Causation, Obligation, and Argument Structure: On the Nature of Little v

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As shown by Kayne (1975), Romance causatives with *faire* fall into two classes, *faire infinitif* (FI) and *faire par* (FP). We argue from Italian data that the properties of the two classes depend on the nature of the complement of *fare*: FI embeds a vP, FP a nominalized VP. The syntactic and semantic characteristics of these complements account straightforwardly for well-known differences between FI and FP, including the previously untreated ''obligation'' requirement in FI, absent in FP. Our analysis also accounts for another subtle restriction on the formation of FP: the existence of an animacy requirement on the subject of *fare*, absent in FI. Finally, we argue that only FP can undergo passivization; this accounts for a previously unobserved asymmetry in passivizability of causatives of unergative and unaccusative intransitive verbs.

Keywords: causative, Italian, unaccusative, unergative, agent, passive, Case

1 Introduction

When the ''little-v'' hypothesis was introduced in the early 1990s (Hale and Keyser 1993, Kratzer 1993, 1996, Chomsky 1995), it was immediately applied in the analysis of affixal causative morphology in languages like Malagasy, Japanese, Turkish, Finnish, and Persian (e.g., Travis 1994, Harley 1995, Kural 1996, Megerdoomian 2002, Pylkkänen 2002, among many others). According to this hypothesis, external arguments are not projected as true arguments of their verbs; rather, they are arguments of a ''light'' verbal projection dominating VP. In the analysis of affixal causatives, the proposal has been that the additional agent argument of a causativized verb appears as the result of the addition of an extra vP. The causative morphology is the spell-out of the extra v head, affixed to the main verb complex as it head-moves up the tree.

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Romance causative verbs like Italian *fare* are not morphological affixes, but they exhibit several properties that suggest that they are not always ''main'' verbs. For instance, a causativized clause behaves like a single Case-marking domain.[1] True main verb causatives like *permettere* 'permit' and *ordinare* 'order' show no such effects. Indeed, previous analyses of *fare* have relied on treating it as a sort of affixal causative, exploiting incorporation to capture some of the clause union effects with respect to Case and θ-roles (Guasti 1996).

In this article, we treat causativizing *fare* as the (nonaffixal) realization of a causative little-v head. That in itself is a natural and unsurprising extension of the affixal-causative analyses described above. However, the original investigation of Romance causatives by Kayne (1975) revealed many subtle properties that have been the subject of much research. With Ippolito (2000) and Landau (2002), we show that the introduction of vP allows a natural account of Kayne's two distinct classes of causatives, the *faire infinitif* type and the *faire par* type, without recourse to any lexicon-internal operations on argument structure, which have been a mainstay of previous analyses. We argue that a refinement of the little-v approach involving multiple types of v permits a fine-grained analysis from which certain subtle properties, previously untreated, naturally follow. Further, the different properties of the v heads proposed here predict certain interactions between *fare* and its complements, and this affords an account of a previously unnoticed constellation of facts concerning the interaction of *fare* with unaccusative and unergative verbs.

2 Background

Since the publication of Kayne 1975, it has been recognized that Romance causatives with *faire* and its cognates (e.g., Italian *fare*) fall into two classes, *faire par* (FP) and *faire infinitif* (FI). In French causatives, there are two possible Case markers for the embedded causee: the preposition *par* 'by' (FP) or the preposition *à* 'to' (FI) (in Italian, *da* and *a*).[2] Kayne showed that the difference in preposition corresponds to several syntactic and semantic differences between the two types of causative.

First, nonpassivizable idioms like those illustrated in (1)–(3) occur in the FI construction, but cannot be interpreted idiomatically in the FP construction (Kayne 1975:235).

(1) Sa famille a cassé la croûte.
his family has broken the crust
'His family had a snack.'

[1] Another fact that we take to indicate the functional (rather than lexical) status of Italian *fare* is that it blocks the appearance of clitic *si* even with inherently reflexive verbs such as *lavarsi* 'wash'; in this regard, it appears to be interacting with the morphological representation of the argument structure of its complement verb. However, this effect does not carry over to French *faire* or Spanish *hacer*, as noted by Burzio (1986) and Zubizarreta (1985). This difference leads Zubizarreta to conclude that a causative verb in French and Spanish is a main verb, while in Italian a causative verb may only be a morphosyntactically affixal verb. Using data from passivization of causatives, we in fact come to the opposite conclusion; see discussion in section 7.

[2] A reviewer notes that in the FP-type causative, it is also possible to mark the causee with the preposition *de* 'of'. We do not address these cases here.

(2) Il a fait casser la croûte à sa famille.
he has made break the crust to his family
'He had his family have a snack.'

(3) #Il a fait casser la croûte par sa famille.
he has made break the crust by his family

Second, the causee can have an inalienable possession relationship with the embedded object in FI, but not in FP (Kayne 1975:236).[3]

(4) a. Elle fera lever la main à Jean.
she will.make raise the hand to Jean
'She will have Jean raise his hand.'
b. #Elle fera lever la main par Jean.
she will.make raise the hand by Jean

A third difference between FP and FI, observed by Burzio (1986:250), has to do with binding. The *a*-phrase causee in FI can bind into the embedded object, while the *da*-phrase cannot, as illustrated here in Italian with bound variable pronouns.

(5) a. Gianni$_j$ ha fatto temperare la sua$_{i/j}$ matita a ogni ragazzo$_i$.
Gianni has made sharpen the his pencil to every boy
'Gianni$_j$ had every boy$_i$ sharpen his$_{i/j}$ pencil.'
b. Gianni$_i$ ha fatto temperare la sua$_{*i/j}$ matita da ogni ragazzo$_i$.
Gianni has made sharpen the his pencil by every boy
'Gianni$_j$ had his$_{*i/j}$ pencil sharpened by every boy$_i$.'

[3] See Zubizarreta 1985:270–272 for discussion. Interestingly, this property does not hold in Italian.

(i) Il presidente fece alzare la mano da cinque dei suoi quando arrivò il momento decisivo.
the president made raise the hand by five of his when arrived the moment decisive
'The president had five of his men raise their hand at the decisive moment.'

This is in fact expected given that Italian does not exhibit the possessor-raising behavior in 'raise the hand' constructions that French does. In French, an inalienable possession relation between the subject and a non-possessive-marked object of a verb like *lever* 'raise' triggers unaccusative syntactic behavior, as shown by the auxiliary choice in (ii).

(ii) Jean$_i$ s'est / *a levé la main$_i$.
Jean$_i$ REFL is / has raised the hand$_i$
'Jean raised his hand.'

In Italian, this is not the case; transitive *alzare* 'raise' (and similar verbs) never shows unaccusative behavior even when a relation of inalienable possession holds between subject and object; such sentences take the auxiliary *avere* 'have' and do not exhibit reflexive marking.

(iii) Gianni *si = è / ha alzato la mano.
Gianni *REFL = is / has raised the hand
'Gianni raised his hand.'

Assuming that inalienable possession (and unaccusative behavior) in these French constructions is licensed by binding of the inalienably possessed object by the c-commanding subject, inalienable possession in French FPs fails for the same reason that regular binding of the embedded object fails in FPs (Burzio 1986:265; see example (5), as discussed below and in section 4). Because Italian does not syntactically implement inalienable possession via binding in the equivalent constructions, these constructions show no FP/FI distinction when causativized.

In (5a), *a ogni ragazzo* 'to every boy' can bind the pronoun *sua* 'his' in the embedded object, whereas in (5b), *da ogni ragazzo* 'by every boy' cannot.

Fourth, Burzio (1986:228) argues that the *da*-phrase in the FP construction is optional, while the *a*-phrase in the FI construction is not. Guasti (1996) gives an additional argument to this effect from Pearce 1990. Recall that FI allows idiomatic interpretations of nonpassivizable idioms, while FP does not. An example from Italian is (6).

(6) Marco non ha fatto fare un tubo a Maria / *da Maria.
Marco not has made make a tube to Maria / by Maria
'Marco didn't let Maria achieve anything.' (Lit. ' . . . didn't make Maria make a tube.')

Here, with FI the idiomatic reading of *fare un tubo*, '(not) achieve anything', is available, but with FP it is not—only the literal 'make a tube' interpretation is possible. Crucially, when a causative of *fare un tubo* occurs without a causee, as in (7), only the 'make a tube' interpretation is available, showing that when it lacks a causee, the construction is interpreted like FP, not like FI.

(7) Marco non ha fatto fare un tubo.
Marco not has made make a tube
'Marco didn't have a tube made.'
'#Marco didn't let anyone achieve anything.'

Fifth, Kayne (1975:237) observes that transitive verbs that cannot undergo passivization also cannot occur in FP. For instance, the French verb *quitter* 'leave', which is nonpassivizable when it takes a locative object, is fine when embedded in FI but not in FP.[4]

(8) a. Jean quittera la maison.
Jean will.leave the house
b. *La maison sera quittée par Jean.
the house will.be left by Jean
c. Je ferai quitter la maison à Jean / *par Jean.
I will.make leave the house to Jean / by Jean
'I will make Jean leave the house.'

Finally, Kayne (1975:239) notes that there is a semantic difference between FI and FP. In the two French sentences in (9), he observes that FI ''implies a more direct relation between 'Marie' and 'the drinking' '' than FP.

[4] This is true for nonpassivizable verbs in Italian as well. Consider the verb *avere* 'to have': it resists passivization (ii) and is fine embedded in an FI but not in an FP (iii).

(i) Maria ha un libro.
Maria has a book

(ii) *Un libro è avuto da Maria.
a book is had by Maria

(iii) Gianni ha fatto avere un libro a Maria / *da Maria.
Gianni has made have a book to Maria / by Maria
'Gianni made Maria have a book / *a book had by Maria.'

We will present our account of these facts in section 4.2.

(9) Marie fera boire cette eau par son chien / à son chien.
Marie will.make drink this water by her dog / to her dog
'Marie will have this water drunk by her dog / her dog drink this water.'

As in the analyses of Alsina (1992), Guasti (1996), and Ippolito (2000), we aim to include this semantic characterization in our account of the two constructions. Kayne's observed ''direct relation'' between the subject and the embedded event is in fact a sense of obligation, as pointed out by Hyman and Zimmer (1975). In FI, the matrix subject of *fare* obliges the subject of the embedded verb to perform the relevant action, while in FP, the optional *by*-phrase DP simply provides additional information about the caused event.

We can see this effect at work if we choose sentences where encyclopedic knowledge about social norms either facilitates or inhibits the availability of the obligation interpretation, owing to the situational roles of the matrix subject and the causee.

(10) a. Gianni ha fatto riparare la macchina a Mario / da Mario.
Gianni has made repair the car to Mario / by Mario
'Gianni got Mario to repair the car.' / 'Gianni got the car repaired by Mario.'
b. ??Gianni ha fatto riparare la macchina al meccanico di via Fiume.
Gianni has made repair the car to.the mechanic of street Fiume
'Gianni had the mechanic in Fiume St. repair the car.'
c. Gianni ha fatto riparare la macchina dal meccanico di via Fiume.
Gianni has made repair the car by.the mechanic of street Fiume
'Gianni had the car repaired by the mechanic in Fiume St.'

In (10b), the FI with *al meccanico* as the causee seems peculiar because it is the job of mechanics to repair cars; in the typical case, one does not oblige a mechanic to repair one's car. In (10c), on the other hand, the FP with *dal meccanico* is natural because the FP construction does not entail obligation on the part of the causee. Intuitively, in the FI construction, what is being caused by the matrix subject is the entire event of ''the mechanic repairing the car,'' while in the FP construction, what is being caused is simply ''the repair of the car,'' the agent of the repair possibly remaining unspecified. We address this effect in section 4.

The key differences we have noted so far between FP and FI are as follows:

(11) a. The causee of a transitive embedded verb is marked with dative case in FI and by a preposition, *da*, in FP (in Italian).
b. Nonpassivizable idioms are acceptable in FI but not in FP.
c. The FI *a*-phrase can bind the embedded object; the FP *da*-phrase cannot.
d. The causee may be omitted in FP but not in FI.
e. Nonpassivizable verbs are acceptable in FI but not in FP.
f. There is a sense of obligation on the part of the causee in FI but not in FP.

The general thrust of most extant approaches to these contrasts is that in FI causatives, the complete argument structure of the embedded verb is present, including the agent argument. In FP causatives, on the other hand, the embedded verb brings only its internal arguments with it; the *da*-phrase is a PP adjunct.

This approach is intended to account for the differences noted in (11), no matter what specific implementation is proposed. The differences listed in (11a–d) are accounted for as follows:

(12) a. In FI, the dative case that the agent argument receives is assigned by the normal structural-Case-marking mechanisms of the clause, while the *da*-phrase, as an adjunct, is independently introduced and Case-marked by a preposition.
b. If the idiomatic interpretation of the embedded verb depends on the entire argument structure being present, idioms should be possible in FI, but not in FP.
c. If the adjunct *da*-marked causee in FP is a true PP, then it will not be able to c-command out of the PP and bind into the embedded object, while the *a*-phrase causee in FI, which is simply a Case-marked DP, should be able to bind into it.[5]
d. Since the *da*-phrase causee of FP is an adjunct, not an argument, it may be omitted, while the *a*-phrase causee of FI may not.

Property (11e)—the inability to make FP constructions from nonpassivizable verbs—has received less attention in the literature, and its treatment is more theory dependent, but it is clear how it could fit into the general approach: the absence of the external argument from the embedded verb in FP and its representation in an adjunct *by*-phrase are subject to the same constraints as the absence of the external argument and its representation in an adjunct *by*-phrase with a passive verb. In Kayne's original treatment, this follows because the external-argument-removing transformation just *is* passivization; Zubizarreta 1985 and subsequent analyses involving lexical operations take a similar tack.

In our view, the trickiest effect to account for satisfactorily is (11f), the sense of obligation present in FI. This effect is closely related to the most theoretically unattractive aspect of the proposals made by Alsina (1992) and Guasti (1996). In both cases, the obligation effect is intended to follow from assigning two θ-roles to the FI causee: one role is assigned from the causative verb; the other from the embedded verb, the normal agent role. The obligation effect is the reflex of this odd semantic situation. Double θ-role assignment is problematic for theory-internal reasons, however; and both Alsina and Guasti must employ extra or unusual machinery to make it possible. We review their proposals below.

In contrast, in a constructionalist approach to argument structure, in which θ-roles are a reflex of a particular structural relation between an argument and a head (see Hale and Keyser 1993, Borer 1998, Ritter and Rosen 1998, Van Hout 1998, among many others), the double-θ-role approach is simply impossible to implement. In such an approach, the presence or absence of a sense of obligation is a consequence of the different structures embedded by the causative verb in FI and FP: different structures entail different θ-relations. This is the essential thrust of our proposal.

The article is organized as follows. In section 3, we review the lexicalist accounts of Zubizarreta (1985), Alsina (1992), and Guasti (1996); the more recent vP-based treatment of Ippolito

[5] As discussed in footnote 3, the unlicensability of inalienable possession between the causee and the embedded object in French FPs also follows from the structural requirements imposed by binding.

(2000); and the problems we perceive with each. In section 4, we present an analysis of the two constructions, in which FI embeds a vP complete with agent, while FP embeds a vP-less structure. The obligation effect is accounted for by an independently necessary distinction between two kinds of agentive v: a v_{DO} and a v_{CAUSE}. In section 5, we discuss FP in more detail. We show an unexpected interaction between the animacy of the subject of *fare* and the availability of an FP causative, and we relate it to the distinction between v_{DO} and v_{CAUSE} motivated earlier. In section 6, we provide an account of the Case-marking patterns in FI. The Case-marking considerations lead to an investigation of passives of causatives in section 7. We present a new paradigm of data that supports our analysis of the FP construction and the structural treatment of the unaccusative/unergative distinction in general. Finally, in section 8 we offer conclusions and some general remarks on the adequacy of a purely Case-based approach to these facts.

3 Previous Approaches to the FI/FP Distinction and Obligation

3.1 Assembling Causatives in the Lexicon

For Zubizarreta (1985) and Alsina (1992), causative formation is a lexical process. In Zubizarreta's approach, the causative verb is a ''morphosyntactic affix'' (though not a morphophonological one). It is attached to its embedded verb presyntactically, by a lexical operation that forms a complex predicate. This operation has two potential effects on the argument structure of the embedded verb. In FP, as in passivization, the causative morpheme prevents syntactic realization of the (lexically present) external argument of the embedded verb. In FI, in contrast, the causative morpheme triggers internalization of the embedded external argument, changing it to an internal indirect object. The entire complex predicate heads a single V, which projects a monoclausal VP.

For Alsina, unlike Zubizarreta, the causative verb itself has three θ-roles to assign: an external causer argument, an internal patient argument, and an event argument. The patient argument of the causative verb ''fuses'' with one of the two arguments of an embedded transitive verb. If it fuses with the logical subject of the embedded verb, an FI structure is created (with an ''obligation effect''); if it fuses with the logical object, the result is an FP structure. Moreover, fusion with the logical object can only occur when the logical subject of the embedded verb has been lexically suppressed. Causativization is implemented entirely in the lexicon.

3.2 Guasti 1996: Incorporation

Guasti (1996:303) argues against Alsina's approach to FP. Her argument is primarily based on the fact that the interpretation of the embedded object is entirely independent of the matrix causative verb; the semantics of the embedded object are dependent on the embedded verb only. She concludes that the embedded object does not receive a θ-role from the causative verb via fusion or any other mechanism. Rather, she claims, causative formation is syntactic embedding, of the familiar type. In FI, however, the embedded subject does receive a θ-role from the causative verb, by virtue of syntactic incorporation of the embedded verb into the causative verb. In Guasti's analysis, then, there are two verbs *fare*: $fare_1$ for FI (with three θ-roles) and $fare_2$ for FP (with

just two). Otherwise, her account is similar to Alsina's in that it also crucially relies on a lexical operation to suppress the embedded subject in FP and involves double θ-role assignment in FI.[6]

As noted above, Guasti motivates θ-role fusion in FI by positing a syntactic incorporation process. The lower verb incorporates into the causative verb, and then together they each assign a θ-role to the causee under government. (The causative verb later excorporates from the complex V and head-moves to T.) The double θ-role assignment accounts for the obligation effect in essentially the same way as Alsina's proposal, yet allows causative formation to be syntactic, involving complementation. In Guasti's account, the θ-role assigned to the causee in FI by the causative verb is not patient, but benefactive/malefactive.

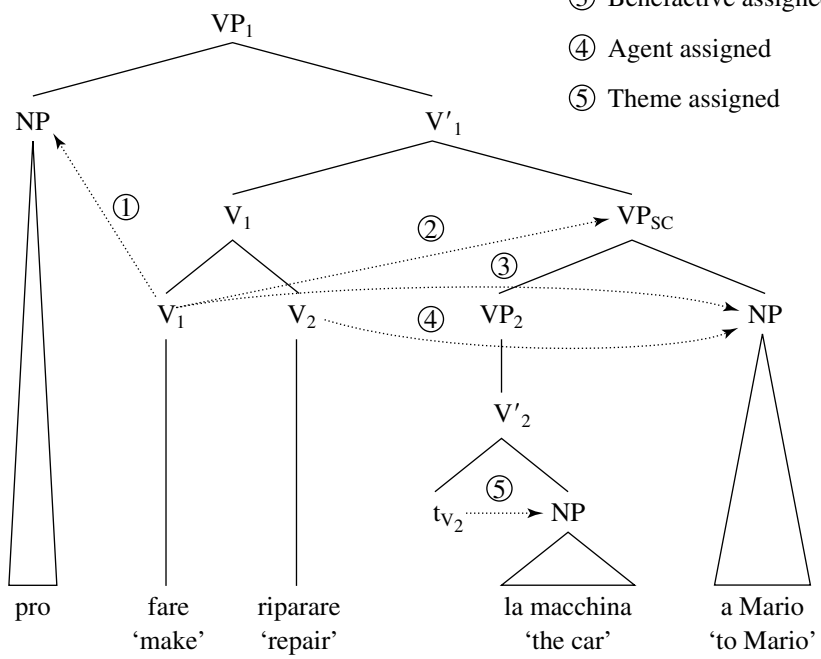
In contrast to Alsina's, Guasti's analysis of the FP causative involves no θ-role fusion, and the causative verb *fare* in FP assigns only two θ-roles: agent, to its subject, and event, to the VP that it embeds. The embedded object receives its θ-role exclusively from the embedded verb. The subject θ-role of the embedded verb is lexically suppressed, as it is in passives. The *da*-phrase is optionally adjoined to the embedded VP.

The analyses of FI and FP causatives proposed by Guasti (1985) are illustrated in (13).

(13) a. *Guasti 1996: Derivation of FI*

$fare_1$ ⟨⟨causer, event⟩ benefactive⟩
riparare ⟨agent, theme⟩

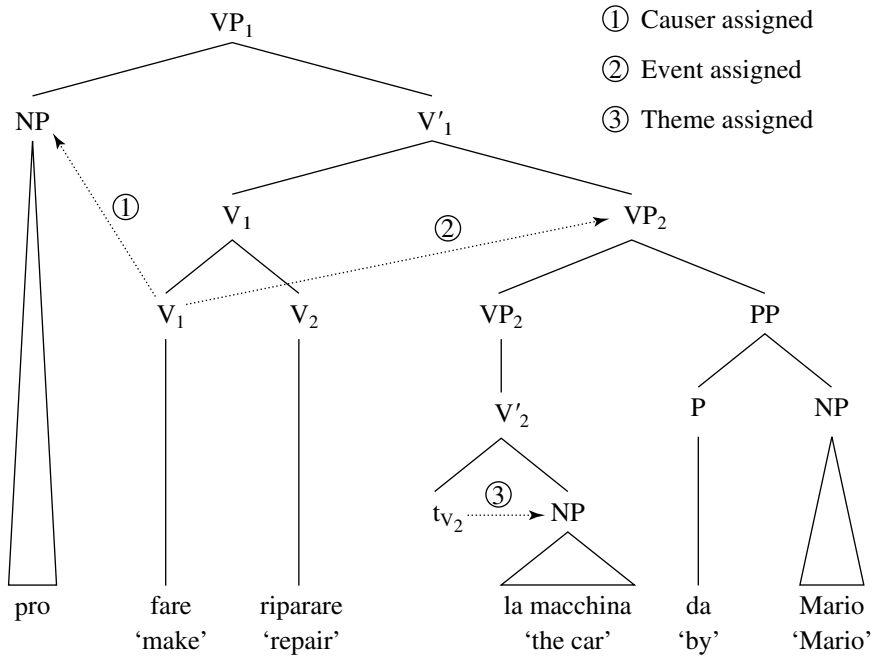
① Causer assigned
② Event assigned
③ Benefactive assigned
④ Agent assigned
⑤ Theme assigned



[6] In later work, however, Guasti (1993) follows Burzio (1986), who was working under the assumption that external arguments were projected as daughters of S, rather than in Spec,VP. For Burzio, then, FP causative formation involves embedding a bare VP; FI involves a small clause consisting of the causee NP plus the bare VP. Burzio's treatment is the closest in spirit to the vP hypothesis adopted in Ippolito 2000, Landau 2002, and this article.

b. *Guasti 1996: Derivation of FP*

$fare_2$ ⟨causer, event⟩
riparare ⟨theme⟩ (derived from *riparare* ⟨agent, theme⟩ by lexical operation)



3.3 Ippolito 2000: FIs Are Benefactives

Ippolito (2000) argues that an incorporation account is difficult to maintain because the causative verb and the embedded verb do not constitute an X of the type normally created by head movement. Adverbial elements can intervene between *fare* and the embedded verb, as in (14).

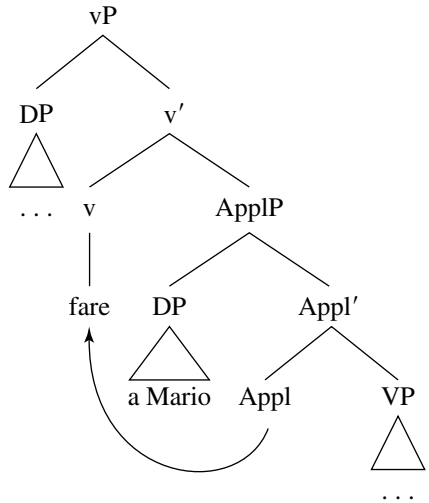
(14) Arturo ha fatto *ancora una volta* riparare la macchina a Mario.
Arturo has made again one time repair the car to Mario
'Arturo had Mario repair the car again.'

On normal assumptions about adverb placement, the presence of an intervening adverb shows that the causative *fare* and the embedded verb *riparare* 'repair' are independent constituents, with at least enough intervening structure for an adverb to adjoin in between.[7]

[7] As noted above, Guasti (1993:50) accounts for this possibility by proposing that *fare* excorporates from the complex V created by incorporation. Excorporation is theoretically problematic, however; and Ippolito's approach accounts for these facts without it. In addition, notice that in (14) the adverbial *ancora una volta* 'again one time' can take scope only over the embedded verb *riparare* 'repair'. On an incorporation account, *riparare* has moved into the matrix V position, and a preceding adverbial should therefore only be able to take scope over the entire caused event. In Ippolito's analysis, as in ours, both scopes are predicted to be possible, because the adverb could adjoin to either the embedded or the matrix vP.

Ippolito's account reworks aspects of Guasti's θ-theoretic account in a vP syntax. Rather than assigning two internal θ-roles, in Ippolito's account the FI causative verb selects for an applicative light verb, which introduces a benefactive/malefactive argument in its specifier and assigns inherent dative case to it. Subsequently, the head of that Applicative Phrase (ApplP) incorporates into the causative verb (see (15)), with consequences for passivization and clitic climbing.

(15)



In FP, *fare* does not select for the Appl head, so there is no dative-marked DP; optionally, a *da*-phrase may be adjoined to VP. The difference in selectional properties of *fare* between FI and FP is the non-θ-theoretic equivalent of Guasti's $fare_1$ and $fare_2$.

In neither FP nor FI is the causee part of the argument structure of the embedded verb; that is, unlike in Guasti's account, the agent role of the embedded verb is not assigned to the causee at any point. Ippolito adopts the vP hypothesis of Hale and Keyser (1993), Kratzer (1993, 1996), and others, according to which agents are not part of the argument structure of the lexical verb, but rather appear in the specifier of a light verb projection. On this approach, eliminating the agent argument does not require a lexical operation; it simply involves selecting for a VP, rather than a vP. In Ippolito's account, *fare*, whether the FI or the FP type, does not embed the vP attached to the lexical verb. Consequently, the embedded verb's agent argument is necessarily absent.

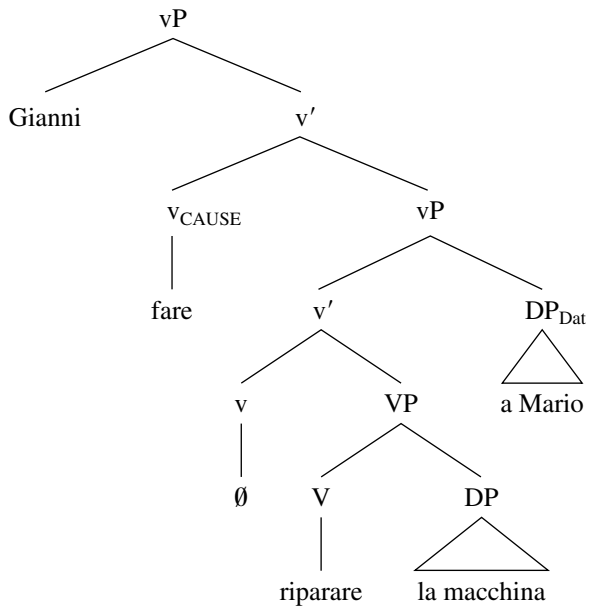
Below, we adopt a version of Ippolito's account of FP, according to which the embedded verb's causee argument is absent because the agent-projecting vP associated with the embedded verb is absent—in essence, a modern version of Burzio's (1986) account. We argue, however, that Ippolito's account of FI cannot be maintained. An approach like Ippolito's in which the causee in FI is lexically assigned dative case cannot account for the Case-marking alternations in causatives of intransitive verbs, where the causee receives accusative case, rather than dative. See section 6 for detailed discussion.

As noted above, with the theoretical innovation of an external-argument-introducing vP, it is possible to create a purely syntactic account of the difference between FP and FI. Unlike Ippolito's account, ours simply retains the complete argument structure for the embedded verb in FI, including the external-argument-introducing vP. The crucial difference between FI and FP is the absence of that external-argument-introducing vP in the latter.

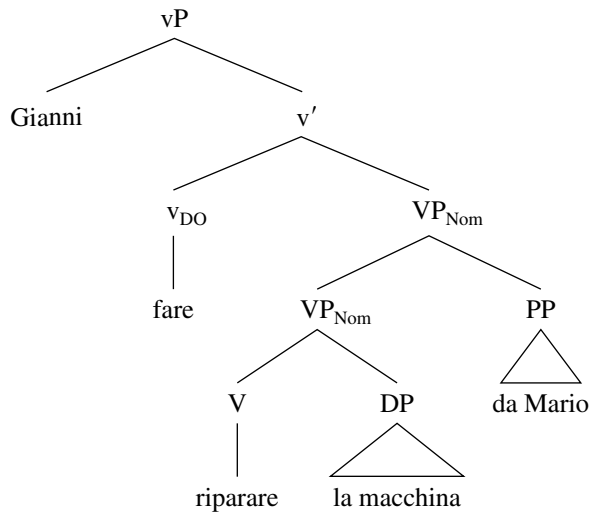
4 Analysis of Differences between the FI and FP Constructions

The crucial substructures that we assume distinguish FI and FP are shown in (16). (In (16b), VP_{Nom} stands for a nominalized VP; see discussion in section 5.)

(16) a. *FI*



b. *FP*



Here, we follow Guasti (1996) (as does Landau (2002)) in assuming that specifiers of vP occur to the right in Italian, which is why the dative causee in (16a) linearly follows the embedded verb and its object.[8] As in Ippolito's analysis, the crucial ''suppression'' of the subject in FP is

[8] Although this is an unusual approach, we feel there is independent justification for it within the vP realm in Italian. In particular, in places where one expects to see small-clause-like structures, the subject of the small clause is on the right in the unmarked case in Italian.

(i) a. John made Mary happy.
b. Gianni ha fatto felice Maria.
Gianni has made happy Maria
'Gianni made Maria happy.'

Of course, movement of the lower VP or its subparts to the left—presumably to a position c-commanding the causee—is also an option for deriving the observed word order; such an approach was first proposed by Burzio (1986) and is also followed by Ippolito (2000) and Kayne (2004). We feel, however, that the rightward-specifier option is fundamentally simpler.

Of course, we assume that Italian specifiers above the vP level are on the left, as usual. It might appear that even vP specifiers are on the left, given that embedded subjects in transitive complements of perception verbs appear before the embedded verb, as in (ii).

(ii) Gianni ha visto Maria dare un libro a Paolo.
Gianni has seen Maria give a book to Paolo
'Gianni saw Maria give a book to Paolo.'

The embedded subject and the embedded object in such examples, however, bear accusative case, and no dative~accusative alternation depending on transitivity of the embedded verb is possible, unlike in causatives (see discussion in section 6). Perception verbs with a verbal complement thus clearly have two Case-marking domains. Citing evidence from adverb placement, negation, and floating quantifiers, Guasti (1993) argues that verbs of perception take a larger complement than causative verbs, an AgrP rather than a bare VP. We conclude with Guasti that these are cases of exceptional Case marking (ECM). The preverbal embedded subject is in the leftward specifier of a higher accusative-case-assigning projection introduced by the matrix perception verb. (Although, as a reviewer notes, sentences like *Ho visto correre Gianni* (lit. '(I) have seen run Gianni'; 'I saw Gianni run') are as acceptable as *Ho visto Gianni correre* and are apparently problematic for a leftward-specifier ECM analysis, the postverbal subjects in such sentences have a distinct interpretation: in these cases, the verbal activity is interpreted as a characteristic property of the postverbal subject, suggesting that a different syntactic structure is in play.) Thanks to Elizabeth Martínez for bringing this point to our attention.

a simple consequence of the failure to embed vP under *fare* in that structure. In (16b), the *da*-phrase is a PP right-adjoined to an embedded VP.[9] No lexical operation is necessary, and the adjunct position and optionality of the *by*-phrase hence follow naturally.

The structural consequences for binding in the FI and FP constructions also follow without the need of further machinery. The dative-marked DP in Spec,vP in FI will c-command the base position of the embedded object; consequently, the asymmetric binding facts in (5) are straightforwardly accounted for. In FP, the DP will not c-command out of the *da*-phrase, which is an adjoined PP, and so will not be able to bind the object.[10]

The acceptability of embedded idioms and the sense of obligation on the part of the causee in FI but not FP remain to be explained. Because the entire vP associated with the embedded verb is present in FIs, it is natural that idiomatic interpretations are available there. In section 5, we discuss the absence of idiomatic interpretations in FP. In section 4.2, we consider the question of obligation. Since we have adopted the vP hypothesis, we cannot appeal to lexical operations such as θ-role fusion to explain the obligation effect. Rather, it must follow from independent differences between FP and FI, as outlined above. In the trees in (16), a distinction is made between the type of v realized by *fare* in each instance: v_{CAUSE} in FI, and v_{DO} in FP. We next examine the nature, motivation, and consequences of this ontology of v.

4.1 Flavors of v and Their Structural Consequences

Hale and Keyser (1993, 2002) gloss their external-argument-selecting v differently in different constructions. An unergative verb like *run*, for instance, is paraphrased as *DO a run*, while a

[9] For a contrasting approach, see Den Dikken and Longenecker 2004, where it is proposed that both the *a*-phrase and the *da*-phrase are embedded realizations of the causee, in a sense reminiscent of Pesetsky's (1995) Cascade structures. Note that it is not clear how such an approach can capture the different binding effects between FI and FP noted by Burzio (1986), since the c-command relationships between causee and embedded object are the same in both.

[10] Two observations are in order here. First, as Ippolito (2000:13) observes, if we assume movement of the object to a higher Case-checking position, the object will, in contrast, c-command the *da*-phrase, producing the observed asymmetric binding relation in the other direction.

(i) Ho fatto rimproverare Arturo dalla propria famiglia.
(I) have made scold Arturo by.the own family
'I had Arturo scolded by his own family.'

Second, FP and FI also differ when combined with reflexive clitic *si*, which can express an embedded argument in an FP sentence but not in an FI one.

(ii) Gianni si = è fatto lavare da Maria / *a Maria.
Gianni REFL = is made wash by Maria / to Maria
'Gianni got himself washed by Maria / *Maria to wash him.'

(iii) Gianni si = è fatto scrivere una storia da Maria / *a Maria.
Gianni REFL = is made write a story by Maria / to Maria
'Gianni got a story written to him by Maria / *got Maria to write a story to him.'

Note that in (iii), *si* represents a goal argument of *scrivere*. We speculate that the failure of *si* to allow an FI may have to do with a ''lethal ambiguity'' effect (McGinnis 2004) that arises between the causee in the embedded Spec,vP and the further embedded goal or theme that *si* represents. On this account, such an effect would not arise in FP because the *da*-phrase does not intervene between the matrix subject and embedded arguments, and the embedded vP is absent. For discussion of similar examples, see Baauw and Delfitto 2005. The facts in this domain are evidently quite complex; a full account of the interaction of reflexive *si* and *fare* will have to await further investigation.

change-of-state verb like *open* is paraphrased as *MAKE* or *CAUSE open*. We argue, with Harley (1999, 2005), that this difference in ''gloss,'' rather than being simply a descriptive convenience, actually reflects structurally distinct primitives of the v inventory.

In Folli and Harley 2005, we argue that the light verb that introduces external arguments comes in different types, or ''flavors.'' We propose that there is an external-argument-introducing v_{DO} that requires its subject to be an agent rather than a causer. This little v is distinct from little v_{CAUSE}, which places no agency restrictions on its external argument. Our proposal is based on the observation that a change in the animacy of the subject is associated with a change in argument structure in examples like these:

(17) a. John ate the apple (up).
b. The sea ate the beach *(away).
c. Gianni ha / si = è mangiato una mela.
Gianni has / REFL = is eaten an apple
'Gianni has eaten / eaten up an apple.'
d. Il mare *ha / si = è mangiato la spiaggia.
the sea has / REFL = is eaten the beach
'The sea *ate / ate up the beach.'

When the subject of a verb of consumption like *eat* is inanimate (e.g., *the sea*) and hence not agentive, a small clause structure is required in English, as in (17a–b): a secondary predicate in the form of a particle is required. Similar facts obtain in Italian, as in (17c–d), where the sentence with an inanimate subject is infelicitous without the reflexive morpheme *si* attached to the verb. (Zubizarreta (1987), Zagona (1996), Sanz (2000), and Folli (2002) argue that *si* marks telicity in Italian and Spanish.) In Folli and Harley 2005, we analyze this paradigm by assuming that different external-argument-introducing little v's also select for different kinds of complements: true agent-selecting v_{DO} takes a nominal complement, while the v_{CAUSE} with a causer external argument requires a small clause complement.[11] Consequently, when a DP that can only be a causer, not an agent, appears as an external argument of vP, it forces an interpretation on the sentence according to which v = v_{CAUSE}, and this in turn requires the complement of v to be a small clause.

The semantic and structural properties of v_{DO} and v_{CAUSE} are summarized in (18).

(18)

Flavor of v	Specifier	Complement
v_{DO}	Agent	Nominal or small clause
v_{CAUSE}	Causer or agent	Small clause

It is important to recognize that the causer interpretation assigned to its specifier by v_{CAUSE} can

[11] The remarkable ability of causative/inchoative change-of-state predicates to take nonintentional external arguments (such as events) has been emphasized in previous work; see Chierchia 2004:55. Our account ties this ability to the type of v involved in such predicates.

of course be assigned to an animate, intentional entity.[12] What is crucial here is that a causer *may* be an inanimate entity.[13] The occupant of Spec,v_{DO}, on the other hand, must be an agent, and an agent can be an inanimate entity only in quite restricted circumstances.

Our notion of agent crucially depends on the ability of an entity bearing the agent role to generate the activity denoted by the verb by virtue of that entity's inherent properties—what Higginbotham (1997) refers to as its *teleological* capabilities. In other words, agents can create events out of whole cloth, requiring nothing external to their own potential.

In the general case, agents are also animate and intentional; after all, many verbal actions are such that animacy and intentionality are two of the inherent properties required to generate them. Consequently, switching inanimate for animate external arguments usually has consequences for agenthood. However, there are some well-known cases where inanimates, or nonintentional animates, may be agents in this technical sense. In particular, the subjects of so-called theme unergatives (Levin and Rappaport Hovav 1995) must be agents, though they are certainly not necessarily animate. The canonical examples are verbs of sound emission such as *whistle*, *hum*, *squeak*, *click*, *ring*—undeniably unergative, yet allowing an inanimate subject. However, the teleological requirement holds: inanimate subjects of these verbs must be inherently capable of generating the noise described by the verb root: *The train whistled* is fine because trains are built with whistles in them. Bresnan (1994) observes that when the subject of such a verb is not teleologically capable of producing the noise, a different syntactic structure is required, as in *The bullet whistled *(into the room)*.

Similar remarks apply to unergative verbs such as *cough*, *shiver*, and *blush*, whose subjects must be animate, but need not be intentional. Animacy in this case is a property that any entity must have in order to be teleologically capable of generating these actions.[14]

As (18) shows, then, v_{DO} does not restrict the category of its complement: nominal complements (as in *John ate the cake*) are possible, as are small clause complements (as in *John ate*

[12] The switch between an intentional and a nonintentional action associated with the appearance of a small clause can be observed in this pair of examples:

(i) John threw the muffin.

(ii) John threw up the muffin.

[13] Causatives of certain verbs of motion do require an animate causer argument (Levin and Rappaport Hovav 1995, Reinhart 2002), as a reviewer notes.

(i) Sue / *The leash jumped the horse over the fence.

(ii) John / *The music waltzed Mary across the floor.

This property is connected to the semantics of the manner-denoting verb root in these manner-of-motion causatives; note that if the manner-denoting root is *roll*, no such requirement holds.

(iii) John / The tide rolled the log up the beach.

See Folli and Harley 2006 for an extended treatment.

[14] Of course, as a reviewer notes, verbs may also require their internal arguments to be animate, if their meaning entails it; object-experiencer verbs, for instance, require intentional objects, and the objects of verbs such as *elect*, *appoint*, *nominate*, *tease*, and *convict* must be animate.

The reviewer also notes that Jackendoff's (1987) test for external arguments using the English verb *do* in the frame *What X did was . . .* is not useful here because it collapses the notions agent and causer, and also some types of arguments we would consider themes, as in *What the rock did was roll down the hill*.

the cake up). By contrast, v_{CAUSE} restricts its complements to small clauses.[15] On the other hand, little v_{DO} restricts its specifier position to agents, while the specifiers of v_{CAUSE} are not so restricted. The conjunction of these restrictions has two consequences.

(19) a. If a v takes an inanimate subject, in the unmarked case it must be v_{CAUSE} and hence take a small clause complement.
b. If a v takes a nominal complement, it will necessarily be v_{DO} and hence require an agent external argument—that is, in the unmarked case an animate one.

Consequence (19a) explains the appearance of *up* and *si* in the verbs of consumption with inanimate subjects we describe in Folli and Harley 2005. We will come to the predictions made by consequence (19b) in the discussion of FP below.

4.2 Flavors of v and the Obligation Effect

Given the validity of the v_{DO}/v_{CAUSE} distinction, we can exploit it in analyzing the obligation effect. We propose that in an FI with an embedded transitive, eventive verb, *fare* takes a vP headed by v_{DO} as its complement. If this is the case, we can account for the obligation effect. If v_{DO} heads the vP in the complement of *fare*, it will take an intentional agent subject. The only way to cause an agent to intentionally do something is to oblige it to.

Support for this position comes from the constellation of facts presented in (20)–(22). First, it is impossible for FI to embed a vP with a causer external argument, rather than an agent—the dative argument, in other words, must be intentional.

(20) a. Maria / Il ramo ha rotto la finestra.
Maria / the branch has broken the window
'Maria / The branch broke the window.'
b. Gianni ha fatto rompere la finestra a Maria / *al ramo.
Gianni has made break the window to Maria / to.the branch
'Gianni made Maria / *the branch break the window.'
c. Il tecnico / Il programma ha disinfettato il computer.
the technician / the program has disinfected the computer
'The technician / The program disinfected the computer.'
d. Gianni ha fatto disinfettare il computer al tecnico / *al programma.
Gianni has made disinfect the computer to.the technician / to.the program
'Gianni made the technician / *the program disinfect the computer.'

Even though either an intentional or a nonintentional external argument is appropriate with the transitive verbs in (20a) and (20c), these verbs may not be embedded under FI with a nonintentional subject, as shown in (20b) and (20d).

[15] As a reviewer notes, causative verbs such as *open* or *break*, which we take to be typical examples of small clauses embedded under v_{CAUSE} (see (47b)) have also been treated as complex predicates, involving no more syntactic structure than any other transitive verb (see, e.g., Neeleman 1994). Since we are adopting a small clause analysis of change-of-state predicates in general, we will not consider this possibility any further here.

Intuitively, in FI the subject of *fare* is causing the whole embedded event: X DO Y. In other words, the subject of *fare* is bringing about an event that is accomplished spontaneously and independently by another entity—the subject of *fare* is creating such an event. The typical scenario for such creation arises when the subject of *fare* obliges the subject of the embedded verb to execute the embedded event. Hence, the implication is that the subject of *fare* is obliging X to participate.

Further support for this position comes from the behavior of causatives of psych verbs like *disturbare* 'disturb' and *assorbire* 'absorb'. These verbs are not acceptable under *fare*, no matter whether the subject is animate or inanimate (similar facts were originally noted in French by Kayne (1975:252); see also Herschensohn 1992, Legendre 1993).

(21) a. La discussione / Gianni ha assorbito Maria.
the discussion / Gianni has absorbed Maria
'The discussion / Gianni absorbed Maria.'

b. *La lezione / *La maestra ha fatto assorbire Maria alla discussione /
the lesson / the teacher has made absorb Maria to.the discussion /
a Gianni.
to Gianni
'The lesson / The teacher has made the discussion / Gianni absorb Maria.'

c. La guerra / Gianni ha disturbato Maria.
the war / Gianni has disturbed Maria
'The war / Gianni disturbed Maria.'

d. *Il programma televisivo / *Marco ha fatto disturbare Maria alla guerra /
the program televised / Marco has made disturb Maria to.the war /
a Gianni.
to Gianni
'The television program / Marco has made the war / Gianni disturb Maria.'

This effect can be explained in the following way under the assumptions presented here. If internally caused verbs like these object-experiencer psych verbs require a v_{CAUSE} to introduce their external arguments—that is, if the external arguments of these verbs are necessarily causers (stimuli) and can never be agents (direct initiators)—then these verbs should be inherently incompatible as embedded verbs in FI.[16] (Landau (2002) proposes an alternative, Case-based account of these facts; we discuss his analysis in section 6 when we discuss Case assignment.)

[16] Notice that this is *not* the target/subject matter effect observed by Pesetsky (1995), whereby lexical causatives of intransitive subject-experiencer verbs may not cooccur with so-called target/subject matter PPs, which are fine with the intransitive form. That effect exists in Italian with the (object-experiencer) lexical causatives of such intransitive verbs, as it does in English, and does not appear with *fare* causatives of the intransitive form of the verb.

(i) Gianni è preoccupato per la guerra in Iraq.
Gianni is worried for the war in Iraq
'Gianni is worried about the war in Iraq.'

(ii) La guerra in Iraq preoccupa Gianni.
the war in Iraq worries Gianni

(iii) *Il programma televisivo ha preoccupato Gianni per la guerra in Iraq.
the program televised has worried Gianni for the war in Iraq

If FI with a transitive complement requires a vP headed by v_{DO}, then we expect causatives of unergatives to be FIs, since on Hale and Keyser's (1993) analysis unergatives must include v_{DO}. As noted above, unergative verbs like *parlare* 'talk' can take a nonintentional agent if that agent is an inherent cause of talking—that is, as long as the agent is teleologically able to talk (see Higginbotham 1997). However, such agents cannot be obliged to talk—and accordingly a causative of an unergative with a nonintentional agent is ungrammatical.[17]

(22) a. Maria / La radio ha parlato dell'aviaria.
Maria / the radio has talked of.the bird.flu
'Maria / The radio talked about bird flu.'
b. Gianni ha fatto parlare Maria / *la radio dell'aviaria.
Gianni has made speak Maria / the radio of.the bird.flu
'Gianni made Maria / *the radio speak about bird flu.'

Notice that in causatives of unergatives, the embedded subject (e.g., *Maria* in (22b)) receives accusative rather than dative case. Clearly, the animacy restriction on FI has nothing to do with the assignment of dative case; rather, it has to do with the semantic properties of the embedded structure. This fact is particularly problematic for an approach like Ippolito's (2000) that links the obligation effect to the presence of an applicative, dative-assigning head.

Is it possible for the FI *fare* to take other types of vP complements than v_{DO}? We have argued that it may not take v_{CAUSE}. Other classes of verbs, however, have other types of v in

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(iv) Il programma televisivo ha fatto preoccupare Gianni per la guerra in Iraq.
the program televised has made worried Gianni for the war in Iraq
'The television program made Gianni worried about the war in Iraq.'

The target/subject matter restriction is present in the lexical causative *preoccupare*, which is fine without the target/subject matter PP in (ii), but poor with it in (iii). When the external cause is introduced by *fare*, however, the embedded intransitive *preoccupare* cooccurs felicitously with its target/subject matter PP (iv).

A reviewer notes that with certain object-experiencer verbs such as *disturbare* 'disturb' and *spaventare* 'frighten', an intentional agent subject is certainly possible, as shown by the possibility of modifying such verbs with agentive adverbs like *deliberatamente* 'deliberately' (see Arad 1999), as in (v).

(v) Marco ha spaventato Maria deliberatamente.
Marco has frightened Maria deliberately
'Marco frightened Maria deliberately.'

Note that as soon as the subject of these flexible verbs becomes agentive in this fashion, these verbs *can* be embedded felicitously under FI *fare*, as shown in (vi).

(vi) Gianni ha fatto spaventare Maria *al film / a Marco.
Gianni has made frighten Maria to.the film / to Marco
'Gianni made Marco / *the film frighten Maria.'

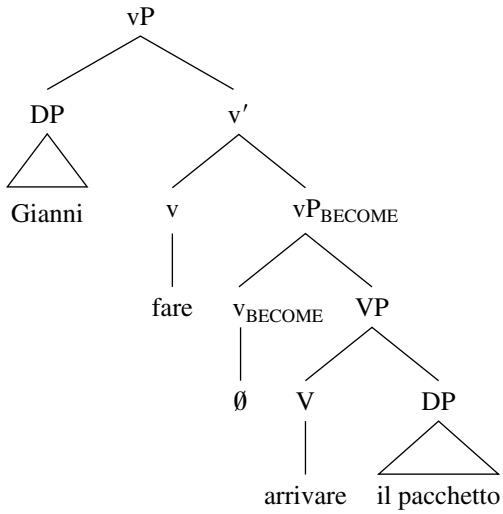
This is felicitous in a scenario where Gianni has told Marco to hide behind the door and jump out at Maria on purpose. On such a reading, Marco is no longer a simple causer, and in fact, we claim that the verb has been reanalyzed as containing v_{DO}. Only certain object-experiencer psych verbs have lexical content that permits such reanalysis; *assorbire* 'absorb' and *preoccupare* 'worry', for instance, reject it.

[17] A reviewer notes that if the subject of *fare* is a potential immediate cause with influence over the entire embedded event, the inanimate subject of an unergative verb can be obliged to perform an unergative event, as in (i).

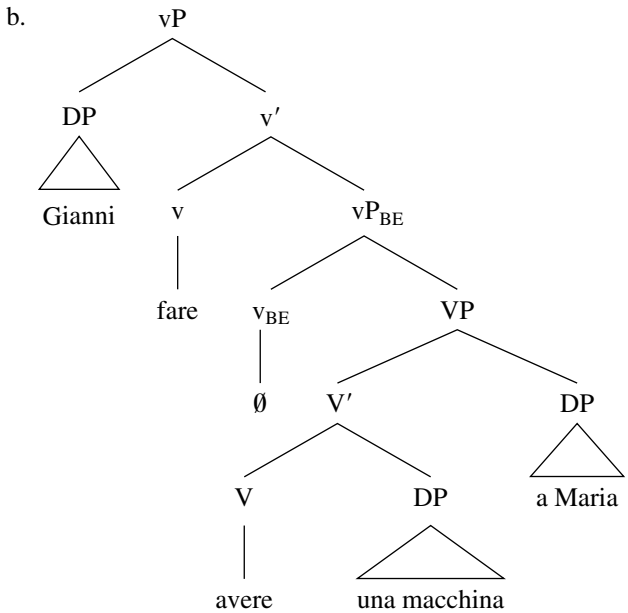
(i) Il tornado fece suonare le campane della chiesa.
the tornado made ring the bells of.the church
'The tornado made the church bells ring.'

their argument structure. Perhaps most obviously, unaccusative verbs contain a v_{BECOME}, which selects for a small clause complement and no external argument (Marantz 1997). Such verbs may be felicitously embedded under FI *fare*, as in the structure *Gianni ha fatto arrivare il pacchetto* 'Gianni made the package arrive', the relevant part of which is illustrated in (23a). Similarly, we assume that stative verbs such as *avere* 'have', *temere* 'fear', and *sentire* 'hear, sense' contain a stative v_{BE} (Harley 1995, 2002), which also does not take an external argument and which again can be embedded under FI *fare*, as shown for *Gianni ha fatto avere una macchina a Maria* 'Gianni made Maria have a car', illustrated in (23b).

(23) a.



b.



The FI *fare* light verb, then, can embed two types of vP: one that introduces eventualities whose initiation is not mediated by an external argument—the v_{BE} or v_{BECOME} type—and one that introduces eventualities whose initiation is mediated by an external argument. In all cases, the subject of *fare* is causing the entire embedded event. When the embedded event has no external argument, the subject of *fare* simply initiates the embedded event itself. When the embedded event has an initiator of its own, the obligation effect comes into being. Only when the embedded causee itself has control over the event that it initiates—when it is an agent, a DOer—can the subject of *fare* be construed as creating the entire embedded event, by virtue of having control over the agent through an obligation relation. When the embedded causee is a causer, it is a stimulus—not in control of the event it initiates. The external argument of *fare* then may not be construed as causing the whole of the embedded event.

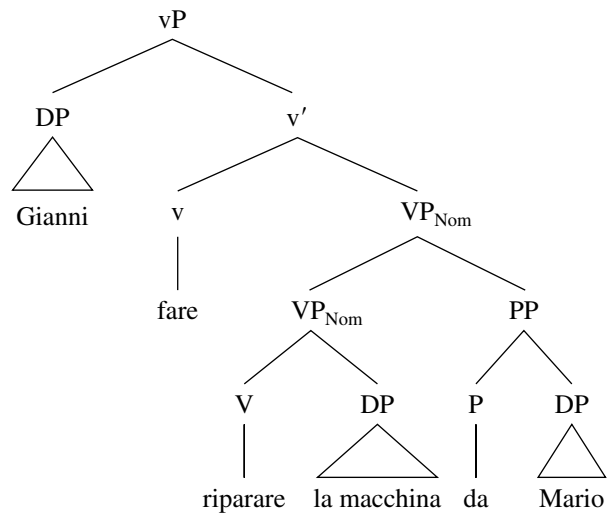
To sum up: What it means to *fare* an event is to create that event. Any intervening initiator of the embedded event must therefore be both under the influence of the subject of *fare* and in control of the progress of the event—that is, must be an agent.

5 The FP Causative

The central observation about FP from the literature (Kayne 1975:236–242) is that there are many parallels between the FP construction and the passive. Indeed, the *da*-phrase is the same as the adjoined *da*-phrase in a passive construction, in that it does not occupy an argument position. As we said above, in an agent-selecting light-verb framework, the nonargumental status of the *da*-phrase is naturally accounted for if we assume that FP does not embed a vP.

As outlined above, we propose the structure in (24) for the FP construction.

(24)



The embedded VP is structurally agentless, although of course for a verb like *riparare* 'repair' that implies an external cause, a *da*-phrase can be adjoined. In this sense, these VPs are like the nominalized verbs discussed by Marantz (1997). Nominalizations permit or forbid an adjoined

agent depending on the encyclopedic content of the nominalized root, whether that agent is realized as a possessor of the DP or in a *by*-phrase, as shown in (25).

(25) a. *John's growth of tomatoes
b. *John's destruction of the city
c. *the growth of tomatoes by John
d. *the destruction of the city by John

In fact, we wish to claim, with Guasti (1990) and Travis (1992), that FP embeds a nominalization, rather than a verbal form.[18] The VP in (24) is a gerundive, verbal noun, which denotes 'the event of Xing'. Italian has deverbal nominals that are morphologically indistinguishable from the infinitive form, as in these examples:

(26) a. [Questo continuo *parlare* dell'aviaria]$_{DP}$ infastidisce Marco.
[this continuous talking of.the bird.flu]$_{DP}$ bothers Marco
b. [Tutto quel *leggere* Dostojevsky]$_{DP}$ ha rovinato Marco.
[all that reading Dostoyevsky]$_{DP}$ has wrecked Marco

The claim that the VP embedded under *fare* in an FP construction is a nominal makes an interesting prediction about the nature of *fare* in FP. The selectional restrictions on v_{DO} and v_{CAUSE} outlined in (19) predict that any v with a nominal complement must be v_{DO}. As noted above, we show in Folli and Harley 2005 that v_{DO} takes an agent external argument, which in the general case enforces an intentionality restriction on its external argument: a causer external argument (i.e., a nonintentional one) is incompatible with v_{DO}. Consequently, if FP *fare* takes a nominal complement, then FP *fare* must necessarily be realizing v_{DO}. In accordance with (19b), then, we expect that FP *fare* must take an animate agentive external argument. In other words, the subject of *fare* in an FP construction can never be a causer. This does seem to be the case. Consider the examples in (27) and similar examples from French in (28), noted but left unexplained by Kayne (1975:242) and Burzio (1986:268).

(27) a. La rabbia fece rompere il tavolo a / *da Gianni.
the rage made break the table to / by Gianni
'Rage made Gianni break the table.'
b. La generosità fece donare la casa a / *da Gianni.
the generosity made give the house to / by Gianni
'Generosity made Gianni donate the house.'

(28) La famine a fait manger des rats aux / *par les habitants de la ville.
the famine has made eat of.the rats to.the / by the inhabitants of the city
'The famine made the inhabitants of the city eat rats.'

[18] As Guasti (1996:308) notes, the claim that the embedded VP is a nominal may explain why the so-called Affectedness Constraint appears in FP, since it is also observed in ''passive nominalizations.'' (See Vecchiato 2004 for relevant discussion of this constraint.) Guasti (1990) decomposes the infinitive into a verb root plus a nominalizing/infinitivalizing suffix *-re*; we also assume that some nominalizing head has attached to the verb root, but we remain agnostic about its realization.

As these examples show, it is clear that an inanimate subject of *fare* is possible in FI, but not in FP. This is a necessary consequence of the view that the complement of FP *fare* is a nominal.

As in Marantz's (1997) treatment of English nominalizations described above, we predict that the possibility of an adjunct *da*-phrase depends upon the internal semantics of the (nominalized) verb root. Accordingly, a nonalternating unaccusative verb embedded in a *fare* construction *cannot* have a *da*-phrase associated with it.[19]

(29) *Gianni ha fatto arrivare il pacchetto da Mario.
Gianni has made arrive the package by Mario

The unacceptability of (29) is not due to a failure of *arrivare* to nominalize (because it certainly may: *L'arrivare cronicamente in ritardo è un bruto difetto* 'To chronically arrive late is a bad defect'); rather, it is due to the impossibility of construing the *by*-phrase as referring to the internal argument of *arrivare*. The analysis also predicts that other verbs that do not allow external causation should not allow *da*-phrases in their FP variants. Stative verbs are unacceptable with *da*-phrases, as shown in (30a), although nominalizations of these verbs are acceptable (without *da*-phrases), as shown in (30c).

(30) a. *Gianni ha fatto avere una macchina da Maria.
Gianni has made have a car by Maria
b. *the having of a car by Maria
c. L'avere una macchina (*da parte di Maria) è utile.
the have a car (by part of Maria) is useful
'Having a car (*on the part of Maria) is useful.'

As observed by Marcantonio (1979) and Guasti (1993), the same is true of transitive stative psych predicates, which also lack an external-argument-selecting v and also do not allow a *by*-phrase in their nominal forms.[20]

(31) a. *Il metereologo ha fatto temere un disastro dai contadini.
the meteorologist has made fear a disaster by.the farmers
b. *the fear(ing) of a disaster by the farmers

[19] This has a semiacceptable irrelevant reading where *da* is interpreted as 'through'.

[20] Contra Guasti (1996:308), it seems clear that such verbs (*temere* 'fear', *sentire* 'hear', etc.) *can* occur in FP, because they can appear in a causative without any causee.

(i) Cassandra ha fatto temere un disastro.
Cassandra has made fear a disaster

Although Guasti (1990) acknowledges the grammaticality of these examples, she takes them to show that an embedded dative pro is realizing the causee and that they are therefore FI constructions. If this is true, however, then we cannot distinguish between FIs with pro causees and FPs without their optional *by*-phrases, and additional tests are needed to settle the question.

Finally, a similar contrast is found with verbs of perception, whose lexical syntax (like that of the stative verbs above) also does not involve v_{DO}. These, of course, contrast nicely with verbs of agentive perception, which can involve a v_{DO} and do allow a *da*-phrase.[21]

(32) Gianni ha fatto ascoltare / *sentire il concerto da Maria.
Gianni has made listen / hear the concert by Maria
'Gianni made Maria listen to / *hear the concert.'

(33) Gianni ha fatto guadare / *vedere l'eruzione da Maria.
Gianni has made watch / see the eruption by Maria
'Gianni made Maria watch / *see the eruption.'

These verbs, in fact, allow us to eliminate the other, commonly proposed analysis of FP, namely, that it embeds a passive (see also Guasti 1990). Verbs of perception and subject-experiencer psych verbs may be passivized with a *da*-phrase, as in (34), but as shown above, they may never appear with a *da*-phrase in a causative. Therefore, FP involves, not an embedded passive, but an embedded nominal.

(34) a. Il concerto è stato sentito da Maria.
the concert is been heard by Maria
'The concert was heard by Maria.'
b. Un disastro è stato temuto dai contadini.
a disaster is been feared by.the farmers
'A disaster was feared by the farmers.'

[21] This contrast is also discussed by Den Dikken and Longenecker (2004), along with the following interesting examples, also discussed by Marcantonio (1979) and Guasti (1993).

(i) Il padrino / Quell'affare ha fatto guadagnare molto denaro a / *da Ugo.
the godfather / that deal has made earn much money to / by Ugo
'The godfather / That deal got Ugo to earn a lot of money.'

(ii) Maria ha fatto vincere il premio a / *da Franco.
Maria has made win the prize to / by Franco
'Maria got Franco to win the prize.'

Den Dikken and Longenecker (2004) treat these examples like (32) and (33). However, notice that while the contrast with *vedere* 'see' discussed above is present no matter the tense of the causative verb (see (iii)), sentences like those in (i) and (ii) become grammatical when the causative is in the future tense (see (iv) and (v)).

(iii) Gianni farà vedere l'eruzione a / *da Maria.
Gianni will.make see the eruption to / by Maria
'Gianni will get Maria to see the eruption.'

(iv) Il padrino farà guadagnare il denaro necessario ai / dai gangster.
the godfather will.make earn the money necessary to.the / by.the gangster
'The godfather will make the gangster earn the necessary money.'

(v) Maria farà vincere il premio a / da Franco.
Maria will.make win the prize to / by Franco
'Maria will make Franco win the prize.'

Consequently, it is clear that the unacceptability of the *da*-phrase in (i) and (ii) has a different source, related to the properties of the embedded verbs. We do not have an explanation for this contrast.

If the embedded verb in FP is not passivized, however, the contrast between passivizable and nonpassivizable idioms discovered by Kayne (see (1)) might seem mysterious. We argue that nonpassivizable idioms cannot occur in FP because the complete argument structure of the embedded verb is not present: the vP with which the embedded verb usually occurs is absent in the embedded nominalized form. Nonpassivizable idioms require the presence of their own v—likely the assignment of accusative case by vP is part of the idiom—while passivizable ones do not require the presence of their own v, as shown by the fact that they are acceptable even with the passive v. Consequently, in nominalizations, where the root's usual v is absent, the passivizable idioms will still be interpretable, but the nonpassivizable ones will not be. This contrast shows up in English nominalizations as well, as expected. The idioms in (35) are not passivizable and lose their idiomatic reading in nominalizations; those in (36) are passivizable and remain idiomatic in nominalizations.

(35) *Nominalizations of nonpassivizable idioms*
   a. #Mary regretted the kicking of the bucket (by John).
   b. #Bill enjoyed his seeing of the light.
   c. #Sue regretted the biting of the big one by Bill.

(36) *Nominalizations of passivizable idioms*
   a. Mary regretted the stacking of the deck (by Bill).
   b. John relished the crossing of t's and dotting of i's.
   c. John regretted the passing of the buck (by Sue).

While (36a–c) are not perfect, they are much better than (35a–c), in the judgment of several native English speakers we consulted.[22]

6 Case Assignment

The central problem of Case marking in Italian causatives is the dative/accusative alternation on the embedded subject, depending on the transitivity of the embedded verb. When the embedded verb is transitive, the argumental embedded subject of FI is marked with dative case, as illustrated

[22] As should be obvious from the above, the constraints on adding a *by*-phrase to a nominalization are more restrictive than those on adding one in passivization. In passives, the passive morphology itself implies the presence of a suppressed external argument, which is available for semantic control in sentences like *The ship was sunk to collect the insurance* (Manzini 1983). In nominalizations, on the other hand, any implication of agency has to come from the verb root itself. This may explain why even certain passivizable idioms such as *prendere la medicina* 'ingest the medicine' (lit. 'bring the medicine') and *tirare i remi in barca* 'exercise care' (lit. 'pull the oars into the boat') may not occur in FP causatives with an overt *da*-phrase, but are acceptable without any expressed embedded causee (contra Pearce (1990) and Guasti (1996)). For example, *La maestra ha fatto prendere la medicina* 'The teacher made the medicine be brought' can have both the literal and the idiomatic 'ingest' interpretations, according to the judgment of several native Italian speakers we consulted. We conclude that these are nominalized FP structures that cannot be modified by a *da*-phrase for encyclopedic-knowledge reasons.

above. When the embedded verb is intransitive, the postverbal argumental embedded subject is marked with accusative case, as shown in (37).[23]

(37) Gianni ha fatto correre *Maria*.
Gianni has made run Maria
'Gianni made Maria run.'

To account for the Case-marking patterns of Italian FI, we adopt a version of the account of Case checking proposed by Harley (1995) and discussed by Miyagawa (2001) for Japanese causatives, which show some properties similar to those of Italian causatives. In Japanese, as well, when an intransitive verb is embedded under a causative, the single embedded argument receives accusative case, and when a transitive verb is causativized, the embedded subject receives dative case and the embedded object is marked accusative.

(38) a. *Intransitive embedded clause*
Calvin-ga *Hobbes-o* ik-ase-ta.
Calvin-NOM Hobbes-ACC go-CAUS-PAST
'Calvin made Hobbes go.'
b. *Transitive embedded clause*
Calvin-ga *Hobbes-ni* piza-o tabe-sase-ta.
Calvin-NOM Hobbes-DAT pizza-ACC eat-CAUS-PAST
'Calvin made Hobbes eat pizza.'

Descriptively, as argued by Zubizarreta (1985) and Burzio (1986), the Case-marking domain of the causative sentence is a single clause, where two structurally Case-marked arguments receive nominative and accusative, and three receive nominative, dative, and accusative. According to the proposal in Harley 1995, following Marantz's (1991) ''dependent Case'' proposal, the morphological realization of structural Case assigned by any given structural-Case-assigning head depends on the assignment of Case by other structural-Case-assigning positions in the same domain.[24] For instance, in a dative subject construction in Icelandic, the object receives nominative case even though its syntactic behavior is entirely typical for an object, because nominative case is not assigned elsewhere in the clause (see also Schütze 1997). Similarly, Harley (1995) claims that in Japanese causatives, the embedded subject always checks Case against the same structural-Case-assigning position no matter whether it receives dative or accusative. The morphological spell-out of the Case on the embedded subject depends on what other structural Cases are assigned

[23] It is important to note that the accusative embedded subject here is postverbal. This eliminates the possibility of a PP-postposing analysis of the rightward embedded subject. A preverbal embedded subject is impossible.

(i) *Gianni ha fatto Maria correre.
Gianni has made Maria run

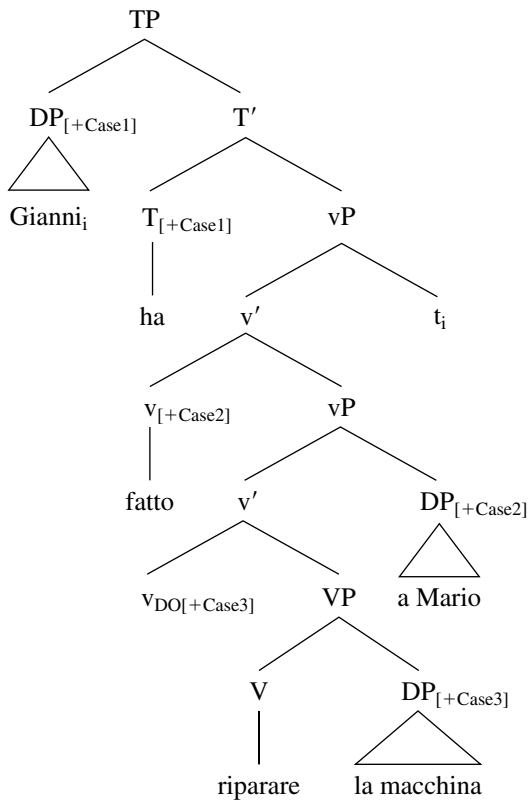
An incorporation account like Guasti's (1996) could in principle explain this ordering without appealing to rightward specifiers, but since the incorporation account (a) cannot account for the scopes available to intervening adverbs, as discussed in footnote 7, and (b) does not account for the postobject order of the dative embedded subject as in (10a), we do not consider it here.

[24] For other proposals along the same lines, see Bobaljik 1995, 2005 and Alexiadou 1999.

in the clause. Consequently, causatives of intransitives have accusative-marked embedded subjects, while causatives of transitives have dative-marked embedded subjects, because the accusative form is used by the embedded object.

For present purposes, it is not crucial whether the Case-checking features project their own functional projection (AgrP) or not (though see footnote 10). We illustrate the system under the assumption that AgrPs are not present (Chomsky 1995).[25] We assume, standardly, that there is a structural Case feature associated with finite TP and also with vP. Consequently, *fare*, as a v, has its own [+Case] feature. The embedded vP in an FI construction also has its own [+Case] feature, as does the matrix TP. The embedded subject and embedded object check their features via Agree (Chomsky 2000), with the closest available [+Case] feature. The morphological realization of these features is determined relativistically at Spell-Out, as in Bobaljik 1995 and Harley 1995. The structure and Case assignment for two instances of FI are illustrated in (39) and (40).[26]

(39)

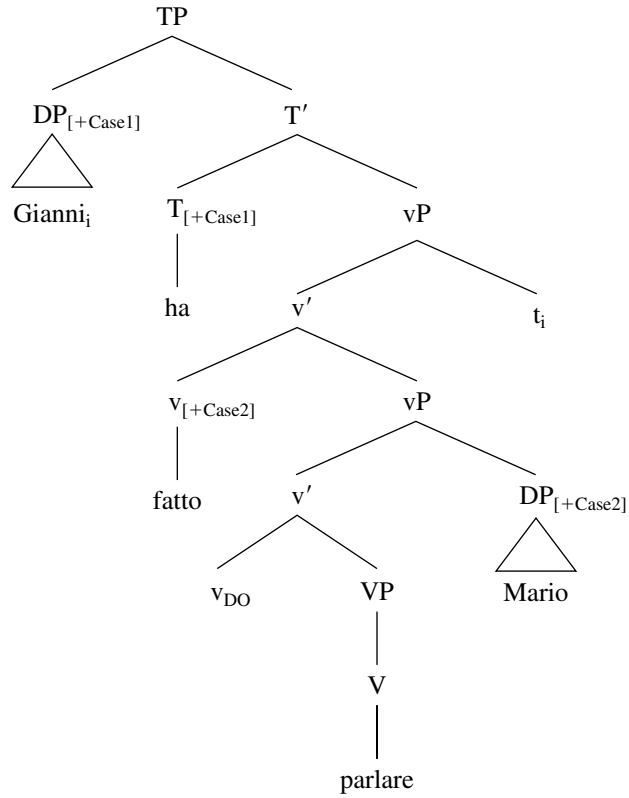


Case1 = nominative
Case2 = dative
Case3 = accusative

[25] For discussion of Case checking implemented via AgrPs, see Collins and Thráinsson 1993, Koizumi 1993, Chomsky 1995:chap. 3, and Lasnik 1999, among others.

[26] Of course, when FI *fare* embeds an unaccusative or stative vP, no agent argument will be present; and if Burzio's Generalization were correct, the embedded v_{BE} or v_{BECOME} would have no structural Case feature to be checked. Since the

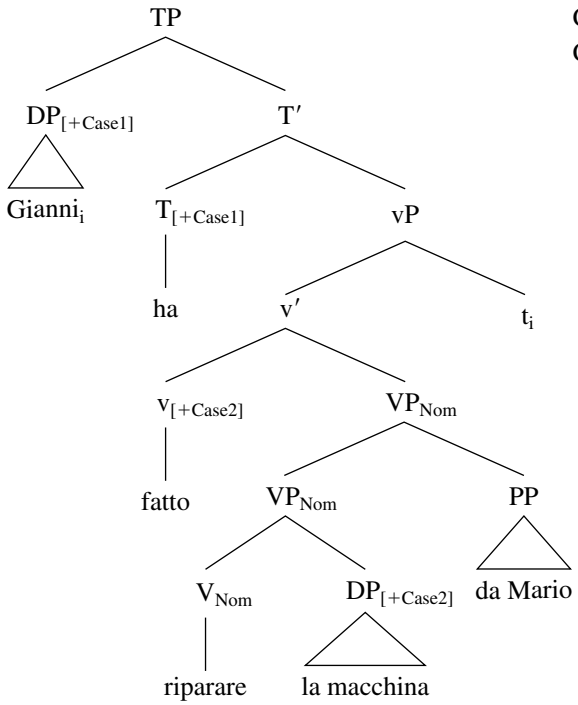
(40)



In FP clauses, on the other hand, only two structural Cases are assigned, because only the matrix vP and the matrix TP are present; no embedded vP occurs. This is illustrated in (41).

dependent Case account was first proposed (Marantz 1991), however, Burzio's Generalization has come to be understood as an epiphenomenon arising from the fact that when only one Case feature is checked in a clause, it is spelled out as nominative, as discussed in the text. Many examples show that in fact the Case- and θ-role-assigning properties of the clause are distinct; to take a trivial example, *get* is perspicuously treated as unaccusative *give* (see, e.g., Pesetsky 1995, Richards 2001), yet structural accusative case is clearly available to its object, presumably from v_{BECOME}. Consequently, we assume that all v heads have a structural Case feature available. For a more thorough discussion, see the recent overview of this literature in Woolford 2003.

(41)



Note especially that in FP the accusative case on the embedded object is checked by the structural Case features of *fare*, while this is not true in FI, where Case on the embedded object is checked by the embedded v. This has significant implications for our analysis of passives of causatives, presented in section 7.

The causatives of unergative intransitives, in particular, are crucial for our analysis. We showed above that in those cases the embedded subject receives accusative case. This poses a problem for Ippolito's (2000) analysis, in which causees occur in the specifier of an ApplP selected by *fare*; in the transitive cases, this Appl head assigns lexical dative case to its specifier. Why should it fail to do so when the complement is intransitive? Ippolito's analysis cannot explain the absence of dative case in causatives of intransitives, whether unergative or unaccusative. We argue, on the other hand, that the embedded subject of the lower predicate is in its usual position. The variation in Case marking between transitives and intransitives is simply expected, as explained above.

In a discussion of psych predicates, Landau (2002) proposes that in Romance FI the Case assignment of all the DPs in the clause is taken over by the causative verb, even the accusative on the embedded object. His explanation for the unacceptability of causatives of object-experiencer psych predicates in examples like those in (21) is that such predicates assign inherent accusative case to their experiencer objects, and that inherent case clashes with the structural accusative assigned by the causative predicate.

Landau's account of these facts encounters at least two problems. First, the embedded vP in FIs of normal transitive verbs loses its structural accusative case feature when causativized;

it's not clear why this is possible, or alternatively why leaving it unchecked doesn't result in a crashed derivation. Second, Landau's account is insufficiently general: it does not extend to the ungrammaticality of nonintentional embedded subjects. On our account, the ungrammaticality of examples like (21d) has a different source. As discussed above, transitive object-experiencer verbs like *disturbare* and *assorbire* require a v_{CAUSE} vP, hence are incompatible with FI. Our account unifies the ungrammaticality of (21d) with that of examples like (20b,d). Landau could not, in principle, appeal to a Case-based account of (20b,d), and would have to look elsewhere to explain them in a unified way.

One reason that Landau ascribes assignment of the embedded accusative case to the matrix causative verb is that when the matrix causative is passivized, the embedded object becomes the derived subject. On the face of it, therefore, it appears that passivization is working as usual, suppressing the external argument of *fare* and absorbing its internal accusative case. This is not possible on our analysis, in which the embedded accusative of FI is assigned by the embedded vP. We argue that passives of causative verbs have been misanalyzed: in fact, there are no passives of FI causatives. We turn to this in the next section.

7 Passives of Causatives

The primary obstacle to a straightforward structural-Case account of the Italian causative is the fact that the dative-marked embedded subject of FI cannot passivize. In the equivalent construction in Japanese, which shows an identical dative/accusative alternation, passivization of the embedded subject is acceptable (Kuroda 1965), as predicted by the structural-Case account. When *-rare*, the passive morpheme, is attached outside *-sase*, the causative morpheme, the embedded dative subject becomes the derived nominative subject, as shown in (42).

(42) Tanako-ga piza-o tabe-sase-rare-ta.
Tanako-NOM pizza-ACC eat-CAUS-PASS-PAST
'Tanako was made to eat pizza.'

In Italian, this is not the case. The apparent pattern of passivization for Italian causatives is the following:[27]

(43) a. *Embedded accusative objects of transitive verbs passivize*
Il libro fu fatto leggere a Mario (da Gianni).
the book was made read to Mario (by Gianni)
'Mario was made to read the book (by Gianni).'
b. *Embedded accusative subjects of intransitive verbs passivize*
Il pacchetto fu fatto arrivare (da Gianni).
the package was made arrive (by Gianni)
'The package was made to arrive (by Gianni).'

[27] *Mario* in (43a) is intended to denote the reader, not the beneficiary of a reading.

c. *Embedded dative subjects of transitives do not passive*
*Maria fu fatta mandare un pacchetto (da Gianni).
Maria was made send a package (by Gianni)

Crucially, (43c) is ungrammatical. The usual assumption in treating this Italian paradigm has been that the passive operation can only absorb accusative case and hence will leave any dative-marked argument unaffected.

These facts are prima facie problematic for an account according to which the dative-marked embedded subject receives structural Case, particularly the same structural Case as an accusative-marked embedded subject. First, if the dative embedded subject receives structural Case in the same way and from the same position as an accusative embedded subject, then we expect the dative embedded subject to be able to become the nominative subject of the passive, as in fact happens in Japanese. In Italian, this prediction is not borne out. Second, (43a) shows that the accusative embedded object in a clause with a dative embedded subject can be the subject of the passive, apparently stranding or skipping the dative embedded subject. In the Case system proposed here, the embedded object of an FI construction receives its accusative case from the embedded v, not the matrix *fare*. Hence, the embedded object of an FI construction should not be able to become the derived nominative subject of a passivized *fare*. This prediction appears not to be borne out either. How does the account solve these two problems?

7.1 FI Does Not Passivize

The solution begins to appear when we consider some previously unobserved restrictions on the kinds of intransitive verbs that can appear in the passive of a causative. Causatives of unaccusatives like *arrivare* can passivize, as shown in (43b) and (45), while causatives of true unergatives cannot, as shown in (44).

(44) a. *Marco è stato fatto telefonare (da Gianni).
Marco is been made telephone (by Gianni)
b. *Marco è stato fatto ridere (da Gianni).
Marco is been made laugh (by Gianni)
c. ??Marco è stato fatto piangere (da Gianni).
Marco is been made cry (by Gianni)

(45) a. Marco è stato fatto partire.
Marco is been made leave
'Marco was made to leave.'
b. Marco è stato fatto cadere (da Gianni).
Marco is been made fall (by Gianni)
'Marco was made to fall (by Gianni).'
c. Il pacchetto è stato fatto arrivare (da Gianni).
the package is been made arrive (by Gianni)
'The package was made to arrive (by Gianni).'

When we look at the passivized causative of a verb like *saltare* 'jump', which can mean either unergative 'jump' or unaccusative 'explode', only the unaccusative version is acceptable.

(46) a. Il Ponte Vecchio fu fatto saltare.
the Ponte Vecchio was made explode
'The Ponte Vecchio was exploded.'
b. ??Marco fu fatto saltare.
Marco was made jump

A Google search for *è stato fatto ridere* 'was made to laugh' and *è stato fatto piangere* 'was made to cry' turned up no hits, while unaccusatives such as *è stato fatto partire* 'was made to leave' turned up between 150 and 500 each. Further, *è stato fatto saltare* 'was made to jump/explode' had many hits on the 'explode' meaning but none on the 'jump' meaning.[28]

This difference, as far as we know previously unnoticed in the literature, constitutes additional evidence for the unergative/unaccusative distinction.[29] Given the system of assumptions proposed here, including the Hale and Keyser–style treatment of unergative and unaccusative verbs, this pattern of passivizability shows that FIs cannot passivize.

In Hale and Keyser's system, unergative intransitives are dominated by a vP headed by v_{DO}. Hence, when an unergative verb appears under *fare*, that *fare* construction must be an FI, since the unergative vP must be included to introduce the causee. In contrast, the single argument of an unaccusative verb is the sister of the main verb. Causatives of unaccusatives, therefore, may be FPs (without any embedded vP under *fare*), while causatives of unergatives may not. When an unaccusative verb appears in an FP causative, the nominalized unaccusative introduces the internal argument as usual, and *fare* checks its accusative case.

The paradigm of facts exhibited above, then, is telling us that causatives of FIs cannot passivize. If they could, we would expect causatives of unergative verbs to passivize just as well as causatives of unaccusatives.

[28] At a reviewer's suggestion, we searched for other unergative verbs such as *tossire* 'cough' and *tremare* 'tremble' in passivized causatives, turning up no hits for either. The passivized causative of *lavorare* 'work', on the other hand, turned up a few hits—seven—which is consistent with the intuitions of the native speakers we consulted. We have no explanation for the slight improvement with this verb, but we note that the number of hits is still two orders of magnitude smaller than the numbers for typical unaccusatives.

[29] As pointed out by a reviewer, Zubizarreta (1985:262, 265) notes a different interesting contrast involving causatives of intransitive verbs in French: only unergative verbs can appear as bare infinitives in the complement of *faire*; unaccusatives are impossible in this environment.

(i) Ce médicament fait dormir.
this medicine makes sleep
'This medicine makes one sleep.'

(ii) *Ça fait arriver en retard.
this makes arrive in lateness
'This makes one arrive late.'

This contrast carries over to Italian. On the present analysis, sentences like (i) must be FIs, because unergatives include a v_{DO} in their argument structure. We speculate that they involve an (accusative) arbitrary pro causee argument, like the pro objects discussed by Rizzi (1986), and that the distinction between (i) and (ii) has to do with the licensing conditions on such objects, which are known to be fairly restrictive.

The inability of FI *fare* to passivize makes sense when we consider what exactly the operation of passive consists of in a vP framework. Passive formation in a language like Italian involves replacing an agentive vP with a nonagentive one—changing out the Voice head, in Kratzer's (1996) terms. The verbal participle *fatto* that occurs in the passive must not be a v, but a V—a *main* verb, in other words. When the verb *fare* is passivized and consequently shows up as a participle, it is main verb *fare*, not the light verb.

We have proposed that the *fare* of FI is a light verb—the realization of an external-argument-selecting v. If one were to try to passivize a *light* verb, there would be no residual participle. That is, FI cannot passivize since it would involve switching v heads from *fare* to something else, and no participial V residue would remain.

Is there any reason to think that FP *fare* is different? So far, we have treated it as a light verb as well. However, since we have proposed that it takes a nominalization as its complement, FP *fare* has a lot in common with the *fare* that occurs in simple SVO constructions—that is, with main verb *fare*, as in *Gianni ha fatto una torta* 'Gianni made a cake'. This *fare* is, of course, passivizable: *Una torta fu fatta da Gianni* 'A cake was made by Gianni'.

In essence, because the v *fare* of FP takes a nominal complement, it syntactically resembles main verb *fare*.[30] The *fare* of FI, on the other hand, taking a predicative vP complement, is a true light verb—a functional element. How can we encode this distinction within our framework? What does it mean to say that an item has ''lexical content''?

7.2 Lexical versus Functional Items

An increasing body of literature proposes an ''exoskeletal'' approach to at least some argument structure alternations (Borer 2005). On such an approach, the lexical content of a verb is provided independently of its argument-structural content. The syntactic frame and its functional heads determine the event structure and the number of arguments that are syntactically present. The verb root is inserted into the structure to provide it with conceptual semantic content; the overall ''verb class,'' however, is determined by the syntactic infrastructure.

As should be clear from the above discussion, we endorse a syntactic infrastructure that may include at least a vP and its complement, which may be of various syntactic categories. With Hale and Keyser (1993, 2002), Harley (1999, 2005), Mateu (2002), McIntyre (2004), Zubizarreta

[30] Additional support for the notion that causatives of unergatives must be FI (and verbal) while causatives of unaccusatives can be FP (and nominal) comes from a contrast in the acceptability of anaphoric reference to the embedded infinitival (possible in the latter case but not the former).

(i) *Gianni ha fatto cantare Maria, ma non lo ha visto.
Gianni has made sing Maria but not it has seen
'Gianni made Maria sing, but didn't see it.'

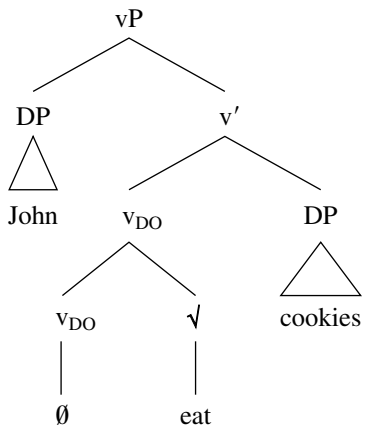
(ii) ?Gianni ha fatto cadere il libro, ma non lo ha visto.
Gianni has made fall the book but not it has seen
'Gianni made the book fall, but didn't see it.'

If a pronominal may pick up a nominal element as its antecedent, the contrast between (i) and (ii) suggests that no nominal is introduced by the infinitival unergative in (i) but that one may be introduced by the infinitival unaccusative in (ii). See Delfitto 2005 for discussion of similar examples with perception verbs, on which these examples were modeled.

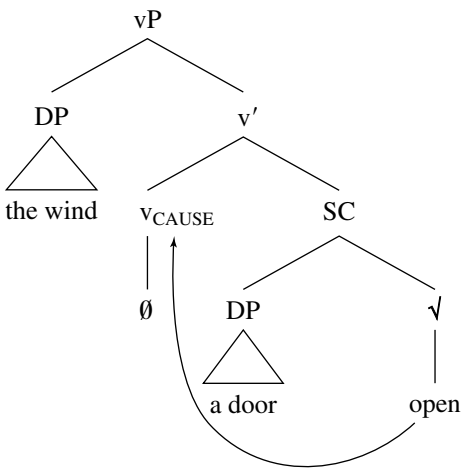
and Oh (2004), Marantz (2005), and Tomioka (2005), we adopt a syntactic implementation of the ''manner incorporation'' operation as one way of providing the exoskeleton with lexical content. A root may be merged directly with certain functional heads, including v, in which case it is interpreted as an adverbial modifier of the v—a ''manner'' element, in lexical-conceptual structure terms. One classic paradigm for which this analysis seems admirably suited is the manner-of-motion alternations first noted by Talmy (1985).

In Folli and Harley 2005, we adopt this type of approach to the consumption-verb paradigm described in section 4.1. There, the lexical content of a verb of consumption such as *eat*, in its canonical use, is inserted into the structure as the manner modifier of a v_{DO}, which explains the animacy-related restriction on the external arguments of such verbs. This contrasts with the source of the lexical content of a verb that names a change of state, such as *open*, which enters the structure as the predicate of the result-state small clause of v (see, e.g., Hoekstra and Mulder 1990). These two structures are illustrated in (47).

(47) a.

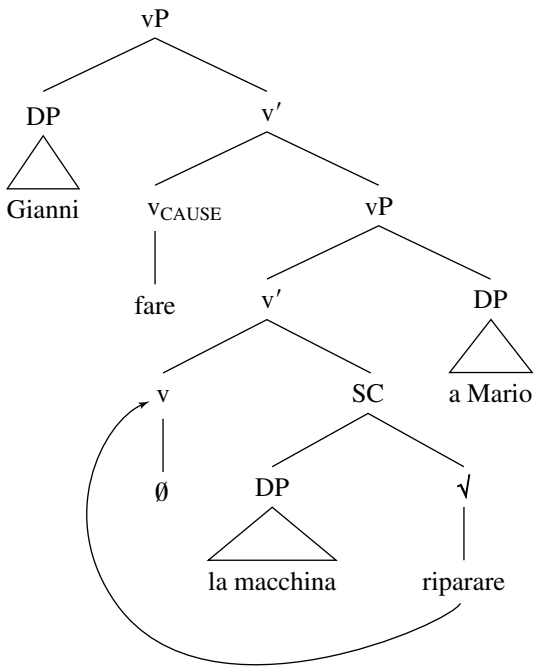


b.



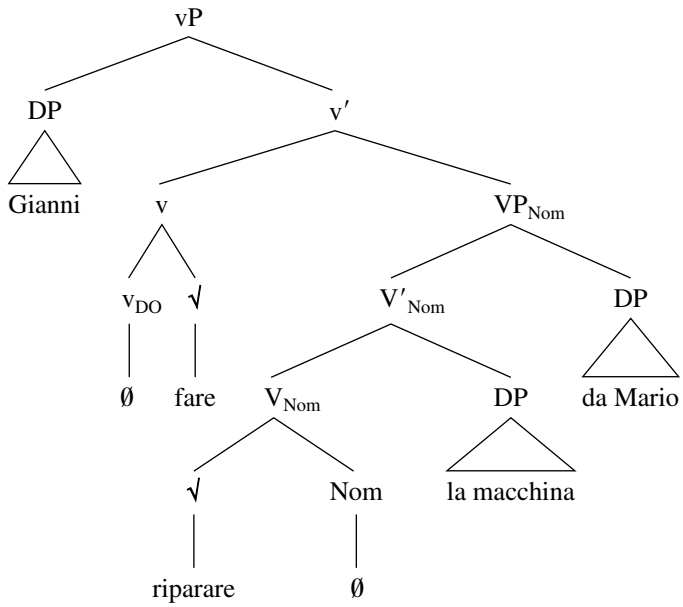
In our analysis of causative constructions with *fare*, we have so far placed *fare* under the v node without making explicit whether it is a lexical element, modifying a v as √*eat* is doing in (47a), or a functional element, itself spelling out the content of v, as the null morpheme Ø is doing in both trees in (47), and as we assume *-sase* does in Japanese (see Harley 1995). In fact, we wish to claim that this constitutes the FP/FI distinction: in FP and in regular creation-verb uses, *fare* is a lexical element, a root inserted to modify a null v_{DO} head. In FI, on the other hand, *fare* is a functional element, itself spelling out the v_{CAUSE} content.[31] The final structures we adopt for FI, FP, and creation-verb *fare*, then, are (49a–c).

(48) a. *FI* fare

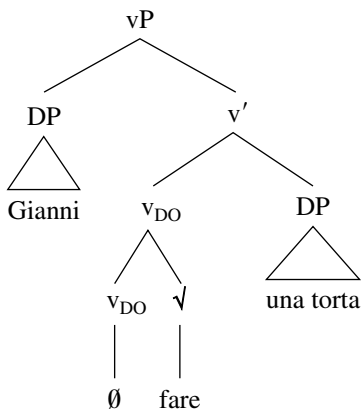


[31] See Wurmbrand 2004 for discussion of a similar distinction between lexical and functional restructuring verbs.

b. *FP* fare



c. *Creation* fare



When a causative is passivized, as noted earlier, the participle *fatto* guarantees that we are dealing with main verb *fare*. What this means, in this framework, is that the participle is formed by merging a participial morpheme with a root element (or possibly a slightly larger constituent that itself contains a root element; see, e.g., Embick 2004). Because FI *fare* is not a root element but a functional vocabulary item that is deterministically inserted to realize the v head itself, it cannot be the input to passivization. There is no passive of an FI *fare*.[32]

[32] In Japanese, of course, this is not the case; rather than replacing the light verb *-sase* and selecting for a participle of the main verb, the passive v *-rare* simply attaches outside it, stacking vPs. The structurally Case-marked dative causee

7.3 Dative Arguments in Passive Causatives

If the above line of reasoning is correct, then the passives of causatives of transitive verbs with *a*-phrases, illustrated in (43a), cannot be what they seem—they cannot be passives of FI causatives, because such passives are impossible. Example (43a) is repeated here.

(49) Il libro fu fatto leggere a Mario (da Gianni).
the book was made read to Mario (by Gianni)
'Mario was made to read the book (by Gianni).'

Here, we seem to have a passive of an FI, with a dative-marked embedded subject that the embedded object has ''skipped'' over into the derived subject position. Our hypothesis is that, when the *a*-phrase is present in a passive of a causative, a benefactive has been formed on (the passive of) an FP. Notice that (50a–c) show that a benefactive of an FP is fine.[33]

(50) a. Gianni gli ha fatto riparare la macchina da Maria / *a Maria.
Gianni to.him has made repair the car by Maria / to Maria
'Gianni had the car repaired by Maria for him.'
b. Gianni ha fatto riparare la macchina a Mario ?da Maria / *a Maria.
Gianni has made repair the car to Mario by Maria / to Maria
'Gianni had the car repaired by Maria for Mario.'

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remains in the structure and participates in the structural Case marking of the clause, becoming the nominative-marked subject. Passives of causatives of unergatives are perfectly fine in Japanese.

In French, it has been assumed that *no* passives of causatives are acceptable (e.g., Burzio 1986), not even passives of causatives of unaccusatives.

(i) *Jean a été fait arriver par Marie.
Jean has been made arrive by Marie

One possible avenue of investigation would be an approach in which French *faire* always realizes a functional head—that is, cannot be a main verb and hence has no participle form. In such an analysis, passivization of causative *faire* in French would be predicted to be impossible. Bouvier (2001), on the other hand, claims that passives of causatives with singular masculine embedded objects are fine in French (e.g., *Un pantalon a été fait faire par Jean* 'A pair of pants was caused to be made by Jean'), and the problem with other such passives has to do with the defective agreement properties of the participle of *faire*, *fait*. Such passives, then, are clearly quite restricted (it seems that the only available examples involve creation *faire* as the embedded verb). We leave this problem for future research.

[33] Interestingly, when there is a dative clitic, the subject of a passive like that in (50c) may not occur preverbally.

(i) *La macchina le è stata fatta riparare (dal meccanico).
the car to.her is been made repaired (by.the mechanic)

We do not have an account for this, but it may be related to the A-movement locality effects observed in Icelandic raising verbs with dative experiencers discussed by McGinnis (1998), and in Greek with dative clitics in double object constructions (Anagnostopoulou 2003).

(50b) is grammatical, but marked. For certain speakers, it improves if the beneficiary *a Mario* is in clause-final position, as in (ii).

(ii) ?Gianni ha fatto riparare la macchina dal meccanico, a Mario.
Gianni has made repair the car by.the mechanic to Mario
'Gianni had the car repaired by the mechanic for Mario.'

What is crucial for the argument to go through is that the benefactive argument *can* be present, and this is supported by the perfect grammaticality of the example with the clitic in (50a), suggesting that the markedness of the examples with the full DP is due to processing load.

c. Le è stata fatta riparare la macchina da Maria.
to.her is been made repair the car by Maria
'For her, the car was made to be repaired by Maria.'

Because the *da*-phrase in an FP passive is optional, it can be omitted from examples like (49), which leaves a sentence that appears to be a passive of an FI, but in fact is not.[34]

In support of this hypothesis, notice that in the passives of FPs with transitives we can again use arguments from semantic fit to test the beneficiary role played by *a*-phrases. We said that in active causatives, the dative embedded subject is made to perform the caused action. In the passive, however, the apparently stranded dative receives a more benefactive/malefactive reading. We can test this difference again by contrasting pragmatically loaded scenarios.

(51) a. La torta fu fatta assaggiare a Gianni.
the cake was made taste to Gianni
'Gianni was made to taste the cake.'
b. La ferita fu fatta disinfettare alla infermiera.
the wound was made disinfect to.the nurse
'The nurse was made to disinfect the wound.'

In (51a), with a clear benefactive, the passive with an *a*-phrase is perfectly acceptable because Gianni is a suitable beneficiary of tasting. In (51b), the *a*-phrase can be easily interpreted if a malefactive reading is assigned to it, since one can imagine a nurse being inconvenienced in such a scenario—say, by being ordered to disinfect a wound. A benefactive interpretation is difficult to get because it is contextually difficult to imagine a situation where a nurse benefits from disinfecting someone else's wound. As a reviewer notes, however, readings of these passives on which the *a*-phrase is a straightforward causee are not impossible. We assume, with many others, that the relationship between an applied argument and the event to which it is related can be any contextually appropriate one. The phenomenon is similar to the many possible relationships between *Mary* and *(the) reading of ''Ode to a Nightingale''* in the possessed DP *Mary's reading of ''Ode to a Nightingale.''*

Additional support for the notion that passives of causatives (with or without *a*-phrases) are FPs, rather than FIs, comes from the following examples, which illustrate a restriction on the content of an optional *da*-phrase expressing the matrix agent of *fare*. Such a *da*-phrase may not contain a causer argument, the same way that in the active form, an FP causative may not have a matrix causer external argument of *fare* (see (27)).

[34] We can confirm that passives of FIs are impossible by attempting to passivize an FI with an embedded, nonpassivizable idiom. Under the assumptions made here, nonpassivizable idioms are impossible in FP, but not FI, because their own v is absent in the nominalized form that occurs in FP. If a passive of the *fare* in an FI were possible, then these idioms should continue to be interpretable in that structure, since the whole vP associated with the idiom would remain unaffected. Such idioms may not occur in passives of *fare* causatives, though, even when the causee is present in an *a*-phrase.

(i) Sono state fatte togliere le castagne dal fuoco a Marco.
were been made take.out the chestnuts from.the fire to Marco
'Chestnuts were pulled from the fire for Marco.'
'*Marco was made to solve the problems.'

(52) È stato fatto rompere il tavolo (a Marco) da Maria / *dalla rabbia.
is been made break the table (to Marco) by Maria / by.the rage
'A table was made to break (on Marco) by Maria / *by rage.'

The ill-formedness of including *dalla rabbia* 'by rage' as the cause of the event is not due to any ban on causer arguments appearing in *da*-phrases. Sentences such as *Gianni fu portato al suicidio dalla rabbia* 'Gianni was driven to suicide by rage' are perfectly good passives, corresponding to actives like *La rabbia ha portato Gianni al suicidio* 'Rage drove Gianni to suicide'. *La rabbia* cannot be the matrix subject of an FP causative, for reasons discussed in section 5, and is equally impossible as an adjunct *by*-phrase in a passive of a causative.

We conclude that passives of causatives are all FP passives and that the *a*-phrase in passive causatives, when present, is an introduced applicative argument, not an external argument. (See Pylkkänen 2002 for a treatment of the introduction of applicative arguments.)

One last problem needs to be addressed. Why can't a benefactive argument be the subject of a passive? We follow Ippolito (2000) and Pylkkänen (2002) in assuming that a benefactive argument receives lexical dative case from the Appl head that introduces it and hence cannot receive nominative case when the FP is passivized.[35]

Of course, since the *da*-phrase in FP is optional, the availability of benefactives in FP means that most *DP fare V DP a DP* strings have two analyses: as FI and as FP with a benefactive but without a *da*-phrase. We believe this is the basis of some previous misanalyses of FI constructions as benefactives.

8 Conclusion

Previous analyses of Italian causatives have tended to approach them from one of two directions: a lexicalist approach, where the various types of causative are formed via manipulations of θ-grids, and a Case-based approach, where the causative verb takes over the Case domain of the embedded predicate. Above, we have argued against specific aspects of extant lexicalist approaches. Here, we pause briefly to consider purely Case-based approaches like that of Landau (2002).

The discussion in previous sections has shown how important the details of Case assignment are in any adequate account, and all the authors discussed above consider the problem to some extent. Nevertheless, attempting to analyze the full range of causative constructions using Case theory as the primary mechanism does not account for the contrasts we have presented.

In particular, we have shown that there are several cases where the structural semantics of the embedded clause plays a significant role in determining the grammaticality of the causative construction. In particular, the difference in passivizability of unergative and unaccusative embedded verbs is completely unexpected on a purely Case-based approach; the embedded subject of

[35] With Pylkkänen (2002), we assume that the ''high'' dative arguments of ditransitive verbs in Italian are also introduced by this Appl head and hence do not passivize.

(i) *Gianni è stato dato un libro da Mario.
Gianni is been given a book by Mario

any intransitive verb receives accusative case. Clearly, the interaction of semantics and structure is implicated by this constellation of facts.

Similarly, we have proposed that the inability of embedded transitive verbs to take inanimate subjects has the same source as the ungrammaticality of embedded object-experiencer psych verbs. This pattern could not be captured by a purely Case-based approach.

In this article, we have implemented a structural treatment of θ-roles via a refinement of the little-v hypothesis. This refinement, in conjunction with a particular treatment of Case assignment, explains a number of restrictions on matrix and embedded subjects in causatives and predicts the appearance of an unergative/unaccusative distinction in passive causatives. The adoption of the little-v hypothesis enables us to eliminate lexical operations on θ-grids or lexical semantic structure; rather, all the observed differences follow from the interaction of the meanings attached to particular syntactic structures (contributed by the primitives in these structures) and the encyclopedic semantics and lexical specifications on the roots themselves. In this last regard, our approach differs from more radical constructionalist approaches like that of Borer (2005), in which lexical restrictions play no role. Rather, we adopt a position closer to that of Marantz (1997) or Ramchand (2001). The observed patterns of interaction between meaning and structure, then, are captured without recourse to an independent rule component in the lexicon, and at the same time allow us to avoid the problem of massive overgeneration.

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