J. Linguistics **28** (1992), 53–90. Printed in Great Britain

Secondary resultative predicates in Italian[1]

DONNA JO NAPOLI

Department of Linguistics, Swarthmore College

(Received 2 January 1991; revised 23 April 1991)

1. Introduction

English exhibits PP, AP and NP resultative secondary predicates (SPs). Italian freely exhibits PP resultatives and, less commonly, AP resultatives. This difference follows from two facts. First, resultatives, being arguments of the V except in constructions involving 'fake' objects (see section 4), may appear only in positions that non-predicative arguments of the V of their same category can appear in (a correlation stated in (155) below). Since English allows PP, AP and NP non-predicative arguments in the position immediately following the direct object, all three categories can also appear as resultatives in the same position. But since Italian allows only the first two types of non-predicative arguments in this position, only PP and AP resultatives can appear there. Second, Italian sentences with AP resultatives are subject to a rule of semantic interpretation by which the primary predicate must be interpreted as focusing on the endpoint of the activity it denotes (as stated in (110) below). English sentences with AP resultatives are only slightly sensitive to this interpretation rule. As a result, AP resultatives are appropriate in fewer situations in Italian. That AP resultatives are sensitive to this rule of interpretation is consistent with the fact that AP arguments of verb that appear in post-object position are marked in a number of ways.

2. Semantic interaction

Phrases located inside the VP can appear to be predicated of other phrases either internal or external to VP.

[1] I owe sincere thanks to Dwight Bolinger, who nurtured me along in this research with a steady stream of letters. Gratitude also goes to Michael Bernstein, Ray Jackendoff, Judy Kegl, Beth Levin, Paola Merlo, Barry Miller (out of discussions with whom grew section 3), Nicola Patruno, Margarita Suñer, Irene Vogel, Will Whitman, Alessandro Zucchi, the semantics class at Swarthmore, autumn 1989, and the people who attended the New York Academy of Sciences meeting on 19 January 1990. I thank my many patient informants, including Titina Caporale, Franco and Lina Buzzi, Michele Finizio, Mariadele and Mario Mavolo, Anna Maria Moscatelli, Marina Nespor, Maurizio Pacifici, Laura Forlati Picchio and Franca and Luciana Simoli. I thank Andrea Calabrese and Anna Maria Di Sciullo for corroborating these data. I thank Elena Benedicto for pointing out and discussing with me comparable data in Spanish and Catalan. Finally, I thank the anonymous reviewers and Nigel Vincent for comments on the penultimate draft.

(1) Jack left [furious].
(2) John ate the meat [raw].

The bracketed APs in (1) and (2) are SPs, where *furious* in (1) is predicated of the subject and *raw* in (2) is predicated of the direct object. SPs are predicates that do not appear in canonical predicate position (that is, primary predicate position) of a big (as opposed to 'small') clause. The primary predicates in (1) and (2) are *left* and *ate*. In general, primary predicates are verbs or elements of other categories accompanied by copular verbs (such as *tired* in *Mary is tired* – see Napoli, 1989: 88). Both bracketed APs in (1) and (2) are VP-internal, as are all the postverbal SPs discussed in this article (Andrews, 1982; Roberts, 1988).

Linear position subtly affects interpretation of such SPs:

(3) The ambassador arrived [nude].
(4) [Nude], the ambassador arrived.

If the ambassador habitually makes appearances in the nude, we might think of him as chronically nude. But if on a single occasion he showed up without clothing, this particular event of arriving is characterized by nudeness. With general uniformity speakers I asked chose (3) for the instance in which the nudeness was a unique event. But if the ambassador is chronically nude, then either (3) or (4) would do. The initial position favours a reading in which the SP does not semantically interact with the verb, whereas the postverbal position favours one in which the SP semantically interacts with the verb (the mediated reading of Napoli, 1989: Ch. 2). The interaction of these SPs with the verb correlates with the fact that in postverbal position they are VP-internal, whereas in sentence-initial position they are not. Not all speakers, however, report a semantic difference between (3) and (4). Thus, if SPs of the type discussed thus far can interact semantically with the verb, the interaction is slight.

There are other types of SPs, however, whose semantic relationship to the primary predicate is recognized by all speakers.

(5) I cut her hair [short].

Here I cut her hair and, as a result, it wound up short. SPs of this type are labelled resultatives. Some sentences are ambiguous as to whether or not an SP is resultative:

(6) John made the tea weak.

Example (6) could describe the situation in which John added water to the tea and the tea wound up weak (the resultative reading), or another in which John made the tea and it came out weak (the non-resultative reading).

Generally, a transitive sentence with an AP resultative which has the form in (7) can be paraphrased as in (8):

(7) X Verbs Y [Z].
(8) X causes Y to become Z by Verbing Y.

Here Z stands for the AP resultative. The semantic interaction between resultatives and Vs shown in (7) and (8) has been accounted for in various ways, not all of which are necessarily discrete from one another. Chomsky (1955/1975: 569), Green (1973) and Dowty (1979) propose that the resultative forms a complex predicate with the verb (and McNulty, 1988: 63–65, 161, 180, argues that at least some resultatives can be analysed as part of a complex verb); Bolinger (1971) treats the resultative and the V as a single discontinuous lexical item (like *take ... to task*); and Simpson (1983), Rothstein (1983), Rapoport (1986) and Carrier & Randall (1988) argue that the resultative is an argument of V (but see Jackendoff, 1989). Many have argued that resultatives are sisters to the verb and to the NP they are predicated of (Halliday, 1967; Levin & Simpson, 1981; Andrews, 1982; Simpson, 1982; Rothstein, 1983; Carrier & Randall, 1988; Roberts, 1988; and McNulty, 1988, among others). Some have argued that the semantic difference between SPs like those in (3) (depictives) and resultatives is paralleled by a syntactic difference (Rothstein, 1983, 1989; Merlo, 1986; McNulty, 1988; but see Demonte, 1989, and Rapoport, forthcoming). Resultatives are the SPs studied here, and the fact that they interact semantically with the verb in the way schematized in (7) and (8) is responsible for a number of restrictions we find in Italian and Romance generally and, to a lesser degree, in English. The facts described here can be accounted for naturally if most resultatives are arguments of the verb, and only resultatives with fake objects are degree modifiers of V (see section 4, particularly note 10).

One of the major controversies in the syntactic analysis of resultatives is whether or not they form small clauses (labelled SC). For example, the non-SC analysis of (5) is given in (9) and the SC analysis is given in (10):

(9) I $[_{V''}$ cut $[_{N''}$ her hair] $[_{A''}$ short]].
(10) I $[_{V''}$ cut $[_{SC}$ [her hair] $[_{A''}$ short]].

In (10), the verb, which usually takes an NP complement, here takes a SC (van Voorst, 1983; Hoekstra, 1988, discusses how one can handle the fact that *her hair* is an argument of the verb).[2] One claimed advantage of the SC analysis is that when the NP following the verb is not an argument of the verb (what I am calling the 'fake object' cases), that NP will not be generated in direct-object position, but instead in object position within the small clause:

[2] See also Hoekstra and Mulder (1990), who discuss the Projection Principle with respect to verbs that take either a single NP argument or a SC, although they do not discuss verbs like that in (10) that supposedly take both an NP and a SC argument.

(11) Sam cried his eyes out.
without SC: Sam [cried [his eyes] [out]].
with SC: Sam [cried [$_{SC}$ [his eyes] [out]]].

The SC analysis of (11) claims that the resultative licenses the NP following the verb, thus accounting for the failure of the NP to occur in the absence of the resultative by claiming that Vs like *cry* are subcategorized to take an SC but not an NP. However, the NP following the verb and the resultative are together interpreted as a degree modifier of the verb (see section 4, particularly note 10). Since such modifiers are not subcategorized by the verb, the SC analysis does not, after all, have an advantage here.

While the syntactic analysis of resultatives is not investigated here, we will see in section 4 (with respect to linking flexibility) and section 6 (with respect to the occurrence of resultatives of different categories in English and Italian) that an analysis in which resultatives are sisters to the verb (as in (9)) allows us to capture generalizations. Thus this article is evidence that the analysis in (9) (as opposed to that in (10)) is correct (and see Napoli, 1988, for arguments against the existence of SCs, and Napoli, 1989: Ch. 2, and Mallén, 1990, among others, for two different non-clausal analyses of SPs).

All examples thus far have been in English. With the exception of (11), they could as well have been in Italian. Let me give here the Italian sentences corresponding to (1)–(6):

(1′) Giacomo se n'è andato [furibondo].
(2′) Giovanni ha mangiato la carne [cruda].
(3′) L'ambasciatore è arrivato [nudo].
(4′) [Nudo], l'ambasciatore è arrivato.
(5′) Ho tagliato i suoi capelli [corti].
(6′) Gianni ha fatto il té [leggero].

Much work relevant to the study of resultatives is not discussed here, although it has influenced this study in a general way (including Halliday, 1967; Bolinger, 1967, 1971; Fraser, 1976; Randall, 1983; Levin, 1987; Marantz, 1988).

3. RESULTATIVES: THE PP IN ENGLISH AND ITALIAN, LEXICAL SUBORDINATION, AND SYNTACTIC CONSTRAINTS

3.1 *Resultative PPs*

Simpson (1983, 1986) explicitly states that resultatives can be of the category AP, NP or PP:

(12) I painted the car [$_{AP}$ yellow].
(13) I painted the car [$_{NP}$ a pale shade of yellow].
(14) I cooked the meat [$_{PP}$ to a cinder].

Many agree with Simpson in admitting PPs as resultatives. For example, in Hoekstra (1988), where Dutch is compared to English, every example of a resultative predicated of an internal argument of the primary predicate is a PP. Pustejovsky (1989) argues that any phrase which can denote a state can be a resultative, including PP. Van Voorst (1983) argues for Dutch that directional PPs are predicates inside SCs (as in (10) and (11)), occupying the same syntactic position resultative APs occupy. All the data and arguments presented by van Voorst are consistent with the analysis of the directional PPs as resultatives. The only explicit claim I know of that PPs cannot be resultatives is in Rapoport (forthcoming: n. 11), who says the PP in examples like (14) modifies the verb rather than being predicated of an NP. It would seem, moreover, some works embody the implicit claim that PPs cannot be resultatives. For example, some say that particular languages lack resultatives, including Green (1973) for French, Merlo (1986, 1988) for Italian, and Rapoport (1986) for Hebrew. But if PPs are admitted as resultatives, these languages surely have resultatives. Below I argue that PPs can be resultatives and Italian has PP resultatives. I discuss some works that have offered accounts of the putative lack of resultatives in particular languages.

3.2 *Resultative PPs in English*

There is evidence that the PPs here are resultatives:[3]

(15) She scrubbed the dirt {[out of her skirt]/[from her skirt]/[off the step]/[away]}.
(16) I slapped him {[into a stupor]/[out of his hysteria]}.

(For evidence that *away* is a PP, see Jackendoff, 1973). First, consider their

[3] The PPs in (15) are locational (or directional or spatial, in the sense of Jackendoff, 1989, and earlier) and the verbs are not inherently motion verbs. In (16) we find state PPs. While some have argued that locational PPs can be predicates both with verbs of motion and with other types of verbs (van Voorst, 1983; Hoekstra & Mulder, 1990), the matter demands extensive study, which I will not undertake here. For example, if change of location with a motion verb and change of state were different aspects of the same phenomenon, why do some languages make distinctions? In (i) we see that with a verb that is not a motion verb, both change-of-location and change-of-state resultatives are allowed:

(i) She scrubbed so hard, she just scrubbed that skirt [right off the porch].
She scrubbed the skirt [clean].

But with some motion verbs, change of location is allowed, but change of state is not:

(ii) She danced [into the room].
*She danced [tired].

(A fake reflexive can rescue the second sentence of (ii). See sections 3.2 and 4.)

Because of such questions, I will assume that change-of-location PPs with motion verbs are a separate phenomenon from (although similar to; see section 3.4 below) resultative PPs. All the examples of resultative PPs in this article, then, will involve change of location with non-motion verbs, or change of state. Without this assumption, the generalizations made about resultatives in the present section (such as the claim that they are predicated only of deep objects) could not stand.

sense. We cannot use the paraphrase test in (7) and (8) as it now stands, since the Z of (7) would not be an AP in (15) and (16), but a PP, and most PPs are not grammatical as predicates in the position immediately following a form of the verb *become* (a fact that has nothing to do with whether or not they can be resultatives or any other kind of predicate). Instead, in each instance we need to ask whether the PP describes a state or location that is predicated of the direct object and that is the result of the primary predicate's action on the direct object. On that basis locational PPs like those in (15) are at least borderline resultatives semantically and are worthy of further testing, and state PPs like those in (16) seem to be clear resultatives.

Second, Simpson (1983) claims that resultatives in English are predicated of deep objects only.[4] If her claim holds for Italian as well, we could immediately formulate a diagnostic for resultatives: they should not be predicated of objects of P. And, in fact, they cannot. Examples (17) and (18) constitute a minimal pair:

(17) I slapped her [silly].
(18) *I slapped at her [silly].

PPs behave precisely as other resultatives here. Compare (19) and (20) with (15) and (16) respectively:

(19) *She scrubbed the dirt {[out of her skirt]/[from her skirt]/[off the step]/[away]}.
(20) *I slapped at him {[into a stupor]/[out of his hysteria]}.

Not all PPs that concern the endpoint of the action expressed by the verb are predicates, however; some are degree modifiers of the action.

(21) I beat him [to a pulp].
(22) I beat him [to the point of exhaustion].

The PP in (21) must be a resultative, whereas that in (22) can be modifier of the V (and, perhaps ambiguously a resultative, as well). In (21) the PP can be predicated only of the direct object. But in (22) it is unclear whether the subject or the object or even the people watching wind up exhausted; the PP tells us that the beating went on too long – it is a degree modifier of the V. Accordingly, if we remove all nominals that are potential arguments of the PPs, the predicative PP in (21) becomes ungrammatical, but the modifier PP in (22) is still acceptable.

(23) *The fight went on [to a pulp].
(24) The fight went on [to the point of exhaustion].

[4] There has been much discussion as to whether this restriction is correct and what motivates it. For discussion of whether the subjects of resultatives must be the affected argument of the verb (in the sense of Tenny, 1987) or a patient of the verb, see Simpson (1986), Jackendoff (1989), Miller (1990) and Rapoport (forthcoming). See also Levin & Rappaport (1989), who argue that verbs that involve a specified change of location (like *arrive*) or a specific path delimit their own event and, thus, resultatives are precluded with them.

Similar contrasts are found in Italian. The Italian counterpart of *to* is *a*; that of *to the point of* is *fino a*. Comparing (25) and (26), we see that the PP in (25) is predicated of the direct object, but that in (26) is a degree modifier of the V:

(25) Mi ha annoiata [a morte].
'He bored me [to death].'
(26) Ho bevuto il mosto [fino alla nausea].
'I drank the wine [to the point of nausea].'

In (25) only the object winds up figuratively dead. In (26) the subject or someone else, perhaps someone watching, feels nausea. If we remove all potential arguments of the SPs, *a morte* is unacceptable, but *fino alla nausea* is still fine:

(27) *E' piovuto [a morte].
'It rained [to death].'
(28) E' piovuto [fino alla nausea].
'It rained [to the point of nausea].'

I know of no way to identify which PPs are predicates and which modifiers of the verb simply by looking at their form. Instead, we must use the tests above of interpretation (in (25), (26)) and availability of potential subject (in (27), (28)).

A third argument is based on Burzio (1986), who argues that superficially intransitive verbs fall into two classes, those that have deep subjects and those that have deep objects which move into subject position (called ergatives or unaccusatives). If Burzio is correct, we can take Simpson's generalization above and form another diagnostic: resultatives should be able to be predicated of a subject only with an unaccusative verb. Of course, with intransitive sentences that contain a resultative AP the pattern of paraphrase given above in (7) and (8) will not hold. Instead, we look for a semantic correlation of the type:

(29) X Verbs [Z].
(30) X Verbs to the point of becoming Z.

(Again, if Z is a PP and not an AP, this paraphrase test will not hold.) This seems true; in (31)–(34) we see the contrast between the unaccusatives *bleach* and *fry*, and the intransitives *cry* and *drink*. Here the resultatives are APs (where an asterisk indicates that no good resultative reading is available):

(31) The shirt bleached [white] in the sun.
(cf. The sun bleached the shirt [white].)
(32) The bacon fried [crisp].
(cf. Let's fry the bacon [crisp].)
(33) *The boy cried [sick].
(34) *The boy drank [sick].

The same contrast occurs with resultatives that are PPs:

(35) The shirt bleached [to the purest white]. (cf. (31))
(36) The bacon fried [to a crisp]. (cf. (32))
(37) *The boy cried [into a stupor]. (cf. (33))
(38) *The boy drank [out of his mind]. (cf. (34))

The correlation between deep transitivity and the possibility of a resultative is so strong that we find fake reflexives (Simpson, 1983) with otherwise intransitive verbs, where the reflexive and the resultative must both appear:[5]

(39) The boy cried himself [sick]. (cf. (33))
(40) The boy drank himself [sick]. (cf. (34))

Once more, the correlation holds also for PP resultatives:

(41) The boy cried himself [into a stupor]. (cf. (37))
(42) The boy drank himself [out of his mind]. (cf. (38))

I conclude that the relevant PPs in this section (both state and locational with non-motion verbs) are resultatives.

3.3 *Resultative PPs in Italian*

Italian has many resultative PPs, both locational (in (43)–(45)) and state (in (46)–(51)):

(43) Ho spinto il pianoforte [dal salotto {alla/nella} sala da pranzo].
'I pushed the piano [from the living room into the dining room].'
(44) Ho calciato la palla [nell'angolo].
'I kicked the ball [into the corner].'
(45) Ho messo il biscotto [nel gelato].
'I put the cookie [in the ice cream].'
(46) Camilla ha modellato la creta [a punta].
'Camilla moulded the clay [to a point].'
(47) Abbiamo vestito le bambine [con le belle gonne lunghe] per la Messa.
'We dressed the little girls [in beautiful long skirts] for the Mass.'
(48) Ho tagliato la carne [in piccoli pezzi].
'I cut the meat [in small pieces].'
(49) L'ho tagliata [in due pezzi].
'I cut it [in two pieces].'

[5] Fake reflexive resultatives have much in common with other resultatives that are predicated of fake objects, like:

(i) He cried his eyes out.

See section 4 below (particularly the discussion of (81).

(50) L'ho tagliata [a metà].
'I cut it [in half].'
(51) Ho intrecciato i fiori {[in una ghirlanda/a forma di ghirlanda]}.
'I wove the flowers {[into a garland]/[in the form of a garland]}.'

While both Italian and English have resultative PPs, I used only English examples in section 3.1 for three reasons. First, with regard to the argument built on Simpson's observation, Italian lacks the needed minimal-pair sentences because it lacks a parallel to the English *at* construction.[6] Second, with regard to the argument built on unaccusatives versus intransitives, Italian unaccusatives have complexities that confound the issue (see note 19). Third, with regard to the argument concerning fake reflexives, Italian lacks this construction (see section 4).

Still, the Italian PPs called resultatives in this section are all understood to be predicated only of the deep object in these examples. Furthermore, the test developed in section 3.2 concerning availability of a potential subject holds for Italian: if these PPs with the senses here occur in a sentence which contains no potential subject, the sentences are ungrammatical.

3.4 *Lexical subordination*

Given that Italian demonstrates PP resultatives, we should examine claimed correlations between the existence of resultatives and of other constructions in a given language.

Levin & Rapoport (1988) argue that some languages have a semantic process whereby the basic meaning of a verb is extended – for example, by the addition of a change-of-state or a change-of-location phrase. They call the process Lexical Subordination (LS) (building on the lexical conflation of Talmy, 1975, 1985). They claim resultatives are a product of LS. They further claim that the use of a verb that shows manner of movement in a clause that describes change in location is a product of LS, as well. For example, in (52) *floated* tells not just how the bottle moved, but that it changed location from outside to inside the cave, whereas in (53) *floated* tells only how the bottle moved. So in (52) LS has taken place, but in (53) it has not.

(52) The bottle floated into the cave.
(53) The bottle floated in the cave.

[6] There are minimal pairs in Italian where in one sentence the V takes an object and in the other it does not, such as:

(i) Ho sfuggito il pericolo.
'I escaped the danger.'
(ii) Sono fuggita dal pericolo.
'I escaped from the danger.'

However, the re-enforcing prefix *s-* (as in *balzare* 'leap' vs. *sbalzare* 'fling') as a transitivizer is not productive today (if it ever was – in contrast to the productive negative prefix *s-* (Napoli & Nespor, in progress)), and I know of no pair similar to (i)–(ii) where a resultative is appropriate semantically.

Levin and Rapoport claim French has no counterpart to sentences like (52), but only to ones like (53). They cite Green (1973), Carter (1984) and Talmy (1974, 1985) for support. They correlate this claim with the claim that French has no resultatives, saying both reflect the absence of LS in French.

Levin and Rapoport do not say explicitly whether they intend the presence of the 'manner-plus-change-of-location' use as both a necessary and sufficient test for the presence of LS in a language, or as simply sufficient. In either instance one could conclude that if a language has such a use, it has LS and, therefore, we might find resultatives.

Italian certainly has sentences in which a verb expressing manner of motion can be used to express change in location. Typically, these sentences involve a location that denotes a path rather than a point of arrival:

(54) La coppia di fidanzati ha ballato (il valzer) {da un lato all'altro della sala/attorno alla sala/da una parte all'altra della sala}.
'The engaged couple danced (the waltz) {from one side to the other of the room/around the room/from one part to another of the room}.'

(55) La medusa galleggia verso il molo.
'The jellyfish is floating towards the dock.'

(56) La ragazzina ha {saltato/saltellato/salterellato} verso la mamma.
'The little girl {jumped/hopped/skipped} towards her mother.'

(57) La trottola ha girato verso il bordo della tavola, ed è caduta.
'The top spun towards the edge of the table, and fell.'

(58) Il postino ha pedalato da Venezia a Mestre.
'The postman pedalled from Venice to Mestre.'
(cf. the manner only use:
Il postino ha pedalato per allenarsi su una bicicletta fissa.
'The postman pedalled for exercise on an exercise bicycle.')

(59) Carlo ha zoppicato su per le scale.
'Carlo limped up the stairs.'

(60) Giacomo e Giglia sono rotolati giù per il colle.
'Jack and Jill rolled down the hill.'

However, with at least some verbs, we find manner of motion with a change of location that is precisely the point of arrival:

(61) Il fiume serpeggia [al mare].
'The river snakes (its way) to the sea.'

(62) La rondine era vicina vicina. Tutt'ad un tratto è volata [fuori di portata].
'The swallow was very near. All of a sudden it flew [out of reach].'

(63) La rondine era lontana. Ma piano piano è volata [a portata di mano].
'The swallow was distant. But very slowly it flew [within reach].'

With some of these verbs, in fact, the choice of auxiliary is sensitive to

whether or not the action in a given sentence is manner only (where *avere* 'have' is used) or motion plus change of location (where *essere* 'be' is used) (Centineo, 1986; for similar facts in Dutch, see Hoekstra, 1984):

(64) Caterina *ha* saltato nel garage.
'Caterina jumped (around) in(side) the garage.'

(65) Caterina *è* saltata nel garage.
'Caterina jumped into the garage.'

Some speakers even allow other action transitive verbs (verbs which are not manner-of-motion verbs and do not typically denote a movement of their object) to be used to express change of location of their object. In such instances, the auxiliary is always *avere* (as it is with all transitive, non-reflexive verbs):

(66) Susanna, ecco le verdure. Per favore, tagliale nella pentola.
'Susanna, here are the greens. Please cut them into the pot.'

(67) Chi ha {spezzato/rotto} il biscotto nel gelato? (cf. (45))
'Who broke the cookie into the ice cream?'

(68) La coppia ha ballato (?il valzer) all'altare.
'The couple danced (the waltz) to the altar.'

Example (66) is not accepted by all speakers. However, many do accept it, and with the change-of-location reading. (There is also a bizarre reading for (66): that in which the speaker asked Susanna to cut the greens while Susanna is in the pot.) Example (67) with *spezzato* was uttered by a Venetian ice-cream vendor in the summer of 1989. Others I have asked since range from accepting it to finding it marginal, often suggesting *rotto* instead of *spezzato*. Example (68), likewise, is not accepted by all speakers. Those who do accept it find reduced grammaticality when the direct object is present. Examples such as these are evidence that LS in Italian can apply to a wider range of verbs for these speakers.

In sum, Italian exhibits motion-plus-change-of-location uses. Thus, if Levin and Rapoport are correct, Italian has LS. It is no surprise, then, that Italian has resultatives, as well.

LS is also claimed by Levin and Rapoport to be responsible for the use in English of manner-of-speaking verbs with a direct object that expresses the thing spoken (Zwicky, 1971; Mufwene, 1978).

(69) She mumbled her adoration.

Again Italian can use manner-of-speaking verbs this way, although it exhibits far fewer of these instances than English does.

(70) Carolina ha sussurato la sua ammirazione per il poeta.
'Carolina whispered her admiration for the poet.'

The correlation is maintained: Italian has LS, as exhibited in at least three

phenomena (resultatives, manner-plus-change-of-location verbs, and manner-of-speaking verbs with an NP object).

3.5 *Idiomatic usage*

Others have attempted a syntactic account of the paucity of resultatives in Italian. Merlo (1986, 1988) argues Italian lacks true syntactic resultatives. Like me, Merlo admits PPs as resultatives (1986: 49). She offers a wide range of 'apparent' resultatives that are predicated of a surface object, where she claims the key is whether or not the surface subject was underlyingly an object. Her examples include:

(71) (a) Diventò [pallido] della paura.
'He became [pale] from fear.'
(b) Tutto l'affare è andato [in fumo].
'The whole business went up [in smoke].'
(c) I conti sono venuti tutti [sbagliati].
'The accounts were done all [messed up].'

Merlo notes apparent resultatives that are predicated of surface direct objects, saying they fall into three groups (and possibly a fourth), based on the semantics of the verb: production (*fare* 'make'), election (*eleggere* 'elect'), and movement in idioms (*mettere a proprio agio* 'put at ease'). Merlo sees as totally lacking (even apparently) from the set of resultatives in Italian what she calls the 'idiomatic usage of object-oriented resultatives' (1988: 55). She claims Italian cannot add a resultative to clauses with verbs other than those in these three groups.

Merlo claims that resultatives cannot occur in Italian for syntactic reasons. Resultatives only appear to occur in Italian (as in (71)) because the semantics of the primary predicate are such that a result is understood. The syntactic reasons why resultatives are precluded in Italian are two, according to Merlo. The first concerns the Empty Category Principle (ECP). Merlo analyses a resultative which is predicated of a surface subject as a small clause, where the *e* inside the bracketed resultative below represents the empty subject of the SC.

(72) ?* Il fiume è ghiacciato [*e* solido].
'The river froze [*e* solid].'

(Merlo stars (72). Some of my informants, however, find it marginal.) She says that resultative SCs are introduced by a null P. In (72), then, we would have a violation of the ECP, since the empty node would not be properly governed, given that P is not a proper governor in Italian (or Romance in general; see Kayne, 1981, and later works).

Second, resultatives are precluded from Italian because of the Case Filter.

If we were to have a resultative which was predicated of a surface object, the structure would be as in (73):

(73) *Gianni ha martellato [$_{SC}$ il metallo piatto].
'Gianni hammered [$_{SC}$ the metal flat].'

Since the SC is introduced by P and P cannot give Case across a clause boundary in Italian, *il metallo* will remain without Case. Merlo's analysis has the advantage of accounting for (72) and (73) with the single claim that resultative SCs are objects of P, where her accounts then proceed by independently needed principles.

On the semantic side, Merlo argues that an example like (74) is structurally a depictive (where depictives are not introduced by a null P), which receives a resultative interpretation because the whole action is intrinsically resultative (1986: 150).

(74) Ha dipinto la macchina [rossa].
'He painted the car [red].'

She claims Italian allows the resultative interpretation only of those verbs that 'produce' their object (1986: 152). While a verb like *dipingere* 'paint' above need not produce its object, it can do so:

(75) Ho dipinto un quadro.
'I painted a picture.'

Merlo offers a tentative conjecture that those verbs that affect their object 'enough' to be considered a verb of production can lend themselves to an interpretation in which a depictive is taken as a resultative.

The crucial claim in Merlo's analysis is that resultative SCs are the object of a P. I know of no independent evidence for this claim. There is also evidence that Merlo's semantic account of (74) is incorrect. A few of my informants reject (74) (where they prefer a resultative PP: *Ha dipinto la macchina di rosso* 'He painted the car (of/with) red' – but see (154) below, which all speakers accept). This variation in acceptability judgments is suggestive that (74) is not a depictive since depictives of all categories are used frequently in Italian and speakers agree closely on grammaticality judgments concerning their use. However, speakers' judgments vary on resultatives, particularly AP resultatives, just as they do on (74).

Second, (74) passes the paraphrase test for resultatives. What allows us to arrive at this paraphrase? Merlo would claim that the paraphrase follows from the fact that painting is intrinsically a resultative action. But the addition of aspect-sensitive, process-related adverbials in (76) shows this is false, as Barry Miller (p.c.) points out, regardless of the interpretation (affectum or effectum) of the verb:

(76) (a) Ha dipinto (il palazzo) tutta la giornata.
(b) He painted (the building) all day long.

This process-related adverbial is rejected with a resultative:

(77) (a) *Ha dipinto il palazzo [rosso] tutta la giornata.
(b) *He painted the building [red] all day long.

The result, then, is present only when the SP is present; it is not intrinsic in the verb *dipingere/paint* even in its effectum interpretation (and see discussion in section 5).

Most important, true resultatives do occur in Italian (as in many preceding examples) and in other Romance languages in which P is, equally, not a proper governor (such as Spanish – see Demonte, 1989; Mallén, 1990). We will see in section 5 that Italian resultatives do not form any subclass easily identifiable by syntactic or (Merlo's) semantic factors.

4. The range of resultative types

English has at least four types of resultatives:[7]

(78) The river froze [solid].
(79) That butcher slices meat [thin].
(80) Sue laughed Ralph [out of the room].
(81) (a) Sam cried himself [sick].
(b) Sam cried his eyes [out].

In (78) *solid* is predicated of *the river*, which is the subject argument of the verb even in the absence of a resultative:

(82) The river froze.

In (79) *thin* is predicated of *meat*, which is the direct object of the verb even in the absence of a resultative:

(83) That butcher slices meat.

However, in (80) and (81) we have different situations. In (80) the PP is predicated of *Ralph*, which is the direct object, as Passive shows:

(84) Ralph was laughed out of the room.

But in the absence of the resultative, this argument would not be linked to the grammatical function (GF) of object. The closest grammatical sentence I can come up with is (85a), which contrasts with (85b):

(85) (a) Sue laughed at Ralph.
(b) *Sue laughed Ralph.

English is flexible about the rules that link internal arguments to their GFs,

[7] Sato (1987) distinguishes a fifth type that I have lumped together under the fourth type, exemplified in (81).

as noted in the literature on lexical semantics. Many verbs that take two internal arguments allow a given argument to surface as direct object or as object of a P:

(86) (a) She wrapped [the baby] in [a blanket].
(b) She wrapped [a blanket] around [the baby].
(87) (a) We supplied [Israel] with [arms].
(b) We supplied [arms] to [Israel].
(c) We supplied [Israel] [arms].
(88) (a) Jack stuffed [feathers] into [the pillow].
(b) Jack stuffed [the pillow] with [feathers].

(Not all speakers accept (87c).) In the double-object construction, both internal arguments appear without a P:

(89) (a) Let's bake some muffins for the class.
(b) Let's bake [the class] [some muffins].
(c) The teacher gave an A to Dave.
(d) The teacher gave [Dave] [an A].

Other languages exhibiting flexibility in linking rules include Bahasa and Bantu languages such as Kinyarwanda (Poser, 1982).

Flexibility in the linking rules is more constrained in Italian. Only one of the sentences in (88) has a grammatical counterpart in Italian, and for many speakers this is true of (86) and (87), as well. Furthermore, Italian lacks the double-object construction in (89). And while there are pairs in Italian that parallel the types in (86)–(88), they are more limited in occurrence and sometimes observe additional restrictions:

(90) (a) Ho caricato i bagagli sul treno.
'I put the luggage on the train.'
(b) Ho caricato Giorgio di debiti.
'I loaded down Giorgio with debts.'
(c) Ho spruzzato la vernice sulla parete.
'I sprayed paint on the wall.'
(d) Ho spruzzato la parete di vernice.
'I sprayed the wall with paint.'

While in English if a verb is in the *load/spray* class, we can be pretty sure it will show linking flexibility (Atkins, Kegl & Levin, 1988), in Italian this is not so. Few verbs exhibit pairs like those in (90) (and not all speakers accept (90b, d). Furthermore, while *caricare* allows either internal argument to be the direct object, if the thing which is moved about is the object, we have the sense of simple loading, but if the location is the object, we have the sense of weighing down (physically or psychologically). Thus loading bags onto a train would not in Italian be expressed with the train as the object unless we think of the train as sinking under the weight of the bags. In contrast, with

verbs like *spray/load* in English the particular internal arguments could vary considerably and both sentences of the pairs would remain grammatical and with similar meanings. English exhibits a productive, highly predictable linking flexibility, while Italian does not.

Returning to our resultatives, we find that Carrier & Randall (1988: section 8) argue that resultatives are arguments of V. So the addition of a resultative is the addition of an internal argument to VP. Once we have two internal arguments (*Ralph* and *out of the room* in (80), for example), we have the situation in which linking flexibility in English can be exhibited in examples like (86)–(90). Add to this the claim that resultatives must be predicated of the deep object, and we have set the stage for linking flexibility: only if *Ralph* is linked to the direct object position will the resultative be allowed.

We might wonder with this account why the relevant argument cannot be linked to object position even in the absence of the resultative. That is, we are dealing here with examples in which the NP at issue is an argument of the verb according to our (non-SC) analysis, so it is licensed independently of any resultative. What, then, prevents this NP from turning up in object position when the resultative is not present?

In fact, however, we do find examples like (80) that lack a resultative. There are a few infrequent uses in English where we find linking flexibility with only a single locative complement appearing inside the VP in object position. In those instances a resultative complement is optional or not even allowed:[8]

(91) (a) Thank you for shopping Macy's.
Thank you for shopping Macy's bare.
(b) She {jogs/walks} the streets.
(c) She runs {marathons/track}.
(d) She thinks computers night and day.
(e) I always fly United.
(f) It's great going Greyhound.

(Dorrity, 1989, analyses constructions like that in (91d).) So, while linking flexibility most often occurs when there are two internal arguments of a verb,

[8] Many sentences which at first look like they exhibit the same phenomenon seen in (91) seem to present additional questions. For example, consider:

(i) Thank you for voting Democrat.

Here *Democrat* is morphologically a noun. Yet it is singular without an article, although it is a count noun. If we add a resultative, the anarthrous singular does not appear:

(ii) Thank you for voting Democrats into office.

Furthermore, the sense of (i) is that this noun tells us about the voting, as though *voting Democrat* is a certain kind of voting.

it can also occur when there is only one (and sometimes with readily recognizable semantic effects).[9]

If resultatives like (80) make crucial use of linking flexibility, we predict that Italian can have no counterpart to (80), because Italian lacks productive linking flexibility. This is so:

(92) (a) Samuele ha riso di Renato.
'Samuele laughed at Renato.'
(b) *Samuele ha riso (di) Renato [fuori dalla stanza].
'Samuele laughed (*at) Renato [out of the room].'

Italian also has no counterpart to English (91).[10] The correlation between linking flexibility and the ability to take resultatives of the type in (80) is strong. One would hope this correlation follows from a more basic feature of language, so that the difference between English and Italian could be handled perspicaciously. Unfortunately, I have no strong evidence for a deeper motive for why English has flexibility to a great extent while Italian has it to a limited extent.[11]

The fourth type of resultative in English is seen in (81), where the fake reflexive was discussed above in section 3.2. I call the object in (81a, b) a fake object because it is not an argument of the verb. If the resultative were not present, the direct object in (81) could not surface as the relevant argument:

(93) (a) Sam cried *(at/for/to) himself.
(b) Sam cried *(with) his eyes.

[9] Consider (91a) for a moment. The effect of turning the normally locative argument (*at Macy's*) into a direct object is to personalize the gratitude. It tells us that Macy's is not just the place you shopped, but that Macy's benefits directly from that shopping. In other words, linking flexibility has been exploited here to put *Macy's* into the affected argument slot (in the sense of Tenny, 1987).

[10] Nigel Vincent has pointed out to me that Old Italian may have had a counterpart to (91), as in:

(i) Per *correr migliori acque* alza le vele
for run better waters raises the sails
'In order to run better waters, raises the sails...'

This is the opening line of Dante's *Purgatorio* (where the subject of *alza* is found on the next line). The interesting part here is in italics: *correr* is typically an intransitive verb, although it can be used transitively today, as in *correre un rischio* 'run a risk'. But here a locative that we would expect to find as the object of a P appears as the direct object. Since the work is poetry, it is possible that (i) represents an aberration even for Old Italian. My edition makes no relevant comment whatsoever.

[11] Both languages historically distinguished the grammatical functions of NPs by morphological Case endings and neither do today (with the exception of Case manifestations in the pronominal and clitic systems). Both languages enjoy a great amount of freedom in word order within the sentence. One difference between the languages is that English allows P-stranding where Italian does not. Since internal arguments of a V other than the direct object are introduced by a P (generally in English and strictly in Italian), that means that linking flexibility involves the shifting or omission of Ps that are otherwise expected. Perhaps linking flexibility in English is somehow a correlate of the fact that English can strand Ps.

The examples in (93) are ungrammatical if no P appears. With a P they may be grammatical, but they do not correspond to (81) in the relevant way. If Sam cried at himself or for himself or to himself, *himself* can be argued to bear a theta-role. Likewise, if Sam cried with his eyes, *his eyes* can be argued to be the instrument. But in (81) *himself* and *his eyes* have no such semantic role; *himself* and *his eyes* combine with the resultative to give a reading of extreme degree.[12]

Fake objects with resultatives are not the only kinds of fake objects that English allows. Consider the so-called 'cognate' objects (including not just nouns that have roots with morphological similarities to verb roots, but also semantically hyponymous objects; see Jones, 1988):

(94) She died a thousand deaths.

The only object one can die in English is a death. Many verbs can take cognate or non-cognate objects:

(95) She lived {a long life/a lie/a fantasy}.

But some verbs in English are strictly (or as close to strictly as English gets) intransitive except for allowing cognate objects. Example (94), then, exhibits the ability of English to transitivize a strict intransitive by adding a fake (that is, non-argument) object. The cognate object modifies the degree or manner of the verb:

(96) (a) She laughed a hideous laugh.
(b) What she smiled was an insincere smirk!

Fake reflexives have a similar function, acting as degree modifiers when taken together with a resultative:

(97) She ran herself [ragged].

Likewise, non-reflexive fake objects plus a resultative favour a degree interpretation:

(98) She ran her soles [thin].

Examples (94)–(98), then, appear to exemplify a single phenomenon: English can modify (usually with a degree or manner interpretation) an intransitive verb by adding a fake object (cognate or otherwise). What is unexplained is

[12] Hoekstra (1988) observes that many sentences with resultatives (with or without fake objects) are understood as if the action expressed by the verb is done to a great degree. He argues that this interpretation is determined not by 'the meaning of the sentence per se, but inferred from it' (1988: 15). That is, since X causes Y to become Z by verbing Y, it is often the case that X is verbing Y to a great degree. But with fake object sentences, the degree interpretation is forced on us. This would follow if the resultative in these sentences is not, after all, an argument of the verb. Then, in order for both the resultative SP and its subject to be licensed, they would have to be interpreted as a modifier of the verb. See discussion below in the text.

why these fake objects must either be cognates or accompanied by a resultative.

(99) She laughed {a loud laugh/*her life/*her lie}.
(100) She laughed {her life/the lie} away.

That is, the presence of a resultative greatly increases the type of fake object a verb can take.

The explanation for this fact is not hard to see. If the resultative is present, it licenses its subject. The resultative itself, of course, is licensed by virtue of the fact that the resultative and its subject modify the verb. And their ability to be understood as modifying the verb follows from the fact that the resultative predicate relates to the endpoint of the main verb's activity (a fact we will look at more closely in section 5). But if the resultative is not present, the non-argument direct object cannot be licensed unless it is interpretable as modifying the main verb. A cognate object lends itself to this interpretation because its referent is related in an obvious way to the sense of the verb: cognate objects are the referential extension of the verb. But objects which have no obvious relation to the verb, such as *herself* in (97) and *her soles* in (98) (remember that neither of these NPs acts as an argument of the verb), cannot be easily understood as modifying (or extending) the main verb. These objects, then, simply defy an interpretation that integrates them into the sentence; they are unlicensed. (Notice that his explanation holds regardless of whether resultatives head SCs.)

I predict, then, that a language that does not allow cognate objects with otherwise strictly intransitive verbs cannot exhibit resultatives with fake objects (reflexive or not). Italian is such a language. Cognate objects are common with verbs that can allow non-cognate objects, as well:

(101) (a) Ha vissuto {una vita serena/un brutto momento/un dramma/la fede/le pene dell'inferno}.
'She lived {a serene life/an ugly moment/a drama/her faith/the pains of hell}.'
(b) Ha pianto {lacrime d'odio/la morte della mamma/il bene perduto}.
'He cried {tears of hate/(for) the death of his mother/(for) the lost good}.'
(c) Ho sognato {un brutto sogno/mio padre}.
'I dreamed {an ugly dream/(of) my father}.'

However, strictly intransitive verbs do not allow cognate objects:[13, 14]

[13] Paola Merlo (p.c.) finds (i) acceptable, although she generally accepts my claim:

(i) Ho riso un riso amaro.
'I laughed a bitter laugh.'

Italians I asked who do not speak English rejected (i).

[14] Recall that it is only direct objects we are concerned with, so the existence of fake prepositional objects, for example, would have no bearing on the possibility of resultatives.

(102) (a) *Ho riso una risata leggera.
'I laughed a light laugh.'
(b) *E' morto una morte orribile.
'He died a terrible death.'

(*Morire* once had a transitive use meaning 'kill' which is lost today.) This correlation seems to hold over time; for example, while it appears that *sorridere* could take both non-cognate and cognate objects in the distant and more recent past (Zingarelli, 1970),

(103) (a) una parola sorridono (Pascoli)
a word (they) smile
'They smiled a word.'
(b) sorrise il buon Tancredi un cotal riso (Tasso)
smiled the good Tancredi a such laugh
'The good Tancredi smiled such a laugh.'

today this verb takes neither. The examples in (103) are from poetry, however, so it is possible that they do not reflect the acceptability judgments of the speech contemporary to each poet. And, as Nigel Vincent points out, these examples could be Latinisms, since Latin allowed cognate objects and a wider range of nominal objects and since Pascoli, at least, also wrote poetry in Latin. Still, we note that the cognate object occurs in poetry here with a verb that also allowed a non-cognate object in poetry – precisely the correlation we would predict.

As expected, Italian does not allow resultatives with fake objects; Italian has no counterpart to English (81).[15]

While Italian does not have the types of resultatives exemplified in (80) (given that it lacks productive linking flexibility) and (81) (given that it lacks fake objects), it does have transitive sentences with resultatives of the type exemplified for English in (79) above, as we saw in section 3:

(104) Quel macellaio taglia le carni [sottili].
'That butcher cuts meats thin.'

However, the exact translation of English (78) is at best marginal and at worst ungrammatical, as we saw in (72), repeated here:

(72) ?*Il fiume è ghiacciato [solido].

I return (in section 5) to an account of (72) after we have explored the restrictions on resultatives like those in (104).

[15] Inherent reflexives do not call for a modifier reading:

(i) Me ne pento. 'I repent it.'
Se ne pente. 'She repents it.'

Thus they are either true arguments or fake objects of a different sort from that discussed in the text.

Given the material in this section, we might expect that English resultatives of the type in (80) and (81) (which use the mechanisms of linking flexibility and transitivizing via fake objects) would have grammatical behaviour that distinguished them from resultatives of the types in (78) and (79). This is so. Carrier & Randall (1988: 23) point out that resultatives that are predicated of deep objects (what they call transitive resultatives) can undergo Middle Formation, Nominalization and Adjectival Passive Formation. But what they call intransitive resultatives (of the type in (80) and (81), where the subject of the resultative is not the deep object of the verb) do not undergo these rules. (Here I give their grammaticality judgments. I do not share all of these judgments, since the nominalizations are strange for me.)

(105) (a) *Middle formation*: New seedlings water [flat] easily.
vs.: *Phys Ed majors talk [into a stupor] easily.
(*cf.* We talked the Phys Ed majors [into a stupor].)
(b) *Nominalization*: The slicing of cheese [into thin wedges] is the current rage.
vs.: *Inebriation is often accompanied by the laughing of oneself [sick].
(*cf.* We laughed ourselves [sick].)
(c) *Adjectival Passive Formation*: the squashed-flat grapes
vs.: *the run-thin pavement
(*cf.* We ran the pavement [thin].)

Carrier & Randall propose that these contrasts are evidence that these lexical rules apply only if the object is the 'direct' argument of the verb. Middle Formation applies only to inputs with direct internal arguments. Adjectival Passive Formation applies only to passive participles derived from verbs with direct internal arguments (Levin & Rapoport, 1986). Only Nominalization can apply to verbs that lack a direct internal argument. 'However, when a nominalization is followed by an *of NP* sister, that NP must be its argument. Thus resultative nominals, which have *of*-NPs, can only be formed from transitive resultatives' (Carrier & Randall, 1988: 24).

5. Restrictions on AP resultatives in Italian

AP resultatives of the type in (79) (repeated here) and (104) are common in both English and Italian.

(79) That butcher slices meat thin.

However, Italian has a more restricted range of AP resultatives than English does. Here I address those restrictions and in section 6 I address their rationale.

Consider the effect of the added resultative here:

(106) I painted the barn./I painted the barn [red].

An accomplishment (Vendler, 1967; Pustejovsky, 1988) becomes an achievement by the addition of a resultative. Witness the fact that the sentence with the resultative is incompatible with a duration adverbial, as noted above in examples repeated here.

(76) (a) Ha dipinto (il palazzo) tutta la giornata.
(b) He painted (the building) all day long.
(77) (a) *Ha dipinto il palazzo [rosso] tutta la giornata.
(b) *He painted the building red all day long.

It is possible that the very function of a resultative is to show that a certain process, activity or accomplishment is to be viewed as resulting in an achievement, a fact that accounts for Rapoport's (forthcoming) observation that resultatives cannot co-occur with verbs which are already of the achievement type.

As with other sentences that involve achievements, changes in adverbials, tense, or type of object can convert these sentences into other aspectual types (Dowty, 1979):

(107) He painted buildings red for three years – what a job!

Likewise, sentences with resultatives can occur in the full range of tenses. Thus, while not all sentences that contain a resultative are achievements, the basic aspectual type of resultatives (before we fiddle with it by changing other factors that affect aspectual type) is achievements: resultatives draw one's attention to the endpoint of the activity denoted by the verb and initiated by the subject of the verb (hence turning accomplishments into achievements).

Both English and Italian AP resultatives can co-occur with a verb that has an instantaneous effect on its object:

(108) (a) My daughter sewed the skirt [(too) tight].
(b) Mia figlia ha cucito la gonna [(troppo) stretta].

As soon as my daughter takes a stitch, the skirt has been affected with visible results (whether she is making the skirt herself or taking in one that she bought). However, English AP resultatives can also co-occur with a verb that has an effect on its object only by way of durative or iterative activity, but Italian AP resultatives in most circumstances cannot:

(109) (a) I ironed the shirt [flat].
(b) *Ho stirato la camicia [piatta].

I propose that verbs of instantaneous effect in Italian can take AP resultatives because such verbs themselves lead us to focus on the endpoint of the activity and thus are easily interpreted in a way compatible with resultatives. This leads me to propose the following rule of interpretation:

(110) *Resultative Interpretation*
In a sentence with a resultative AP, the primary predicate must be interpreted as focusing on the endpoint of the activity denoted by that predicate.

Rule (110) is an interpretation strategy that applies in the semantic component of the grammar. Only in sentences in which the verb can be interpreted as focusing on the endpoint of its activity can a resultative appear. However, as Alessandro Zucchi (p.c.) points out, while being interpretable as focusing on the endpoint of its activity is necessary for the verb, it is not sufficient:

(111) *Ho macchiato la camicia [rossa].
'I stained the shirt [red].'

Example (110), then, is a strategy for interpreting sentences that have resultative APs, but verbs will have to be marked in the lexicon as to whether or not they allow resultatives. That is, resultative arguments (as opposed to resultatives with fake object sentences, which are not arguments) will appear in the predicate–argument structure and in the subcategorization frame of a verb. (In this way, my proposal is similar to Jackendoff's (1989) proposal regarding lexical redundancy rules: he views them as rules that relate independently listed items, rather than as rules that generate lexical items.) For those verbs which allow resultatives, the ease with which the verb can be read as focusing on the endpoint of its activity in a given sentence in a given pragmatic context (as shown below) determines the ease with which a sentence with a resultative will be interpreted.

The interpretation strategy in (110) is not stated in formal terms, and, so far as I can see, is not formalizable. For that reason, it is difficult to evaluate. Still, the proposal leads to several predictions, the confirmation of which lend it strong support. While disagreement on single pieces of data below (and, for that matter, above) is almost inevitable, the data taken as a whole are indicative.

First, if the resultative is modified enough to draw attention to the endpoint rather than the process of the action, we expect an otherwise inappropriate resultative to improve. This is so. Nicola Patruno (p.c.) offered me (112), which many of my informants accept, in contrast to (109).[16]

(112) Ho stirato la camicia [piatta piatta].
(I) have ironed the shirt flat flat.
'I ironed the shirt [very flat].'

[16] Repetition of the AP is a means of intensification. English allows repetition for intensification on APs that are modifiers (*a blue blue sky*) but only in few and very colloquial usages for APs that are predicates (**The sky is blue blue* versus *He's not really BAD bad, just bad*), but Italian freely allows repetition for intensification on APs regardless of function.

Similar pairs where everyone I asked finds the second sentence acceptable or better are found in (113) (where the grammaticality judgment given correlates to the resultative reading only):

(113) (a) ?*Hanno riscaldato l'acqua [bollente].
'They heated the water [boiling].'
Hanno riscaldato l'acqua [tanto calda che non ci si poteva entrare].
'They heated the water [so hot that no one could get in].'
(b) ?*Ha strappato la lettera [fine].
'He ripped up the letter [fine].' (in small pieces)
Ha strappato la lettera [fine fine].
'He ripped up the letter [very fine].'
(c) ?Abbiamo pettinato i cappelli [lisci].
'We combed the hair [smooth].'
Abbiamo pettinato i capelli [lisci come seta].
'We combed the hair [smooth like silk].'
(d) ?Li abbiamo scoloriti [bianchi].
'We bleached them [white].'
Li abbiamo scoloriti [quasi, ma non perfettamente, bianchi].
'We bleached them [almost, but not perfectly, white].'

As an adjective is modified or intensified, it becomes 'heavier' (and while the definition of the concept of heaviness is controversial, this phenomenon is nevertheless generally recognizable). One might, therefore, ask if the effect in (112) and (113) (and in the English (128) below) is due to heaviness rather than to the semantic interpretation of the sentences.

I doubt that heaviness is at play here because restrictions we find on constructions that are sensitive to the heaviness effect are not found on our resultative construction. For example, in nominalizations such as *distruzione* 'destruction' (Giorgi & Longobardi, 1991: Ch. 3), a single-word AP that modifies the head N cannot follow an argument of the head noun, but a heavy AP can (Zucchi, 1989: 255 ff.):

(114) (a) *la distruzione della città sanguinosa
lit.: the destruction of the city bloody
'the bloody destruction of the city'
(*cf.* la distruzione sanguinosa della città)
(b) la distruzione della città sanguinosa e violenta
'the bloody and violent destruction of the city'

The restriction exemplified in (114) holds only if the NP is definite. If it is indefinite, a single-word AP can appear before or after the argument of the head noun, as pointed out by Raffaella Zannuttini (p.c.) (Napoli, 1989: 181):

(115) una lettura del testo superficiale
'a superficial reading of the text'

(*cf.* una lettura superficiale del testo
and: *la lettura del testo superficiale)

Resultatives, on the other hand, show no difference in acceptability if the relevant nominal is definite or indefinite.

Second, a given activity can have an instantaneous effect on one object but not on a different object: for example, if we hammer on metal, we do not expect an instantaneous effect, but if we hammer on tin foil, we do. A resultative should, then, be better in the sentence describing the second event than in that describing the first. Alternatively, a given object might be instantaneously affected by one activity but not by another. So if we found a machine that could flatten metal in an instant, we would expect improved acceptability over the sentence in which a person is hammering on metal. Our expectations are met in the speech of many, although the contrasts are not always strong.

(116) (a) *Gianni ha martellato il metallo [piatto]. (= (73))
'Gianni hammered the metal [flat].'
(b) ?Gianni ha martellato la carta stagnola [piatta].
'Gianni hammered the tin foil [flat].'
(c) ?Quella pressa idraulica ha {pestato/pressato} il metallo piatto (subito subito).
'That hydraulic press {smashed/pressed} the metal flat (in an instant).'

Here pragmatic factors clearly affect the appropriateness of a resultative. Thus we are forced to find an account that involves interpretation principles of the sort in (110).

Third, if the verb is of low information with respect to the type and manner of activity, where the major information of the verb is the endpoint of the activity, we expect a resultative to be acceptable, even if the activity has to be iterative or durative before the desired effect on the object is achieved. *Caricare* 'load' is such a verb. We can load material onto or into a location by doing many different types of actions (in contrast to ironing, for example, where we do a highly specified action). Resultatives are easily allowed with this verb, where intensification of the AP (as in (117b)) makes it that much more colloquial (as pointed out by a speaker consulted by an anonymous referee of this paper):

(117) (a) Gli operai hanno caricato il camion [pieno].
'The workers loaded the truck [full].'
(b) Gli operai hanno caricato il camion [pieno al massimo].
'The workers loaded the truck [full to the brim].'

Fourth, we expect that in a situational context in which our point of attention is naturally the endpoint of an activity, a verb whose effect is felt

only after some duration of the activity can nevertheless co-occur with a resultative. This is so:

(118) Quell'anitra, l'hai cucinata [saporita].
'That duck, you cooked it [tasty].'

The fact that *saporita* appears separated from the clitic *l'* requires us to analyse this AP as a predicate, since modifying APs must occur internally to NP and can never modify a clitic.[17]

Alessandro Zucchi (p.c.) offers a different type of example of the same principle. While (109) sounds strange out of context, it can be accepted in a situation in which there are different possible outcomes of ironing. For example, if we are debating whether the shirt was ironed flat or into pleats, one person might say (109) and the other might retort with:

(119) No, hai stirato la camicia [pieghettata].
'No, you ironed the shirt [pleated].'

Several of my informants agree with Zucchi's intuitions.

A fifth prediction is similar to, and perhaps a special case of, the fourth. We expect imperatives to allow resultatives when the ordinary corresponding statement might not, since imperatives can set up an endpoint-focused context. That is, when we order someone to beat eggs, we often do not care how they get to the desired result so long as they do. While I have not found an improvement generally by turning most statements into imperatives, resultatives with imperatives about cooking quite generally are more acceptable than their statement counterparts:

(120) (a) Sbatti le uova [cremose].
'Beat the eggs [creamy].'
(*cf.* ?*Maria sbatte le uova [cremose].
'Maria is beating the eggs [creamy].')
(b) Macinatele [fini].
'Grind them [fine].'
(*cf.* ?Le avete macinate [fini].
'You have ground them [fine].')

Speakers range from finding (120a, b) acceptable to ungrammatical, but all reported to me that the imperative was better than the declarative. Likewise, the infinitive form of the verb used as an imperative (which is often found in written directions in both the affirmative and the negative, but which occurs in spoken language only in the negative) was judged acceptable to marginal with a resultative in:

[17] The SP in (118) is not a depictive: (118) in Italian is not equivalent to saying you cooked the duck and it is tasty. Instead, it means you cooked the duck in such a way that you made it come out tasty. So the SP is a resultative.

(121) (a) Sbattere le uova [soffici].
'Beat the eggs [fluffy].'
(*cf.* ?*Carolina sbatte le uova [soffici].
'Carolina is beating the eggs [fluffy].')
(b) Scolare gli spaghetti [asciutti].
'Drain the spaghetti [dry].'
(*cf.* ?Gli spaghetti, li dovete scolare [asciutti].
'The spaghetti, you must drain them [dry].')

If the above discussion is on the right track, we might expect English to show sensitivity to the same factors that affect acceptability in Italian AP resultatives. In transitive sentences it is hard to find evidence of these factors, although perhaps there is a remnant in the lexical selections we see in resultatives. While to a great extent which AP resultatives (and which PP resultatives) are accepted by which verb is a fact to be listed in the lexicon,[18] there are some general properties of resultatives. One is that most AP resultatives that deal with a point on a scale, deal with the endpoint:

(122) (a) She wrung the shirt [{dry/*damp}].
(b) She watered the tulips [{flat/*droopy}].
(c) We heated the coffee [{hot/*tepid}].

This effect is felt, as well, for resultatives like (80) and (81) (where the surface direct object is filled with a non-argument or an argument that would have some other grammatical function in the absence of a resultative) whenever the resultative expresses intensification.[19]

(123) (a) The joggers ran the pavement [{thin/*worn}].
(b) The king laughed himself [{sick/?slightly nauseous}].

PP resultatives are not so readily interpreted as indicating points on a scale, as Nigel Vincent (p.c.) points out. So both examples in (124) are good, but each PP expresses a different way one can rip things rather than degrees of a single way.

(124) She ripped the book [{to tatters/in half}].

[18] Simpson (1983) notes that only appropriate and predictable results are allowed (what McNulty, 1988: 63, calls 'natural entailments'). The point, however, is that not all semantically and pragmatically appropriate and predictable results are allowed.

[19] Beth Levin (p.c.) suggests that it is not just a question of an adjective being on the end of a scale, but also of an adjective being a member of a direct antonym pair (Gross, Fischer & Miller, 1988). Thus, even though *scorching*, which is not part of a direct antonym pair, might be higher on the heat scale than *hot*, which is part of a direct antonym pair (*cold*), it is not a terribly colloquial resultative AP:

(i) ??We heated the coffee [scorching]. (cf. (122))

This suggestion demands further attention, although examples like (120) above (with *cremose* 'creamy') seem problematic. Furthermore, as an anonymous reviewer pointed out, participles do not occur as resultative SPs. So (i) could be rejected for extraneous reasons.

However, when we are able to create circumstances in which PPs do relate to points on a scale, the effect appears:

(125) Sue talked Paul [{into a stupor/*into slight disorientation}].
(126) Paul cried himself [{to sleep/*to rest}].

(Everyone I asked found the starred examples of (125) and (126) unusual, and often remarked that these instances are humorous. The asterisk here is meant to indicate those judgements.) The choice of state APs that denote the endpoint on a scale calls to mind the greater acceptability of state APs in Italian that are intensified or otherwise modified (as in (112) and (113) above).

All of this discussion, however, is about a general tendency, rather than any firm rule. As Dwight Bolinger (p.c.) points out, with more information about context, resultatives that are not endpoints on a scale are accepted, particularly if they are contrasted with an endpoint resultative:

(127) (a) Heat it just warm, not hot, okay?
(b) She talked Paul into a half-dreamy state, with that lulling voice of hers.
(c) Paul cried himself to near exhaustion.

Second, some English sentences with a one-word AP resultative are decidedly odd, but if the resultative is appropriately modified, the sentence becomes acceptable for at least some speakers (compare to Italian (112) and (113)):

(128) (a) ??I wrote the letters [long].[20]
(b) ?I wrote the letters [long and beautiful].
(c) I wrote the letters [so long no one could read them].

Notice that PP resultatives contrast with AP resultatives here (*I wrote the letters [into a(n epistolary) novel]*).

Third, in superficially intransitive sentences with no expressed agent, such as unaccusatives (in (130a) and (131a)) and middles (in (130b) and (131b)), the acceptability of English AP resultatives is affected by whether we are led to focus on the endpoint of the activity of the verb:

(129) We scrubbed the pot [shiny].
(130) (a) *That pot sure scrubbed [shiny].
(b) *That type of pot scrubs [shiny] easily.
(cf. That type of pots scrubs easily.)

[20] Even the change from *the* to *my* improves this sentence:

(i) I wrote my letters [long].

It appears that additional information of many sorts improves the sentence, as though simply making the situation more highly specified adds to the appropriateness of the resultative.

In (131), the addition of *up* gives us an endpoint for the activity of scrubbing, and suddenly the resultative is now acceptable. (And some speakers who find all the examples in (128) above odd, find marked improvement if *up* is added after *wrote*).

(131) (a) That pot sure scrubbed up [shiny], didn't it?
(b) That type of pot always scrubs up [shiny].

Alternatively, instead of adding *up* to give the action of scrubbing an endpoint, one could use the resultative *clean*, which has a natural endpoint, in contrast to *shiny*, which does not, as Dwight Bolinger (p.c.) has pointed out to me. The counterparts to (130) improve greatly in this case:

(132) We scrubbed the pot [clean].
(133) (a) That pot sure scrubbed [clean]. (cf. (130a))
(b) That type of pot scrubs [clean] easily. (cf. (130b))
(134) (a) That pot sure scrubbed up [clean], didn't it? (cf. (131a))
(b) That type of pot always scrubs up [clean]. (cf. (131b))

When a verb's agent argument is suppressed, the need for a clear endpoint in order to allow a good interpretation of a sentence with an AP resultative emerges. Accordingly, the passive sentence in (135) is acceptable, since the passive suffix itself expresses the agent argument (Jaeggli, 1986):

(135) The pot was {scrubbed/cleaned} [shiny].

Transitives which can be analysed lexically as causatives in the absence of a resultative do not show this sensitivity when used intransitively. Thus *tall* brings to mind no fixed endpoint, yet it is a fine resultative in the non-agentive sentence here:

(136) She grew [tall].

If the suppression of an agent in English leads to greater need for focus on the endpoint in order for AP resultatives to be appropriate, we might expect that in Italian, where the need for focus on the endpoint is evident even in the presence of an agent, the absence of an agent would preclude an AP resultative.

This is a difficult prediction to test for many reasons.[21] Nevertheless, it

[21] Many transitive sentences that allow AP resultatives in Italian call for the presence of the clitic *si* in their unaccusative or middle counterparts:

(i) (a) I loro capelli si tagliano [corti].
'Their hair is cut [short].'
(b) La bresaola si taglia [sottile].
'Bresaola is cut [thin].'
(c) I grani si battono [fini].
'The grains are beaten fine.'

But *si* is also used to signify an underspecified human argument (similar to the English passive morpheme) which, if it were to be realized by a full NP, would fill the subject

appears likely that the absence of an agent affects the possibility of having an AP resultative. Consider again the exact translation of English (136):

(137) *E' cresciuta [alta].

Example (137) is perceived as redundant to Italians, since *crescere* 'grow' lexically includes the notion of upward. For situations in which one would use English (136), Italians would simply say:

(138) E' cresciuta.
'She grew.'

However, if she has control over her growing and over the direction of growth, then a resultative improves. Consider (139) when talking about Alice in Wonderland:

(139) Alice ha mangiato il pezzo di torta, ed è cresciuta [piccolissima] di nuovo.
'Alice ate the piece of cake, and she grew [tiny] again.'

Example (139) is rejected by many speakers, but others spontaneously produced it for me and found it better than (137).

---

function (Napoli, 1973). Thus (i) can be interpreted with *si* as the agent; witness the fact that the adverb *deliberatamente* and purpose and rationale clauses are acceptable:

(ii) (a) I loro capelli si tagliano [corti] deliberatamente.
'Their hair is cut [short] deliberately.'
(b) La bresaola si taglia [sottile] per far venir fuori il gusto.
'Bresaola is cut [thin] to make the taste come out.'
(c) I grani si battono [fini] per far bello il pane.
'They beat the grains fine to make the bread pretty.'

Italian has only a few verbs that can be used transitively and intransitively where *si* does not appear in the intransitive. However, none of them, so far as I know, can co-occur with resultatives of any category.

Sometimes the reasons for the incompatibility of resultatives is a mystery to me. But sometimes the incompatibility of resultatives with these verbs follows from a fact extraneous to the question of the presence or absence of an agent. For example, consider the verb *esplodere* 'explode'.

(iii) (a) Esplodo la bomba.
'I explode the bomb.'
(b) La bomba esplode.
'The bomb explodes.'

This verb does not co-occur with resultatives in either language:

(iv) (a) *Ho esploso la bomba [via].
(b) *I exploded the bomb {[away]/[to smithereens]}.
(*cf.* The bomb blew the town {[away]/[to smithereens]}.)

As an anonymous reviewer pointed out to me, *esplodere/explode* has its removal-from-origin sense sufficiently explicit in the meaning of the verb, perhaps in the frozen morpheme *ex-*. We see the same resistance toward resultatives with other verbs using this *ex-*:

(v) (a) *The archaeologist excavated the temple (clean/bare).
(b) *The coroner exhumed the corpse (visible/accessible).

Agency also appears as a factor in (72), repeated here:

(72) ?*Il fiume è ghiacciato [solido].
'The river froze [solid].'

Ghiacciare can be used intransitively (without *si*, like *esplodere*, see note 21) or (infrequently) transitively:

(140) Il fiume è ghiacciato.
'The river froze.'
(141) La bassa temperatura ha ghiacciato il fiume.
'The low temperature froze the river.'

However, freezing is not ordinarily achieved instantaneously, and (141) rejects the addition of a resultative.

(142) *La bassa temperatura ha ghiacciato il fiume [solido].
'The low temperature has froze the river [solid].'

But if we have a scientist who uses a method to freeze water instantly, some speakers report improved acceptability, especially with intensification (compare to (112) and (113)):

(143) ?Lo scienziato ha ghiacciato l'acqua [assolutamente solida] in solo un secondo.
'The scientist froze the water [absolutely solid] in only one second.'

However, in the intransitive use the resultative is rejected just as strongly for these speakers, with or without intensification:

(144) ?*Il fiume è ghiacciato [così solido che possiamo pattinarci].
The river froze [so solid that we can skate there].'

If the lack of an agent in (144) accounts for its extreme marginality in contrast to (143) for these speakers, we have a reason for the lack of AP resultatives in Italian of the type found in the English (78) (*The river froze solid*): AP resultatives in Italian co-occur only with an expressed agent of the verb.

In sum, we have seen that AP resultatives in Italian are more readily accepted (1) with verbs of instantaneous effect (108), (2) if modified or intensified ((112) and (113)), (3) with instantaneous-effect situations (116), (4) with verbs that naturally focus on the endpoint of the activity they denote (117), (5) in situations that focus our attention on the endpoint of an activity (118), and (6) with certain imperatives ((120) and (121)). AP resultatives in Italian occur only in the presence of an agent ((137)–(144)). We have also seen that English resultatives that deal with a point on a scale deal with the endpoint ((122)–(127)); that modification can make a resultative

sound better (128); that a clear endpoint makes a resultative sound better, particularly if no agent is expressed ((129)–(135)).

The interpretation strategy in (110) applies strongly in Italian and weakly in English. This conclusion runs counter to the idea that interpretative rules apply uniformly in all languages and raises questions regarding learnability. Nevertheless, the data above lead undeniably to this conclusion.

6. The contrast between PP and AP

Italian exhibits PP resultatives freely, whereas it exhibits AP resultatives in a semantically more restricted range of sentences. English has a similar distinction, though greatly muted. The question is why.

The answer may lie at least partially in phrase-structure constraints. Both English and Italian exhibit VPs with the structure:

(145) V NP PP

The PP could modify the verb or properly contain an argument of the verb:[22]

(146) (a) I left Rome [in a great hurry].
(b) Ho lasciato Roma [in fretta e furia].
(147) (a) I gave a book [to John].
(b) Ho dato un libro [a Giovanni].

The PP could also be an argument of the verb without being a predicate:

(148) I chose [under the bush] as a hiding place.

And, as we have seen above, it can be a resultative:

(48) (a) Ho tagliato la carne [in piccoli pezzi].
(b) I cut the meat [in small pieces].

That is, PP resultatives can occur inside VP following the direct object, a position other types of non-predicative PP arguments can occupy.

However, the VP string in (149) is more restricted:

(149) V NP NP (cf. 147)

In both languages the second NP can be a modifier of the verb:

(150) (a) I saw John [yesterday].
(b) Ho visto Giovanni [ieri].

[22] Many linguists argue that arguments are sisters to V, whereas modifiers are sisters to V'. Even if one takes that position (which I do not), the generalization arrived at in (155) below holds, since the comparison here is based on arguments only.

In English the second NP can also be a non-predicative argument of the verb, but in Italian it cannot:

(151) (a) I gave John [the book].
(b) *Ho dato Giovanni [il libro].

We find that NP resultatives can occur in English (though they are more restricted than PP or AP resultatives (Simpson, 1983)):

(152) I painted the closet [a dark colour].

but not in Italian:[23]

(153) *Ho dipinto l'armadio [un colore scuro]. (cf. (152))

Yet an AP resultative is allowed here:

(154) Ho dipinto l'armadio [troppo scuro].
'I painted the closet [too dark].'

From (149) to (154), we see that NP resultatives can occur inside VP following the direct object only if other types of non-predicative NP arguments can occur there.

Recall that Carrier & Randall (1988) argue that resultatives are arguments of the verb, and that in section 2 we saw that resultatives are semantically tied to the verb in a way that other types of SPs need not be (which is probably a reflex of their being arguments). We are led, then, to a simple correlation:[24]

[23] One might object that with *eleggere* 'elect' and *chiamare* 'call' we find NP secondary predicates:

(i) L'hanno eletto presidente.
'They elected him president.'
(ii) L'ha chiamato lestofante.
'She called him swindler.'

It is not clear, however, that these SPs are, in fact, resultatives. Furthermore, specifiers that ordinarily can occur with NPs cannot ordinarily occur here:

(i) *L'hanno eletto il presidente.
'They elected him the president.'
(ii) *L'ha chiamato un lestofante.
'She called him a swindler.'

These putative NPs act like proper names or titles, and, accordingly, specifiers that can be used as parts of titles can appear:

(iii) L'hanno eletto il nostro presidente.
'They elected him our president.'

I leave such examples aside since their proper analysis is not clear to me. What is clear is that the kind of NP secondary predicate that English allows in the text (152) is impossible in Italian (153).

[24] No correlation is mentioned here between the possibility of resultatives of a given category and other types of SPs of that same category. For example, both Italian and English allow a wide range of SPs in the bracketed position in (i):

(i) Considero Ennio [un genio].
'I consider Ennio [a genius].'

To make any relevant correlation, one would need to argue both that the SP in (i) is an argument of the verb, and that this SP occurs in the same syntactic slot that resultatives occur in. Neither of these is a simple matter and both go beyond the scope of this article.

(155) A resultative of category XP can occur in post-direct-object position as sister to V only if other non-predicative arguments of category XP can occur in that same position.

Example (155) accounts for the presence of PP resultatives in English and Italian and the presence of NP resultatives in English but their absence in Italian. And (155) is natural if resultatives are arguments of the verb (Chomsky, 1965: 99; Bowers, 1973; and see various phrase-structure/grammatical-function assignment rules in Lexical-Functional Grammar, as in Kaplan & Bresnan, 1982). In fact, (155) can be seen as evidence that resultatives are arguments. Still, the fact that resultatives can combine with fake direct objects in English to give a degree interpretation stops me from claiming that all resultatives are arguments of the verb.

Turning now to APs, given the fact that both English and Italian exhibit AP resultatives, we expect both to exhibit non-predicative AP arguments in the position after the direct object.

If we take AP to mean only adjective phrase, then the hypothesis fails trivially. This is because adjectives must be modifiers or predicates, so a non-predicative AP argument would have to be a modifier. But if an adjective modifies, it must be inside an NP (Napoli, 1989: Ch. 1). Thus a modifying adjective phrase could never occur in post-object position. However, if we allow AP to mean adjective phrase or adverb phrase, where how an element is spelled out morphologically depends on its function (modifiers of nominals are spelled out as adjective phrases and modifiers of non-nominals are spelled out as adverb phrases), the hypothesis becomes interesting. We find that the structure:

(156) V NP AP

where AP (adjective or adverb phrase) is a non-predicative argument of V, occurs only rarely in both languages if subcategorization is a necessary characteristic of arguments. (Predicative AP arguments, however, are relatively frequently subcategorized for, as with the verbs *become* and *get*). One example for English (McConnell-Ginet, 1982) is:

(157) Most of the people treated Jill rudely.
#Most of the people treated Jill.

(The # indicates that with the relevant sense of the verb (here, the sense 'behave toward') the sentence is unacceptable, although with another, irrelevant, sense it is acceptable.) It is not the category AP that the verb is subcategorized for here, but rather a manner modifier that could be realized by PP or, perhaps, even NP (on whether or not the phrase headed by *way* in (159) is an NP, see Larson, 1985, and, particularly for Romance, Bolinger, 1987):

(158) Most of the people treated Jill with contempt.
(159) Most of the people treated Jill the way she expected.

The important point is that the AP in (157) is a post-object argument that is non-predicative.

The Italian translation of (158) also requires a manner modifier under the relevant heading of the verb, where whether that AP occurs most naturally before or after the object argument depends on the choice of AP itself. The APs *male* 'badly', *bene* 'well' and *molto* 'a lot' occur most naturally before the object argument, while the APs ending in *-mente* (similar to English *-ly*) seem to occur most naturally after the object argument, as Alessandro Zucchi (p.c.) has pointed out to me.

(160) (a) La maggior parte della gente ha trattato male Giglia.
'The majority of the people treated badly Giglia.'
(b) La maggior parte della gente ha trattato Giglia rudemente.
'The majority of the people treated Giglia roughly.'

Thus both languages exhibit non-predicative AP arguments in post-object position, and (155) predicts correctly that both languages will have resultative APs.

Two questions remain. First, why are APs sensitive to the conditions on interpretation exemplified in section 5, while PPs are not? Second, why does Italian find these factors salient, but English show only a slight sensitivity to them?

Perhaps the fact that non-predicative AP arguments in post-object position are rare in both languages may be taken as a reason for their being subject (to a high degree in Italian and a slight degree in English) to special factors, in contrast to PPs, which appear frequently in post-object position as arguments of a variety of sorts. Whatever is responsible for the scarcity of non-predicative AP arguments in post-object position is likewise responsible for marking resultative APs, in the sense that they are sensitive to the special factors outlined in section 5.

In fact, it seems that AP arguments inside VP are marked in constructions other than resultatives. Consider the case of verb compounding in English. Many verbs are compounds of P+V:

(161) outrun, outlive, outgrow; overload, overdo, overturn, overstep, overthrow; downplay; underfeed, undercut; offset; uproot, upchuck, upright; backtrack, backspace

But, according to Selkirk (1982: 17, who cites Marchand, 1969), we find no verbs that are compounds of A+V except back-formations from already existing nominal or adjectival compounds.

(162) redpencil; dryclean; hardboil, softboil; doubledare; deadend; sharpshoot; whitewash; roughcast

While the claim that all compounds of the sort in (162) are back-formations calls for further investigation, it seems clear that compound formation

directly from A+V is rare, if existent at all, in English. In English it appears that verbs select only the unmarked argument of V (the P, not the A) for compounding.[25]

We are still left with the question of why Italian exhibits the effects in section 5 so much more strongly than English. As demonstrated in section 3, Italian exhibits both verbs which show manner plus change of location ((54)–(65)), as well as transitive verbs which show manner of speaking ((70)). However, Italian seems to have fewer of both these verb usages than English. We discussed in section 3 the claim that the possibility for all three constructions (resultatives, manner-plus-change-of-location verbs and transitive manner-of-speaking verbs) follows from the presence or not of a given mechanism (of conflation or subordination) in the lexicon. In this article I have studied the factors affecting the interpretation of sentences with resultative APs in Italian (and, briefly, in English). What is called for now is a sister study of the factors affecting the use of manner-plus-change-of-location verbs and transitive manner-of-speaking verbs, to provide a basis for comparison of the lexical mechanisms in the two languages.

7. Conclusion

Secondary resultatives exist in Italian and English, where both languages exhibit freedom with PP resultatives but semantic restrictions with AP resultatives (strongly in Italian and weakly in English). This contrast between freedom and restrictions is mirrored in the fact that AP arguments in post-object position as sisters to V are marked in both English and Italian.

While I have restricted this article to comments on Italian, my initial study of French, Spanish (and see Demonte, 1989, and Mallén, 1990) and Catalan show highly similar results. It appears that Romance languages in general exhibit resultatives (as well as manner-plus-change-of-location verbs and transitive manner-of-speaking verbs).

Author's address: *Department of Linguistics,*
Swarthmore College,
Swarthmore,
PA 19081,
USA.

[25] English also lacks non-backformed N+V compounds. However, NP is certainly not a marked argument of V. Still, the PP and AP arguments of a verb typically interact with it in a way that seems to extend or modify the action denoted by the verb (hence the claim of some, cited at the outset, that resultatives are part of a complex predicate), whereas NP arguments do not typically do this. This is probably the reason new compound verbs are rarely formed from N+V.

References

Andrews, A. (1982). A note on the constituent structure of adverbials and auxiliaries. *LIn* **13**. 313–317.
Atkins, B., Kegl, J. & Levin, B. (1988). Anatomy of a verb entry: from linguistic theory to lexicographic practice. *International Journal of Lexicography* **1**. 84–126.
Bolinger, D. (1967). Adjectives in English: attribution and predication. *Lingua* **18**. 1–34.
Bolinger, D. (1971). *The phrasal verb in English*. Cambridge, MA: Harvard University Press.
Bolinger, D. (1987). Adverbial nouns in English and Spanish. Ms, Palo Alto, CA.
Bowers, J. (1973). Grammatical relations. Doctoral dissertation, MIT.
Burzio, L. (1986). *Italian syntax: a government–binding approach*. Dordrecht: D. Reidel.
Carrier, J. & Randall, J. (1988). From conceptual structure to syntax: projecting from resultatives. MS. Harvard University and Northeastern University.
Carter, R. (1984). Compositionality and polysemy. Unpublished ms. Lexicon Project, Center for Cognitive Science. MIT.
Centineo, G. (1986). A lexical theory of auxiliary selection in Italian. *Davis Working Papers in Linguistics* **1**. 1–35.
Chomsky, N. (1955/1975). *The logical structure of linguistic theory*. Chicago: University of Chicago Press.
Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.
Demonte, V. (1989). Remarks on secondary predicates: c-command, extraction and reanalysis. *The Linguistic Review* **6**. 1–39.
Dorrity, K. (1989). What do people think about *think*? Senior thesis, Swarthmore College.
Dowty, D. (1979). *Word meaning and Montague Grammar*. Dordrecht: Reidel.
Fraser, B. (1976). *The verb particle construction in English*. New York: Academic Press.
Giorgi, A. & Longobardi, G. (1991). *The syntax of the noun phrase*. Cambridge: Cambridge University Press.
Green, G. (1973). A syntactic syncretism in English and French. In Kachru, B. et al. (eds), *Issues in Linguistics*. Urbana: University of Illinois Press. 257–278.
Gross, D., Fischer, U. & Miller, G. A. (1988). Antonymy and the representation of adjectival meanings. *Cognitive Science Laboratory Report* **13**. Princeton University.
Halliday, M. A. K. (1967). Notes on transitivity and theme in English, part I. *JL* **3**. 37–81.
Hoekstra, T. (1984). *Transitivity*. Dordrecht: Foris.
Hoekstra, T. (1988). Small clause results. *Lingua* **74**. 101–139.
Hoekstra, T. & Mulder, R. (1990). Unergatives as copular verbs; locational and existential predication. *The Linguistic Review* **7**. 1–79.
Jackendoff, R. (1973). The base rules for prepositional phrases. In Kiparsky, P. & Anderson, S. (eds), *A festschrift for Morris Halle*. New York: Holt, Rinehart, & Winston. 345–356.
Jackendoff, R. (1989). Semantic structures. Ms, Brandeis University.
Jaeggli, O. (1986). Passive. *LIn* **17**. 587–622.
Jones, M. (1988). Cognate objects and the Case filter. *JL* **24**. 89–110.
Kaplan, R. & Bresnan, J. Lexical-functional grammar: a formal system for grammatical representation. In Bresnan, J. (ed.), *The mental representation of grammatical relations*. Cambridge, MA: MIT Press. 173–281.
Kayne, R. (1981). On certain differences between French and English. *LIn* **12**. 349–371.
Larson, R. (1985). Bare-NP adverbs. *LIn* **16**. 595–622.
Levin, B. & Rapoport, T. (1988). Lexical subordination. *CLS* **24**. 275–289.
Levin, B. & Rappaport, M. (1986). The formation of adjectival passives. *LIn* **17**. 623–661.
Levin, B. & Rappaport, M. (1989). An approach to unaccusative mismatches. *NELS* **19**. 314–329.
Levin, L. (1987). A theory of relation changing rules in LFG. *Report CSLI-87-115*, Stanford University, Stanford, CA.
Levin, L. & Simpson, J. (1981). Quirky case and the structure of Icelandic lexical entries. *CLS* **17**. 185–95.
Mallén, E. (1990). A syntactic analysis of secondary predication in Spanish. *JL* **27**. 375–403.
Marantz, A. (1988). Reply to Jackendoff: 'arguing one's way to a less radical conclusion'. Unpublished ms, University of California, Irvine, CA.
Marchand, H. (1969). *The categories and types of present-day English word formation*. 2nd ed. Munich: C. H. Beck.

McConnell-Ginet, S. (1982). Adverbs and logical form. *Lg* **58**. 144–84.
McNulty, E. (1988). The syntax of adjunct predicates. Doctoral dissertation, University of Connecticut.
Merlo, P. (1986). Secondary predication in Italian and English. Tesi di laurea, Università di Venezia. Venice.
Merlo, P. (1988). Secondary predicates in Italian and English. In Powers, J. & de Jong, K. (eds), *Proceedings of the Fifth Eastern States Conference on Linguistics*. Columbus: Ohio State University. 338–348.
Miller, B. (1990). A thematic constraint on resultative predication. Ms, York University, North York, Ontario.
Mufwene, S. (1978). English manner-of-speaking verbs revisited. In Farkas, D. et al. (eds), *Papers from the parasession on the lexicon*. Chicago: Chicago Linguistic Society. 278–288.
Napoli, D. J. (1973). *The two si's of Italian: an analysis of reflexive, inchoative, and indefinite subject sentences in Modern Standard Italian*. Doctoral dissertation, Harvard University; circulated by Indiana University Linguistics Club in 1976.
Napoli, D. J. (1988). Subjects and external arguments/clauses and non-clauses. *Linguistics and Philosophy* **11**. 323–354.
Napoli, D. J. (1989). *Predication theory: a case study for indexing theory*. Cambridge: Cambridge University Press.
Napoli, D. J. & Nespor, M. (in progress). The prefix *s-* in Italian. Ms, Swarthmore College.
Poser, W. (1982). Lexical rules may change internal arguments. *The Linguistic Review* **2**. 97–100.
Pustejovsky, J. (1988). Event semantic structure. *Computer science technical report*, Brandeis University, Waltham, MA.
Pustejovsky, J. (1989). The generative lexicon. MS, Brandeis University, Waltham, MA.
Randall, J. (1983). A lexical approach to causatives. *Journal of Linguistic Research* **2**, 3.
Rapoport, T. (1986). Nonverbal predication in Hebrew. *Proceedings of West Coast Conference on Foreign Languages V*. Stanford University: Stanford Linguistics Association. 207–218.
Rapoport, T. (forthcoming). Secondary predication and the lexical representation of verbs. *Machine Translation* **4**, 4.
Roberts, I. (1988). Predicative APs. *LIn* **19**. 703–710.
Rothstein, S. (1983). *The syntactic forms of predication*. Doctoral dissertation. MIT; circulated by Indiana University Linguistics Club in 1985.
Rothstein, S. (1989). Syntactic predication: a syntactic primitive or a thematic relation? Ms, Bar-Ilan University, Israel.
Sato, H. (1987). Resultative attributes and GB principles. *English Linguistics* **4**. 91–106.
Selkirk, E. (1982). *The syntax of words*. Cambridge, MA: MIT Press.
Simpson, J. (1982). Secondary predicates in English, Icelandic, and Finnish. Ms, MIT.
Simpson, J. (1983). Resultatives. In Levin, L., Rappoport, M. & Zaenen, A. (eds), *Papers in Lexical–Functional Grammar*. Bloomington: Indiana University Linguistics Club. 143–157.
Simpson, J. (1986). Resultative attributes. Unpublished ms, MIT.
Talmy, L. (1975). Semantics and syntax of motion. In Kimball, J. (ed.), *Syntax and semantics*, vol. 4. New York: Academic Press. 181–238.
Talmy, L. (1985). Lexicalization patterns: semantic structure in lexical forms. In Shopen, T. (ed.), *Language typology and syntactic description*, vol. 3. *Grammatical categories and the lexicon*. Cambridge: Cambridge University Press. 57–149.
Tenny, C. (1987). Grammaticalizing aspect and affectedness. Doctoral dissertation, MIT.
van Voorst, J. (1983). Anaphor binding and directional PPs in Dutch. *CLS* **19**. 386–395.
Vendler, Z. (1967). Verbs and times. In Vendler, Z. (ed.), *Linguistics in philosophy*. Ithaca: Cornell University Press. 97–121.
Zingarelli, N. (1970). *Vocabolario della lingua italiana*. Bologna, Zanichelli.
Zucchi, A. (1989). The language of propositions and events: issues in the syntax and the semantics of nominalization. Doctoral dissertation, University of Massachusetts at Amherst.
Zwicky, A. (1971). In a manner of speaking. *LIn* **2**. 223–32.