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Psych-Movement as P Incorporation: Evidence from Italian

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1. Introduction

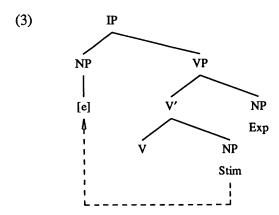
This paper is concerned with the analysis of the class of Italian psych-verbs shown in (2a). These verbs occur in sentences like (1a), with the Stimulus argument appearing as (surface) subject and the Experiencer argument as direct object. They differ thus from verbs like those in (2b), which occur in sentences showing an opposite alignment of thematic roles with syntactic positions, as shown by (1b).

- (1) a. Cose simili non preoccupano Gianni. things such NEG worry-3PL Gianni Such things don't worry Gianni.
 - b. Gianni non apprezza cose simili.

 Gianni NEG appreciate-3SG things such
 Gianni doesn't appreciate such things.

(2)	a.	STIMULUS SUBJECT		b.	EXPERIENCER SUBJECT	
		preoccupare commuovere entusiasmare meravigliare attirare colpire	worry move excite surprise attract impress		apprezzare temere ammirare amare odiare desiderare	appreciate fear admire love hate desire

In an important paper, Belletti and Rizzi (1988) (henceforth B&R) show that the two classes of verbs in (2) systematically contrast with respect to various syntactic phenomena. For example, unlike the verbs in (2b), those in (2a) (i) cannot occur with a pro_{arb} subject, (ii) do not allow their subject to bind a reflexive clitic, (iii) do not undergo syntactic passivization, and (iv) fail to causitivize in the way that canonical transitive verbs do. B&R argue that these contrasts can best be accounted for by analyzing the Stimulus (what they call Theme) in sentences such as (1a) as a derived subject. Resurrecting, in essence, one aspect of the transformation originally known as "Flip" or "Psych-Movement" (e.g., Rosenbaum 1967, Lakoff 1970, Postal 1971), they propose the following analysis:



The basic idea is that the Experiencer, generated as a sister of V', is lexically specified to receive an inherent accusative Case. There being no other VP-internal Case available, the Stimulus, generated as a sister of V, must move to the empty subject position where it receives nominative Case. The S-structure subject thus binds a trace in object position.

Now, this analysis makes the following prediction. With respect to any phenomena that are sensitive to this sort of binding configuration, the *preoccupare* construction should behave like other constructions in which the subject binds an object trace. Three such constructions are illustrated in (4).

(4) a. [IP Gianni_i fu [VP visto t_i]

Gianni was seen
b. [IP Gianni_i è [VP arrivato t_i]

Gianni is arrived 'Gianni arrived.'
c. [IP Questo_i [VP piace t_i a Gianni]

this likes to Gianni 'Gianni likes this.'

(4a) and (4b) exemplify passive and unaccusative structures respectively.² (4c) is an

¹ This transformation was supposed to permute subject and complement. It is the idea that the Stimulus moves to subject position that is resurrected.

² For extensive justification for an unaccusative analysis of Italian verbs like *arrivare*, cf. Perlmutter (1989a), Burzio (1986), and Rosen (1984), among others.

example of the *piacere*-type psych-verb construction, for which there is ample evidence that the surface subject is an underlying direct object (Perlmutter 1989a) and which on B&R's analysis differs from the *preoccupare* construction only in that the Experiencer receives dative rather than accusative Case.

What I show in this paper is that there are in fact phenomena in Italian that are sensitive to this sort of binding configuration and the *preoccupare*-type psych-verbs fail to behave as predicted. Drawing on the idea that the Stimulus in the *preoccupare* construction is an underlying PP subject, I explore an alternative analysis that accounts both for its derived subject properties and the evidence that it does not bind a trace.

2. Evidence Against NP Movement

The first problem for the movement analysis has to do with Perfect Auxiliary Selection (PAS). As is well known (e.g., Burzio 1981, 1986; Perlmutter 1980, 1989a; Rosen 1984) the two perfect auxiliaries in Italian, *essere* and *avere*, are in complementary distribution. In general, *avere* is chosen in clauses in which the subject position is assigned a θ -role, i.e. in unergative and transitive structures:

(5)	TRANS	a.	Mario ha/*è difeso Giorgio.
	avere		Mario defended Giorgio.
	UNERG	b.	Giorgio ha/*è tossito.
	avere		Giorgio coughed.
	UNERG	c.	Eva ha/*è telefonato a Giorgio ieri.
	avere		Eva phoned (to) Giorgio yesterday.

In unaccusative structures, and other structures with derived subjects, including passives and the *piacere*-type psych-verb construction, *essere* is chosen, as shown in (6).

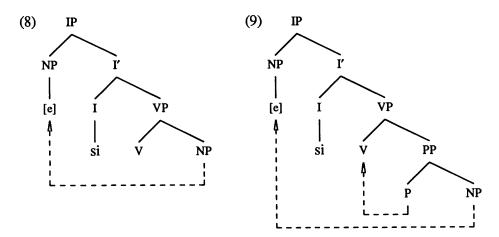
(6)	UNACC	a.	Le arancie sono/*hanno cadute dall'albero.
	essere		The oranges fell from the tree.
	PASSIVE	b.	Giorgio è/*ha stato difeso da Mario.
	essere		Giorgio was defended by Mario.
	PIACERE	c.	Questo film non è/*ha piaciuto a Giovanni.
	essere		Giovanni didn't like this movie.

Similarly, in reflexive clauses, the auxiliary is *essere*:

(7)	REFLX D.O.	a.	Giorgio si è/*ha difeso.
	essere		Giorgio defended himself.
	REFLX I.O.	b.	Le donne si sono/*hanno telefonate spesso.
	essere		The women phoned each other often.

I assume here that reflexive clauses are analyzed as shown in (8-9).³

³ Although this assumption plays a role in the analysis presented below, nothing crucial depends on it. With minor modifications, the arguments against (3) and for an alternative such as that proposed here would go through assuming an analysis of reflexives like Burzio's (1981, 1986). The analysis shown in (8-9) is motivated in the following ways: (i) by assimilating the structure of reflexive clauses to that of



In particular, building on an idea discussed by Cinque (1988: p. 575) and attributed to Richard Kayne, I assume that the reflexive/reciprocal clitic is an argument in Infl to which the verb's external θ-role is assigned. A VP-internal Case (accusative or dative) is withheld, forcing the object to move to subject position, as in unaccusative and passive clauses. In the case of a reflexive clause with an indirect object, movement is made possible by P incorporation, i.e. "Dative Movement" in the sense of Baker (1988). Technically, incorporation of the preposition allows the V (and the moved NP) to govern into the PP, such that NP movement to subject position is sanctioned in the same way as with passive for example.⁴

There are of course other cases in which *essere* is chosen. But these can be analyzed as instantiations of the same basic configuration. In essence, as shown by Burzio (1981, 1986), the generalization concerning PAS is that *essere* is chosen in clauses in which the subject is in a binding relation of a certain kind with another element. The rule can be stated as in (10).⁵

clauses with derived subjects, it makes it possible to eliminate the disjunction in Burzio's formulation of the condition on *essere* selection; (ii) unlike Burzio's analysis, it provides an account of the fact that past participles agree with reflexive clitics corresponding to indirect objects (cf. (15e)); (iii) it explains why the dative/accusative contrast that holds for pronominal clitics is neutralized with reflexive clitics; and (iv) it makes possible a unified treatment of all *si*'s as clitics generated in Infl (cf. Cinque 1988). It should be noted that this analysis is not compatible with Rizzi's (1986) Chain Formation Condition. However, it also renders this condition superfluous, at least with respect to the Italian data discussed by Rizzi.

⁴ This analysis of indirect object reflexive clauses is essentially a translation of an analysis proposed and justified on various grounds in a relational grammar framework by La Fauci (1986). There is no reason to expect that because P incorporation is possible, Italian should have a double object construction such as that of English (e.g., John gave Bill a book). We need only assume that the full Case array associated with a predicate must ordinarily be realized (entailing inter alia that certain Ps be phonologically realized) and that, unlike in English, reflexivization is the only process in Italian that involves withholding the Case of an indirect internal argument.

⁵ An A-position is a position to which a θ-role may be assigned, i.e., a position potentially occupied by an argument at D-structure (Chomsky 1981: p. 47). Given Burzio's (1986) analysis of clauses containing expletive-argument CHAINS in Italian and Cinque's (1988) analysis of impersonal si constructions, (10) accounts for auxiliary selection in these clause types, which, for the sake of brevity, I do not present examples of here.

(10) Perfect Auxiliary Selection:

Essere is selected in clause b if there is a CHAIN in b containing the subject of b and some other link in an A-position, otherwise avere is chosen.

The question is what happens with psych-verbs in the *preoccupare* class. As shown by (11), *avere* is chosen rather than *essere*, suggesting that the subject does not bind a trace.

(11) PSYCH Questo ha/*è preoccupato/turbato/entusiasmato il presidente.

avere This worried/troubled/excited the president.

Noting the potential problem that their analysis creates for a PAS rules such as (10), B&R propose (12) as an alternative.

(12) A verb takes *avere* if it has the capacity to assign accusative Case (structural or inherent), and *essere* otherwise. (Belletti & Rizzi 1988)

But (12) fails to account for sentences like those in (13), i.e. reflexive clauses with an accusative object in which *essere* is chosen.

- (13) a. Giorgio si è/*ha comprato questi libri. Giorgio bought himself these books.
 - b. Giorgio se li è comprati.

 Giorgio bought them for himself.

That the verb in such cases has the capacity to assign an accusative Case is shown quite clearly by (13b), in which an accusative clitic appears. In short, (10), unlike (12), captures the generalization concerning auxiliary selection. If (10) is correct, the analysis of the *preoccupare* construction shown in (3) cannot be correct.

A second problem for B&R's analysis has to do with Past Participle Agreement (PPA). Past participles in Italian do not agree with subjects of transitive and unergative clauses, as shown by (14a-b).⁶

(14) TRANS
no agrmnt

Eva has bevuto/*a/?e

Eva has drunk-MSG/FSG/FPL two beers-FPL

Eva drank two beers.

UNERG
no agrmnt

Eva has coughed-MSG/FSG

Eva coughed.

I.O. CLITIC c. Giovanni le ha telefonato/*a.

no agrmnt Giovanni 3-FSG-DAT has telephoned-MSG/FSG

Modulo the marginal possibility of agreement with an overt direct object NP (a

Giovanni called her.

⁶ MSG = masculine singular; FPL = feminine plural; etc.

phenomenon which, being irrelevant for my present concerns, I will not consider here), a default masculine singular form of the participle appears in such cases. (14c) shows that agreement with an indirect object is not possible, even if it is realized as a pronominal clitic. Agreement must occur in constructions with a derived subject, including unaccusatives, passives, the *piacere* construction, and reflexive clauses (15a-e). Furthermore, direct object clitics determine agreement (15f).

(15)	UNACC agrmnt	a.	Eva è tomata/*o a casa. Eva is returned-FSG/MSG to home Eva returned home.
	PASSIVE agrmnt	b.	Eva fu difesa/*o da Giorgio. Eva was defended-FSG/MSG by Giorgio Eva was defended by Giorgio.
	PIACERE agrmnt	c.	Quei libri sono piaciuti/*o a Giorgio. those books-MPL are liked-MPL/MSG to Giorgio Giorgio liked those books.
	REFLX D.O. agrmnt	d.	Maria si è difesa/*o. Maria REFL is defended-FSG/MSG Maria defended herself.
	REFLX I.O. agrmnt	e.	Le donne si sono telefonate/*o spesso. the women REFL are telephoned-FPL/MSG often The women phoned each other often.
	D.O. CLITIC agrmnt	f.	Eva le ha bevute/*o. Ada 3-FPL-ACC has drunk-FPL/MSG Eva drank them.

As noted by Burzio (1981, 1986), the generalization is that a past participle agrees with an element holding a binding relation with its direct object. A version of the rule that is consistent with my current assumptions is given in (16).

(16) Past Participle Agreement:

A past participle p agrees in number and gender with the head of a multi-linked CHAIN containing an NP in an A-position governed by p.

Now, the analysis in (3) predicts that the subject of the *preoccupare* construction should determine PPA. However, as shown by (17), this prediction is not borne out.

(17) PSYCH Questa idea ha entusiasmato/*a le donne.

no agrmnt this idea-FSG has excited-MSG/FSG the women

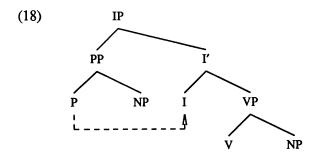
This idea excited the women.

Summarizing, there are two major morphosyntactic phenomena in Italian that are sensitive to binding configurations of a certain kind. In particular, in the configuration in which a subject binds an object trace *essere* is the perfect auxiliary selected and the participle agrees with the subject. The fact that PPA fails and *avere* is chosen with verbs in the *preoccupare* class argues that their subject does not bind an

object trace.⁷

3. A Solution

The most straightforward way of squaring the analysis of the *preoccupare* psych-verbs with the PPA and PAS facts is to assume that the Stimulus is simply a subject—both at S-structure and at D-structure. The problem with this assumption, however, is that it is not clear how the derived subject properties of the construction might be accounted for. The hypothesis that I wish to entertain, therefore, is that the Stimulus is both base-generated in subject position *and* a derived subject. More specifically, I suggest the analysis sketched in (18).



The Stimulus is generated not as an NP but as a PP—an idea that is not altogether implausible, given that this argument appears with an overt P, at least in a productive number of cases, in the related construction shown in (19).

(19) Gianni non si preoccupa di/per cose simili. Gianni doesn't worry about such things.

The key idea is that the P incorporates (in the sense of Baker 1988) into Infl, allowing Infl to govern and Case-mark the NP at S-structure (cf. § 4.2 on the technical viability of such a proposal). Thus, this NP is a clausal subject in Case-theoretic terms, but a prepositional object in θ -theoretic terms. In other words, what we have is a case of Dative Movement on the opposite side of the tree.

In terms of a theory of argument structure (e.g., Marantz 1984, Rappaport and Levin 1988, Zubizarreta 1987), what I am proposing is that the traditional distinction between direct and indirect internal arguments be extended to external arguments. Put differently, I am suggesting that a logically possible argument type that the distinctions [± external] and [± direct] yield is in fact realized, thus filling an otherwise mysterious gap. The argument structures of various predicate types are, then, as in (20).

⁷ Cf. Farrell (1989) for further evidence against B&R's analysis, based on the behavior of psych-verbs in small clause relatives (i.e., clauses headed by a participial adjective).

(20) ARGUMENT STRUCTURE

gettare 'throw': x < y > apprezzare 'appreciate': x < y > dare 'give': x < y, P-z > telefonare 'telephone': x < P-y > preoccupare 'worry': x < y >

Whereas a verb like *telefonare*, for example, takes a direct external argument and an indirect internal argument, *preoccupare* takes a direct internal argument and an indirect external argument, i.e. an external argument for which θ -role assignment is mediated by a preposition.

Let us consider how this distinction makes it possible to account for the derived subject properties of the *preoccupare* construction. As noted by B&R and Cinque (1988), among others, a third person plural null pronoun in Italian can be given an "arbitrary" interpretation that in specific time contexts corresponds to the notion 'someone'. This interpretation is not always available, however. Notably, the arbitrary reading is available with unergatives and transitives but not with unaccusatives, as shown by the sentences in (21) (from Cinque 1988).

- (21) TRANS a. Lo hanno cercato: era un signore anziano.

 They have been looking for him: it was an elderly man.
 - UNERG b. Prima, hanno telefonato: mi pareva tua sorella.

 Earlier, they telephoned: it seemed to me it was your sister.
 - UNACC c. * Sono venuti a vedere: era una signora anziana.

 They came to see: it was an elderly lady.
 - PSYCH d. * Hanno colpito il giornalista per l'estrema gentilezza: era il tuo amico.

They impressed the journalist with their extreme kindness: it was your friend.

The arbitrary reading is similarly unavailable for passives, raising constructions, reflexive constructions, and so forth. The descriptive generalization is that pro_{arb} cannot be a derived subject. (21d) shows that psych-verbs in the preoccupare class pattern with unaccusatives rather than transitives and unergatives. On the proposed analysis this is not surprising, since the subject of these verbs is in fact a derived subject. We need simply assume that the condition is that pro_{arb} must get a direct external θ -role. Technically, we can assume, following B&R, that pro_{arb} must be θ -marked by Infl. Since the Stimulus NP is θ -marked by a preposition, it fails to meet the condition.

A similar explanation is available for the restriction on reflexive clitics illustrated by the sentences in (22).

(22) TRANS a. Gianni si ammira/disprezza/conosce. Gianni admires/despises/knows himself.

PSYCH b. * Gianni si preoccupa/commuove/entusiasma.

Gianni worries/moves/excites himself.

PASSIVE c. * Eva si è stata affidata da Giovanni.

Eva was entrusted to herself by Giovanni.

In not allowing their subject to bind a reflexive clitic, psych-verbs in the *preoccupare* class pattern with other verbs that occur in constructions with derived subjects, such as the passive construction.⁸ The condition, I suggest, is that a reflexive clitic must be assigned the *direct* external θ -role of a verb—a restriction that follows without stipulation, given that an indirect θ -role must, by definition, be assigned to a PP (or to an argument governed by a P), which reflexive clitics are not.

The inability of the *preoccupare* construction to undergo syntactic passivization, as illustrated by the data in (23) (from B&R), can be seen as an instance of the same sort of restriction.

(23) TRANS a. Gianni viene temuto da tutti. Gianni is feared by everyone.

PSYCH b. * Gianni viene preoccupato da tutti.

Gianni is worried by everyone.

Under standard assumptions, passivization involves something like "absorption" of the external θ -role of a predicate. To account for the ungrammaticality of (23b), we need only assume that this phenomenon is restricted to the *direct* external θ -role. In fact, if the passive morpheme is an argument clitic in Infl (Baker, Johnson, and Roberts 1989), then—like reflexive clitics—it is intrinsically incompatible with an indirect θ -role.

Finally, consider B&R's observation that psych-verbs, although apparently transitive, do not causitivize in the way that other transitives do. As can be seen by (24a), the subject of a caustivized transitive appears postverbally with dative marking (the preposition a 'to').

(24) TRANS a. Questo lo ha fatto apprezzare/temere a Mario.

This made Mario appreciate/fear him.

PSYCH b. * Questo lo ha fatto preoccupare/commuovere a Mario.

This made Mario worry/move him.

The Stimulus in the *preoccupare* construction, however, cannot be dativized, as shown by (24b). The representation I am considering here for this construction provides different ways of accounting for the contrast in (24), depending on what particular analysis of causatives is adopted. I will simply assume that causativization is a process that directly affects argument structure, along the lines of Zubizarreta (1985). The reason, I suggest, that (24b) is ungrammatical is that dativization is an option that is only available for the direct external argument. The causativized form of a sentence built on a

⁸ Cf. Burzio (1986), Rizzi (1986), and Farrell (1989) for relevant discussion and further data. Irrelevantly, the sentences in (22b) are grammatical when read as instantiations of the construction illustrated by (19), i.e. on an anticausative reading (e.g., 'Gianni worries').

verb like *preoccupare* is as in (25).

(25) Questo lo ha fatto preoccupare per Mario.

This made him worry about Mario.

The indirect external argument is internalized and the preposition is spelled out as a Case marker. In other words, causativization is a process that yields the same result as anticausativization (with reflexive morphology), which produces sentences like (19). In both cases the external argument is simply internalized.

What I have done is to isolate two different kinds of phenomena that give evidence for derived subjects in Italian: PAS and PPA are sensitive to the structural configuration in which a subject binds an object trace. The pro_{arb} , reflexivization, passivization, and causitivization phenomena are sensitive to argument structure. The analysis sketched above provides a plausible explanation for why the verbs in the preoccupare class manifest evidence that their subjects are derived only with respect to the phenomena having to do with argument structure. They have an external argument—but one that differs in a fundamental way from the external argument of canonical transitive verbs.

4. Some Further Issues

4.1. Why Must the P be Invisible?

Although the idea that psych-verbs like *preoccupare* have a PP subject offers a resonable solution to a difficult problem in Italian, it also raises difficult questions. To begin with, one might ask why the preposition is never overtly realized in subject position. Further, one might ask why PP subjects are not more widely attested in the languages of the world. I would like to suggest that the answer to the second of these questions might yield an answer to the first. It has been noted by various researchers (e.g. Chomsky 1981, Stowell 1981, Emonds 1985) that PP subjects do not appear to exist—at least in configurational languages—and that the architecture of government and binding theory (which includes a category-neutral base) does not provide an explanation for this. Different principles with the effect of ensuring that clauses must have an NP subject have been proposed. Assuming that some such principle is needed, let us make the further assumption that an NP counts as subject even if it is only an Structure subject. In other words, the principle might be something like (26), which says in effect that Infl must govern an NP at some level.

(26) Subject Principle:

 I_i must govern an NP external to its_i selected XP.

We have, then, an explanation for why my postulated Psych-Movement as Dative Movement in subject position is obligatory. If the P were spelled out instead of being incorporated, Infl would not govern into the PP and (26) would be violated.

A related question is why the P is not overtly realized in Infl. I assume, essentially following Emonds (1985), that certain prepositions are generated null and (at least

in languages like Italian) acquire phonological features at S-structure only if they assign Case or need to be overt to meet some other requirement of the grammar. Since the incorporated P in the Psych-Movement construction does not assign a Case, it is not spelled out.

4.2. Incorporation from Subject Position

A potential objection to the P incorporation analysis is that it involves an apparent violation of the Empty Category Principle (ECP). If, as in Chomsky (1986), a maximal phrasal projection in subject position is a barrier to government from Infl (by virtue of not being "L-marked"), the trace of the incorporated P in (18) is not properly governed as required by the ECP. However, (18) does not involve an ECP violation within the framework of Baker (1988), which I am assuming here. For Baker, a maximal projection α is a barrier to government by a c-commanding element β only if α is not "selected" or if the head of α is distinct from β . Since the P/Infl complex resulting from incorporation is technically nondistinct from the trace of P and since the PP is selected (by virtue of being θ -marked), the derivation shown in (18) violates no principles. Indeed, Baker himself (Chapt. 6) appeals to the idea that an element can incorporate into Infl from a θ -marked phrasal category governed by Infl to account for certain cases of si cliticization in Italian, for the incorporation of passive agents in various languages, and for the incorporation of the passive morpheme from subject position in languages like Lithuanian (cf. also Baker, Johnson, and Roberts 1989).

Baker claims to have developed a theory that provides a principled account of an apparent subject-object asymmetry with respect to overt N incorporation. Yet it is difficult to see how this claim can be anything more than misplaced rhetoric. Baker's explanation of why overt N incorporation from subject position is not possible is that an element incorporated into V from subject position would fail to c-command its trace (p. 83). However, since an element can incorporate into Infl from subject position and since V can—perhaps typically does—incorporate into Infl, nothing rules out incorporation of the head of a subject phrase into an Infl/V complex or of a V into an Infl/head-of-subject complex. Thus, the effect of incorporation into V from subject position is easily obtained.

From my perspective in this paper, this latitude with respect to incorporation from subject position must be seen as desirable. Recent research has revealed that the subject-object asymmetry with respect to overt N incorporation that Baker refers to is, at the very least, not absolute. Subject N incorporation has been shown to occur in Southern Tiwa (Perlmutter 1989b), Turkish (Barker, Hankamer, and Moore 1990), Indonesian (Myhill 1988), and Chukchee and Alyutor (Polinsky to appear). What appears to remain unaccounted for in Baker's theory is the relative rarity of this

⁹ Cf. Baker (1988: pp. 56-57) for precise statements of the relevant principles. The notion of 'c-command' assumed here and in Baker (1988) is one based on maximal projections, i.e. Chomsky's (1986) m-command.

¹⁰ Being (indirectly) θ-marked, subjects are and must be characterized as "selected" in Baker's theory. Both his appeal to the possibility of incorporation into Infl from subject position and his account of causee incorporation in languages like Southern Tiwa (pp. 377 ff.) depend crucially on this assumption.

phenomenon.

4.3. A Nonargument for NP Movement

Examples like those in (27) (from B&R) might be thought to be problematic for the PP subject analysis.

- (27) a. Questi pettegolezzi su di sè preoccupano Gianni più di ogni altra cosa. These gossips about himself worry Gianni more than anything else.
 - b. I **propri** sostenitori preoccupano **Gianni**. *His own supporters worry Gianni*.

For B&R, the anaphors $s\hat{e}$ and proprio in (27) are bound by their antecedents at D-structure, thus satisfying an "any level" version of Principle A of the binding theory. However, examples like those in (27) only provide evidence for an NP movement analysis of psych-verbs if it is the case that the distribution of such anaphors is otherwise governed by the binding theory. The sentences in (28) show quite clearly that c-command at some level is *not* a necessary condition on the use of $s\hat{e}$ and proprio.

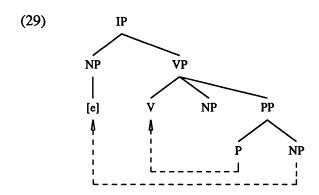
- (28) a. La paura di sè è il più grosso problema di Gianni. The fear of himself is Gianni's biggest problem.
 - b. Mario chiese ad Alice un ritratto di sè. (from Manzini and Wexler 1987)

 Mario asked of Alice a portrait of herself.
 - c. La preoccupazione di **Gianni** è dovuta alla salute della **propria** madre. Gianni's worrying is due to the health of his own mother.
 - d. Mario è preoccupato. La vernice della propria bicicletta è brutta. Mario is worried. The paint on his own bicycle is ugly.

It is well known that the binding theory cannot account for the distribution of similar anaphors in English and other languages and that discourse factors such as point of view and logophoricity are a more promising source of explanation (cf. Kuno 1987, Sells 1987, Pollard and Sag 1989).

4.4. Against an Alternative P Incorporation Analysis

A seemingly less radical solution to the problems addressed here would be to analyze the Stimulus in the *preoccupare* construction as a VP-internal PP from which the P incorporates, forcing the NP to move to subject position to get nominative Case, i.e.:



Such an alternative faces at least the following obstacles. First, since the subject binds a trace in an A-position governed by the V, this analysis, like B&R's, wrongly predicts that *essere* will be chosen as the perfect auxiliary and that the subject will determine past participle agreement—given the optimal statements of the PAS and PPA rules presented above. It is possible to imagine statements of these rules which would discriminate between CHAINS formed on a true direct object trace and those formed on a trace within a PP. However, this distinction appears to be irrelevant, as shown by the fact that clauses with reflexives corresponding to indirect objects behave like those with reflexives corresponding to direct objects with respect to PAS and PPA. A proponent of an analysis such as (29) would have to provide alternative, equally adequate accounts of PAS and PPA.

Second, it is not clear what would prevent the Experiencer from moving to subject position instead of the Stimulus. That is to say, one might expect that the verb's single accusative Case could be assigned to the Stimulus, a derived direct object, and that the Experiencer could move to subject position to get nominative Case, as in (30).

(30) * Gianni preoccupa cose simili Gianni worry-3SG things such Such things worry Gianni.

Minimally, it would have to be stipulated that these verbs have an inherent rather than structural accusative Case that must be assigned to the Experiencer, as on B&R's analysis. The proposed analysis is preferable in that it eliminates the need for this otherwise unmotivated stipulation.

Third, unlike on the proposed analysis, it is unclear what would prevent the preposition from being spelled out rather than incorporating. A further stipulation would be needed to rule out the structure exemplified by (31), which has an expletive *pro* subject and its two arguments realized within the VP.

(31) * Preoccupa le donne per questo. worry-3SG the women about this This worries the women.

In sum, although seemingly less radical than (18), the analysis shown in (29) is sufficiently problematic to warrant rejecting it.

5. Conclusion

I have shown that there is good distributional evidence for not treating the Stimulus in the Italian psych-verb construction as the same kind of derived subject as is found, for example, in passive and unaccusative constructions. At the same time there are good reasons for treating it as something other than an underived subject. An analysis on which it is an underlying PP subject resolves this paradox, by simply taking advantage of a hitherto unexploited logical possibility made available by a standard version of the theory of grammar.

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References

- Baker, Mark C. (1988) *Incorporation: A Theory of Grammatical Function Changing*, University of Chicago Press, Chicago and London.
- Baker, Mark C., Kyle Johnson, and Ian Roberts (1989) "Passive Arguments Raised," Linguistic Inquiry 20, 219–251.
- Barker, Chris, Jorge Hankamer, and John Moore (1990) "Wa and Ga in Turkish," Paper presented at the Fifth Biennial Conference on Grammatical Relations, University of California, San Diego.
- Belletti, Adriana and Luigi Rizzi (1988) "Psych-Verbs and θ-Theory," *Natural Language and Linguistic Theory* 6, 291–352.
- Burzio, Luigi (1981) Intransitive Verbs and Italian Auxiliaries, Doctoral dissertation, MIT.
- Burzio, Luigi (1986) *Italian Syntax: A Government-Binding Approach*, D. Reidel Publishing Co., Dordrecht and Boston.
- Chomsky, Noam (1981) Lectures on Government and Binding, Foris Publications, Dordrecht.
- Chomsky, Noam (1986) Barriers, MIT Press, Cambridge and London.
- Cinque, Guglielmo (1988) "On Si Constructions and the Theory of Arb," Linguistic Inquiry 19, 521-582.
- Emonds, Joseph E. (1985) A Unified Theory of Syntactic Categories, Foris Publications, Dordrecht and Cinnaminson.
- Farrell, Patrick (1989) "The Italian Psych-Verb Construction," Manuscript, University of California, San Diego.
- Kuno, Susumu (1987) Functional Syntax, The University of Chicago Press, Chicago.

- Lakoff, George (1970) Irregularity in Syntax, Holt Rinehart and Winston, New York.
- La Fauci, Nunzio (1986) "Sulla natura assoluta del controllore dell'accordo del participio passato in italiano," La Memoria. Annali della Facoltà di Lettere e Filosofia dell' Università di Palermo, pp. 187-253.
- Manzini, M. Rita and Kenneth Wexler (1987) "Parameters, Binding Theory, and Learnability," *Linguistic Inquiry* 18, 413–444.
- Marantz, Alec (1984) On the Nature of Grammatical Relations, MIT Press, Cambridge and London.
- Myhill, John (1988) "Nominal Agent Incorporation in Indonesian," *Journal of Linguistics* 24, 111–136.
- Perlmutter, David M. (1980) "Relational Grammar," in Edith Moravcsik and Jessica Wirth (eds.), Syntax and Semantics 13: Current Approaches to Syntax, Academic Press, New York, San Francisco, and London.
- Perlmutter, David M. (1989a) "Multiattachment and the Unaccusative Hypothesis: The Perfect Auxiliary in Italian," *Probus: Journal of Latin and Romance Linguistics* 1, 63–119.
- Perlmutter, David M. (1989b) "The Relation between Possessor Ascension and Incorporation," Paper presented at the West Coast Conference on Formal Linguistics, Vancouver, B.C.
- Polinsky, Maria (to appear) "Subject Incorporation in Chukchee and Alyutor," Folia Linguistica.
- Pollard, Carl and Ivan A. Sag (1989) "Anaphors in English and the Scope of the Binding Theory," Manuscript, Carnegie Mellon University and Stanford University.
- Postal, Paul M. (1971) Cross-Over Phenomena, Holt, Rinehart and Winston, New York
- Rappaport, Malka and Beth Levin (1988) "What to Do with θ-Roles," in Wendy Wilkins (ed.), Syntax and Semantics 21: Thematic Relations, pp. 7–36, Academic Press, San Diego, New York, and London.
- Rizzi, Luigi (1986) "On Chain Formation," in Hagit Borer (ed.), *The Syntax of Pronominal Clitics, Syntax and Semantics 9*, Academic Press, New York, San Francisco, and London.
- Rosen, Carol (1984) "The Interface between Semantic Roles and Initial Grammatical Relations," in David Perlmutter and Carol Rosen (eds.), Studies in Relational Grammar 2, pp. 38–77, University of Chicago, Chicago.
- Rosenbaum, Peter S. (1967) The Grammar of English Predicate Complement Structures, MIT Press, Cambridge and London.
- Sells, Peter (1987) "Aspects of Logophoricity," Linguistic Inquiry 18, 445-479.
- Stowell, Timothy (1981) Origins of Phrase Structure, Doctoral dissertation, MIT.
- Zubizarreta, Maria Louisa (1985) "The Relation between Morphophonology and Morphosyntax: The Case of Romance Causatives," *Linguistic Inquiry* 16, 247–289.
- Zubizarreta, Maria Luisa (1987) Levels of Representation in the Lexicon and in the Syntax, Foris Publications, Dordrecht and Providence.