial distinction between the verbal complex-predicate context and the purely nominal independent context is that in the former there are additional resources available for Case-licensing nominals. In particular, applicatives are available in verbal contexts only.[17]

 In the examples in (37) above, the absence of the Applicative head accounts for the unavailability of the internal argument of the verb which is the source of the participle, and hence the ungrammaticality of these nominalizations.[18] Equivalent nominalizations formed from intransitive verbs, as

---

[17] The verbal quality of Applicative projections is not generally subject to theoretical debate. As a *JL* referee notes, one could ask how the restriction to verbal contexts can be theoretically implemented. We assume, presumably with many in the literature, that the Applicative head either syntactically or semantically selects for a verbal complement, and also itself requires checking by a dominating verbal projection of some sort (e.g. Voice, see Harley 2007). If a nominalizing affix could include higher verbal projections, we would expect to see deverbal nominals with applicatives inside them, and indeed deverbal nominals in other languages sometimes can include applicatives or causatives (see e.g. Stone 2010 for examples from Cherokee). However, these Italian nominals based on verbal participles do not select for a 'high' enough verbal projection, and Applicative heads are therefore excluded from occurring in them.

[18] We leave untreated the relationship between the selectional requirements of the transitive verb and the Applicative projection. In the verbal realm, it is not uncommon for a thematic restriction imposed by a verb to be implemented indirectly, via a relationship between a verb and a prepositional projection which actually introduces the verbally selected

in (36), are well-formed, because these verbs do not require the presence of an internal argument for interpretation. Since many intransitive verbs are unergative activity predicates, the effective result is an impression that the Aktionsart of the verbal base is important in determining whether *-ata* can be affixed to it or not.

This account makes two predictions concerning when a transitive verb will have an *-ata* form which can occur as an independent nominal. First, transitive verbs which allow object drop, such as *spazzare* 'sweep', *pulire* 'clean' or *spolverare* 'dust', will also form nominal V-*ata* items with an independent distribution, as in (38) (thanks to a *JL* referee for these examples):

(38) Una bella spazzata/pulita/spolverata! Ecco di cosa ha bisogno
      a   great sweeping/cleaning/dusting this of what has need
      il cortile/il   tavolo/hanno bisogno i   mobili.
      the courtyard/the table/have   needed   the furniture
      'A great sweeping/cleaning/dusting! That's what the courtyard/table/
      furniture needs!'

These nominals are well-formed because they do not require a syntactic object, even if they semantically imply one, as indicated by the continuation in the example.

Second, if an alternative method for Case-licensing an internal argument is available within the DP, we predict that independent V-*ata* nominals of mandatorily transitive verbs will be well-formed, since their requirement for a syntactic object will be met. There are some such cases using the preposition *di* 'of', which we assume is analogous to the Last Resort assignment of *of* in English event nominals. Consider the following examples:

(39) (a) Che lavata   di camicie!
          what washing of shirts
          'What a washing of shirts!'
     (b) *Che lavata   alle   camicie!
           what washing to.the shirts
           'What a washing of the shirts!'
     (c) Che bevuta   di latte!
          what drinking of milk
          'What milk-drinking!'
     (d) *Che   bevuta   al latte!
           what drinking of milk
           'What a drinking of the milk!'

Such *di* arguments are fine in stand-alone V-*ata* nominals, as they are Case-licensed entirely internally to the DP. The *di* has some special constraints,

---

argument. For example, this question arises in the analysis of the relationship between the double-object and *to*-dative structures of ditransitive verbs (Pesetsky 1995, Harley 2002).

restricting the internal argument to an indefinite NP complement, which limits the general applicability of this strategy.[19]

This, then, also provides the necessary ingredients to understand the absence of transitive V-*ata* nominals with *fare*. Our analysis predicts that, when we see *fare* with a V-*ata* nominal, no Applicative head is present, since v + Appl is spelled out as *dare*. This is why we do not expect *fare* to co-occur with a dative-marked internal argument, hence we do not expect it to co-occur with a transitive V-*ata* complement. However, when a different argument-introducing strategy is available internally to the DP, as in the *di* construction above, *fare* CAN in fact occur with a transitive -*ata* nominal (40), as the analysis predicts.

(40) Gianni ha fatto una lavata di camicie.
     Gianni has made a   washing of shirts
     'Gianni washed shirts.'

In short, the absence of internal arguments with *fare* + V-*ata* constructions follows from the unavailability of a Case-licenser for these arguments. This in turn follows from the approach advocated here, in which each argument is introduced by a head contributing to the overall syntactic and semantic properties of the whole.

6.3 *Adicity mismatches*

In the analysis proposed here, the dative arguments in V-*ata* complex-predicate constructions have a different source than dative arguments in run-of-the-mill ditransitives. In the former, they are introduced by an ApplP projection, while in the latter they are subcategorized for by a lexical verb, i.e. they are introduced in the specifier of the lower VP itself, in a local relationship with the lexical verb, rather than in the specifier of a higher functional projection such as Appl°. It is possibly unsurprising, then, that the requirement that *dare* occur with a dative argument is somewhat more relaxed in the complex-predicate cases than when *dare* is a lexical verb. There are cases of *dare* + V-*ata* nominals of transitives which can occur without the dative *a*-phrase in the right context:

(41) Gianni (ha preso il martello e) ha dato una martellata.
     Gianni has taken the hammer and has given a   hammering
     'Gianni took the hammer and gave a hammering.'

---

[19] Another prepositional strategy is available for some verbs, interestingly the verbs of the object-drop class illustrated in (38), in which the internal argument is licensed by prepositional *a*:

(i) Dopo ogni spazzata al   cortile, Gianni beveva un caffe.
    after every sweeping to.the courtyard Gianni drank a   coffee
    'After every sweeping of the courtyard, Gianni drank a coffee.'

Thanks to a *JL* referee for these examples.

This seems to be possible when the nominalized verb is itself based on an instrumental noun, as with *martellare* 'to hammer', *sforbiciare* 'to scissor', or *pedalare* 'to pedal'.

Lexical *dare*, in contrast, does not permit the omission of the dative DP without heavy contextual support:[20]

(42) Maria ha dato una bicicletta *(a Gianni).
     Maria has given a   bicycle   to Gianni
     'Maria gave Gianni a bicycle.'

Similarly, with certain denominal V-*ata* nominals, with the meaning 'take/give a blow to N', *dare* is well-formed without the dative argument.

(43) Gianni ha dato una testata prima di entrare in cabina.
     Gianni has given a   heading before of entering the cabin
     'Gianni knocked his head before entering the cabin.'

Even with *dare* + V-*ata* constructions which do not allow the omission of the *a*-phrase when all arguments are expressed as full DPs, there is a crucial difference from lexical verb *dare*. Both arguments must be present with lexical *dare*, even if only as pronominal clitics:[21]

(44) A: Gianni ha dato una bicicletta a Maria?
         Gianni has given a   bicycle   to Maria
         'Did Gianni give Maria a bicycle?'

   B: (a) *Si, Gianni l'ha   data.
          yes Gianni it.has given
     (b) Si, Gianni gliel'ha   data.
         yes Gianni to.her.it.has given
         'Yes, Gianni has given it to her.'

---

[20] Omission of the dative or even of both objects is possible in very particular contexts:
  (i) Abbiamo già   dato.
     already   have.we given
     'We already gave.'
  (ii) Date ai   poveri, non ai   ricchi!
      give to.the poor   not to.the rich
      'Give to the poor, not to the rich!'
  Thanks to a *JL* referee for pointing out these examples.

[21] Note that the constraint on argument expression with heavy verb *dare* carries over to the passive form: *Una bicicletta è stata data *(a Gianni)*, 'A bicycle was given *(to Gianni)', as predicted by our contention above that Italian participial passives are always formed from heavy verbs.

In contrast, in complex predicates with transitive V-*ata* nominals, the dative clitic may be omitted in the same context:

(45) A: Gianni ha dato una letta   a Kant?
      Gianni has given a   reading to Kant
      'Did Gianni read Kant?'

  B: Si, Gianni l'ha   data.
      yes Gianni it.has given
      'Yes, he read Kant.'

In the account we propose, the complement of light verb *dare* is a small clause headed by ApplP; we contend that the single accusative clitic here refers to the proposition encoded by that small clause [[*una letta* Appl°] *a Kant*]$_{ApplP}$.

While we do not have a specific account predicting the omissibility of the applicative datives, it is perhaps not surprising that they might differ in their omissibility from other datives, since they result from a different syntactic configuration. In particular, we note that the dative *a* with heavy verb *dare* is a true preposition. In contrast, we have assumed above and in earlier work that the dative *a* can be the realization of a structural Case. In such cases, the dative phrase is a simple DP, not a PP, and as such is integrated into the structural Case configuration of the clause. In Folli & Harley (2007), we argue that a structural dative *a* in Italian is supported by the accusative/dative alternation in Italian causatives of intransitive/transitive alternating verbs: *Gianni ha fatto cantare Mario* 'Gianni made Mario sing' vs. *Gianni ha fatto cantare l'inno nazionale a Mario* 'Gianni made Mario sing the national anthem'. This, we suspect, is likely to be the source of the difference in omissibility of the dative argument with the complex-predicate construction.[22]

6.4 *Impression of size of* -ata

Previous analyses have not suggested any approach to a subtle but salient semantic effect of V-*ata* nominalization, namely that the event denoted by the nominal in general carries an implication of a certain minimum size or intensity. For example, *una mangiata* 'an eating', usually refers to a feast,

---

[22] The alternation between dative and prepositional *a* also figures largely in the analysis of the different behaviors of benefactive applicative arguments and true Goal arguments in Folli & Harley (2006). Similar variation between homophonous adpositional and structural dative forms is found in many other languages. See, for example, Miller (1992) for extensive argumentation to this effect for French *à*, and Sadakane & Koizume (1995). However, a truly comprehensive justification of this proposal for Italian *a*, comparable to Miller's study of French *à*, remains to be undertaken.

rather than a snack; similarly, *una dormita* 'a sleeping' cannot refer to a quick nap – it usually implies a long, sound sleep.[23]

This contrast carries over to the V-*ata* nominals in construction with *fare*. It can be clearly felt when we compare a simplex verbal use of *mangiare* 'eat' with the construction involving a V-*ata* nominal in the examples below:

(46) (a) Gianni ha mangiato.
Gianni has eaten
'Gianni ate.'
(Can describe a small or regular-sized eating event.)
  (b) Gianni ha fatto una mangiata.
Gianna has done an eating
'Gianni ate.'
(Describes a substantial eating event.)

Interestingly, when a V-*ata* nominal composes with *dare*, the impression is in fact the opposite – *dare* with V-*ata* seems to suggest a brief, inconsequential version of the event. Compare the sentences with *studiata* 'a studying':

(47) (a) Gianni ha fatto una studiata.
Gianni has done a studying
'Gianni studied.'
(Presupposes a serious amount of studying.)
  (b) Gianni ha dato una studiata a Kant.
Gianni has given a studying to Kant
'Gianni studied Kant.'
(Presupposes a quick scan.)

In (47a), *fare una studiata* 'do a studying' seems to suggest a significant effort has been invested, as with (46b) above. In contrast, the sentence with *dare una studiata a Kant* 'give a studying to Kant' in (47b) implies a brief, insubstantial event.

We claim that the size effect in independent V-*ata* nominals derives primarily from the fact that the nominalizer is feminine, which correlates with cross-linguistic observations concerning the use of feminine gender with objects of a certain size (Gerdts 2009 and references therein). However, the reverse effect which we see with *dare* derives from the event-structure properties of the light verb construction itself.

---

[23] In fact, the implication is that the events in question are of at least normal duration, not that they are necessarily exceptionally large. As a *JL* referee notes, for some verbs such as *camminare*, the derived nominal *una camminata* 'a walking', can be a walk of anything from normal to exceptional duration in its usual uses; it cannot, however, be noticeably shorter than usual. For other verbs, such as those in the text, the usual interpretation is that an exceptional size has been reached.

Let us consider the temporal properties of the *dare* + V-*ata* structure. In the *dare* construction, we propose that the semantics involves a simple transition to the result state – the relationship between the dative argument and the V-*ata* nominal is asserted to be caused. The period of time required for the establishment of the applicative relationship is then a function of the nature of that relationship, not a function of the event type involved – the size/temporal extent of the V-*ata* nominal is essentially irrelevant.[24]

The nature of the applicative relationship is a matter of some debate in the literature, but there is a general consensus that it is a species of possession (or, perhaps, possession relationships are a species of applicative – see e.g. Pylkkänen 2002). The crucial trait of such relationships for us is the instantaneous nature of their creation; one either is or is not a possessor of something – there is no transitional state on the way to possession. Possession-change relations such as *get* or double-object *give* behave like Achievements, in the Vendler classification, with respect to modification by temporal adverbials and other tests.[25]

Applying this observation to our current analysis, we conclude that the *dare* + V-*ata* constructions are Achievement predicates because the small clause headed by the applicative is an instantiation of this possession relationship. The temporal contrast between *Gianni ha studiato Kant* 'Gianni studied Kant' and *Gianni ha dato una studiata a Kant* 'Gianni has given a studying to Kant', then, is a reflection of the different predicates involved in the small clauses. When *studiare* 'study' is a main verb, *studiare* itself is the predicate of the small clause, contributing all its temporal properties, specifically an extended duration, to the change of state. In contrast, when *dare una studiata* 'give a studying' is involved, the predicate is a punctual one introduced by the Appl° head, and the durational properties of *una studiata* are not relevant to the small clause's event structure.

7. CONCLUSION

In this paper, we have argued that a syntactic approach to argument structure can give considerable leverage on some puzzling features of Italian

---

[24] Alessandro de Medeiros (p.c.) reports a similar effect in the equivalent Portuguese construction, and comes to a similar conclusion concerning the source of its punctual nature. See Scher (2004) and de Medeiros (2009) for further discussion of the Portuguese cases.

[25] Possession relationships and experiencer relationships have been argued to be parallel in a considerable body of work, and indeed the one may well be a variety of the other (see e.g. Noonan 1993). This is equally true of the experiencer-subject reading of *get*, which parallels the possession-change structure; compare *The boy got a headache/got milk spilled on him* with *The boy got a bicycle*; these are also Achievements, and applicative syntax could conceivably be extended to treat them as well. However, note that we would not want to claim that Achievement predicates such as *reach the top* or *win* are also underlyingly applicative constructions; we assume that there are other compositional sources for achievement interpretations available in the semantics of argument structure.

complex predicates in V-*ata*, which contrast with those of their simplex counterparts. In particular, it provides a natural explanation for the unavailability of the creation reading in complex predicates formed from Incremental Theme verbs. It also explains the variation in thematic roles seen with a change in light verb from agentive *dare* 'give' to non-agentive *prendere* 'take'. These facts in particular constitute strong support for the hypothesis that there are varieties of light verb with different argument-introducing properties and event-structure interpretations. We have argued that the much-discussed intuition that V-*ata* nominals are primarily based on activity-denoting unergative verbs result from a simple difference in distribution of these nominals compared to their change-of-state, transitive counterparts. The actual formation of the nominals is equally productive for both types of verbs, but the argument-licensing needs of the transitive nominals prevents them from appearing in several contexts in which the activity-denoting verbs are possible. From a broader perspective, we feel that the account also demonstrates the viability and usefulness of the syntactico-centric approach to argument structure and morphological phenomena.

REFERENCES

Acquaviva, Paolo. 2003. I significati delle nominalizzazioni in -ATA e i loro correlati morfologici. In Maria Grossmann & Anna M. Thornton (eds.), *37 congresso della Società di Linguistica Italiana: la formazione delle parole, L'Aquila*, 7–27. Roma: Bulzoni.

Alexiadou, Artemis & Elena Anagnostopoulou. 2008. Structuring participles. *The West Coast Conference on Formal Linguistics* (WCCFL) 26, 33–41.

Bobaljik, Jonathan D. 1995. *Morphosyntax: The syntax of verbal inflection*. Ph.D. dissertation, MIT.

Bobaljik, Jonathan D. 2008. Where's Phi? Agreement as a post-syntactic operation. In Daniel Harbour, David Adger & Susana Béjar (eds.), *Phi-theory: Phi features across interfaces and modules*, 295–328. Oxford: Oxford University Press.

Borer, Hagit. 1998. The morphology–syntax interface. In Andrew Spencer & Arnold M. Zwicky (eds.), *The handbook of morphology*, 151–190. London: Basil Blackwell.

Borer, Hagit. 2005. *Structuring sense*, vol. II: *The normal course of events*. Oxford: Oxford University Press.

Butt, Miriam & Gillian Ramchand. 2005. Complex aspectual structure in Hindi/Urdu. In Erteschik-Shir & Rapoport (eds.), 117–153.

Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.

Cuervo, Maria Cristina. 2003. *Datives at large*. Ph.D. dissertation, MIT.

Dardano, Maurizio. 1978. *La Formazione delle Parole nell'Italiano Contemporaneo*. Roma: Bulzoni.

de Medeiros, Alessandro Boechat. 2009. Aspecto e estrutura de evento nas nominalizações do português do Brasil: revendo o caso das nominalizações em **-ada** [Aspect and event structure in Brazilian Portuguese nominalizations – revisiting the case of *ada*-nominals]. Ms., Universidade de São Paolo.

Dowty David R. 1991. Thematic proto-roles and argument selection. *Language* 67, 547–619.

Embick, David. 2004. On the structure of resultative participles in English. *Linguistic Inquiry*, 35.3, 355–392.

Embick, David & Alec Marantz. 2008. Architecture and blocking. *Linguistic Inquiry* 39.1, 1–53.

Erteschik-Shir, Nomi & Tova Rapoport (eds.). 2005. *The syntax of aspect: Deriving thematic and aspectual interpretation*. Oxford: Oxford University Press.

Folli, Raffaella & Harley, Heidi. 2004. Flavors of *v*: Consuming results in Italian and English. In Roumyana Slabakova & Paula Kempchinsky, (eds.), *Aspectual inquiries*, 95–120. Dordrecht: Kluwer

Folli, Raffaella & Heidi Harley. 2006. Benefactives aren't Goals in Italian. In Jenny Doetjes & Paz Gonzáez (eds.), *Romance Languages and Linguistic Theory 2004*, 121–142. Amsterdam: John Benjamins.

Folli, Raffaella & Heidi Harley. 2007. Causation, obligation and argument structure: On the nature of little v. *Linguistic Inquiry* 38.2, 197–238.

Folli, Raffaella, Heidi Harley & Simin Karimi. 2005. Determinants of event structure in Persian complex predicates. *Lingua* 115.10, 1365–1401.

Gaeta, Livio. 2002. On the interaction between morphology and semantics: The Italian suffix – ATA. *Acta Linguistica Hungarica* 47.4, 205–229.

Gerdts, Donna. 2009. Women, fire, and not so dangerous things: Explorations in Halkomelem gender. Presidential address, 2009 Annual Meeting of the Society for the Study of the Indigenous Languages of the Americas, 9 January 2009, San Francisco, CA.

Grimshaw, Jane. 1990. *Argument structure*. Cambridge, MA: MIT Press.

Grimshaw, Jane & Armin Mester. 1988. Light verbs and θ-marking. *Linguistic Inquiry* 19.2, 205–232.

Hale, Kenneth & Samul Jay Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In Hale & Keyser (eds.), 51–109.

Hale, Kenneth & Samuel Jay Keyser (eds.). 1993a. *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*. Cambridge, MA: MIT Press.

Halle, Moris & Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In Hale & Keyser (eds.), 111–176.

Harley, Heidi. 1995. *Subjects, events and licensing*. Ph.D. dissertation, MIT.

Harley, Heidi. 2002. Possession and the double object construction. In Pierre Pica & Johan Rooryck (eds.), *The linguistic variation yearbook*, vol. 2, 29–68. Amsterdam: John Benjamins.

Harley, Heidi. 2005. How do verbs get their names? Denominal verbs, Manner Incorporation and the ontology of verb roots in English. In Erteschik-Shir & Rapoport (eds.), 42–64.

Harley, Heidi. 2007. External arguments: On the independence of Voice and v°. Presented at GLOW 30, 14 April 2007, Tromsø, Norway.

Harley, Heidi. 2010. A Minimalist approach to argument structure. In Cedric Boeckx (ed.), *The Oxford handbook of linguistic minimalism*, 426–447. Oxford: Oxford University Press.

Harley, Heidi. 2012. Lexical decomposition in modern generative grammar. In Wolfram Hinzen, Markus Werning & Edouard Machery (eds.), *Handbook of compositionality*, 328–350. Oxford: Oxford University Press.

Hoekstra, Teun & René Mulder. 1990. Unergatives as copular verbs: Locational and existential predication. *The Linguistic Review* 7, 1–79.

Ippolito, Michela. 1999. On the past participle morphology in Italian. *MIT Working Papers in Linguistics* 33, 111–137.

Jackendoff, Ray. 1991. Parts and boundaries. In Beth Levin & Steven Pinker (eds.), *Lexical and conceptual semantics*, 9–46. Cambridge, MA: MIT Press.

Koontz-Garboden, Andrew. 2007. Anticausativization. *Natural Language & Linguistic Theory* 27.1, 77–138.

Kratzer, Angelica. 1996. Severing the external argument from its verb. In Johan Rooryck & Laurie Ann Zaring (eds.), *Phrase structure and the lexicon*, 109–137. Dordrecht: Kluwer.

Lee, Chungmin. 1973. Presupposition of existence of Theme for verbs of change. *Foundations of Language* 9.3, 384–388.

Marantz, Alec. 1991. Case and licensing. In Germán F. Westphal, Benjamin Ao & Hee-Rahk Chae (eds.), *The Eighth Eastern States Conference on Linguistics*, pp. 234–253. Columbus, OH: OSU Linguistics Publications.

Marantz, Alec. 1993. Implications of asymmetries in double object constructions. In Sam A. Mchombo (ed.), *Theoretical aspects of Bantu grammar 1*, 113–151. Stanford, CA: CSLI Publications.

Marantz, Alec. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. *University of Pennsylvania Working Papers in Linguistics* 4.2, 201–225.

Mayo, Bruce, Marie-Teres Schepping, Christoph Schwarze & Angela Zaffanella. 1995. Semantics in the derivational morphology of Italian: Implications for the structure of the lexicon. *Linguistics* 33, 583–638.

McGinnis, Martha. 1998. *Locality in A-movement*. Ph.D. dissertation, MIT.

McGinnis, Martha. 2001. Variation in the syntax of applicatives. In Pierre Pica (ed.), *The linguistic variation yearbook*, vol. 1, 105–146. Amsterdam: John Benjamins.

Miller, Philip. 1992. *Clitics and constituent in phrase structure grammar*. New York: Garland. [Based on Ph.D. thesis, Free University of Brussels, 1991.]

Noonan, Máire. 1993. Statives, perfectives and accusativity: The importance of being *have*. Jonathan Mead (ed.), *The West Coast Conference on Formal Linguistics* (WCCFL) 11, 354–370.

Pesetsky, David. 1995. *Zero Syntax: Experiencers and cascades*. Cambridge, MA: MIT Press.

Pylkkänen, Liina. 2002. *Introducing arguments*. Ph.D. dissertation, MIT.

Richards, Norvin. 2001. An idiomatic argument for lexical decomposition. *Linguistic Inquiry* 32, 183–192.

Sadakane, Kumi & Masatoshi Koizumi. 1995. On the nature of the 'dative' particle *ni* in Japanese. *Linguistics* 33, 5–33.

Samek-Lodovici, Vieri. 1997. A unified analysis of noun- and verb-based nominalization in *-ata* (Arbeitspapier 80). Ms., Fachgruppe Sprachwissenschaft, University of Konstanz.

Samek-Lodovici, Vieri. 1999. The internal structure of arguments (Arbeitspapier 102). Ms., Fachgruppe Sprachwissenschaft, University of Konstanz.

Samek-Lodovici, Vieri. 2003. The internal structure of arguments: Evidence from complex predicate formation in Italian. *Natural Language & Linguistic Theory* 21, 835–881.

Scalise, Sergio. 1984. *Morfologia lessicale*. Padova: Cooperativa Libraria Editoriale Studentesca Patavina

Scalise, Sergio. 1994. *Morfologia*. Bologna: il Mulino.

Scher, Ana Paula. 2004. *As Construções com o verbo leve* dar *e nominalizações em* -ada *no português do Brasil* [The constructions with the light verb 'dar' e the ada-nominalizations in Brazilian Portuguese]. Ph.D. dissertation, UNICAMP (Universidade Estadual de Campinas).

Stone, Megan. 2010. Nominalizations without Tense: Evidence from Cherokee. Ms., University of Arizona.

Tenny, Carol L. 1987. *Grammaticalizing aspect and affectedness*. Ph.D. dissertation, MIT.

Authors' addresses: (*Folli*)
  University of Ulster, School of Communication,
  Jordanstown Campus, Newtonabbey BT37 0QB, UK
  R.Folli@ulster.ac.uk

  (*Harley*)
  Department of Linguistics, University of Arizona,
  Tucson, AZ 85721-0028, USA
  hharley@email.arizona.edu