

Movement and agreement in Italian past participles and defective phases¹

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1. Past-participle agreement in Standard Italian

In Standard Italian past-participle agreement is associated with internal arguments that are promoted to subject position (passives, unaccusatives, medio-passive *si*), reflexive constructions (which Kayne (1988) argued to also involve promotion of the “antecedent” of the reflexive), and with preposed direct-object clitics, as shown in (1).

- (1) a. Le ragazze sono arrivate.
the girls-FEM PL are arrived-FEM PL
'The girls have arrived.'
- b. Le ragazze sono state arrestate.
the girls-FEM PL are been-FEM PL arrested-FEM PL
'The girls have been arrested.'
- c. Si sono viste le ragazze.
SI are seen-FEM PL the-FEM PL girls-FEM PL
'We have seen the girls/the girls have been seen.'
- d. Le ragazze si sono guardate allo specchio.
the girls selves are looked-FEM PL at-the mirror
'The girls have looked at themselves in the mirror.'
- e. Le abbiamo salutate.
them-FEM PL we-have greeted-F PL

‘We have greeted them.’

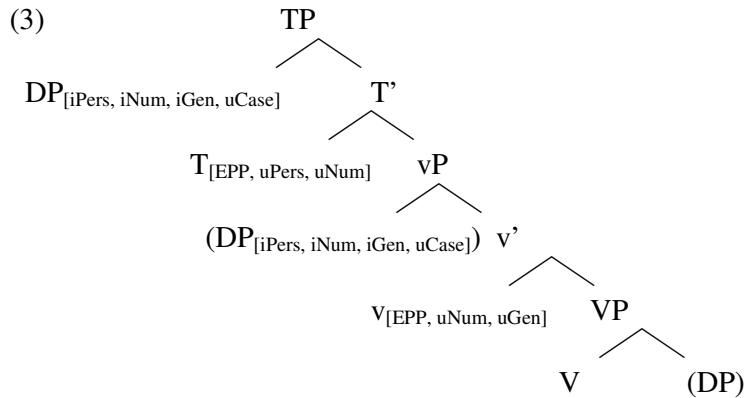
On the basis of facts like these, Kayne (1989) and Belletti (2001) argued that past-participle agreement is triggered by the fronting of an internal argument. Kayne (1989) originally proposed that the agreement was triggered by moving the internal argument through the Specifier of AgrOP:

(2) DP ... [_{AgrOP} (DP) AgrO [_{VP} V (DP)]] ...

Raising of an originally VP-internal DP, passing through the SpecAgrOP, triggers Spec-head agreement with AgrO and consequent checking of number and gender features of the DP. In this way, Kayne was able to achieve three things: (i) only internal arguments trigger past-participle agreement; (ii) agreement always and only takes place in a Spec-head relation; (iii) agreement is connected to movement. In connection with (ii), Belletti (2001:17) points out that “A crucial piece of data concerning the phenomenon of past participle agreement in Romance is that no variety allows for the past participle to agree with the subject of intransitive/unergative and transitive verbs [...] Any treatment of the computation involved in past participle agreement must account for this fact.”

In terms of the Agree-based system of Chomsky (2001), we could rephrase most of Kayne’s analysis along the following lines: v, bearing unvalued number and gender features, probes these features of the VP-internal DP. DP has an unvalued Case feature and so is able to be an active goal. DP moves to SpecvP since v also bears an EPP feature. However, because DP also has a person feature and T has unvalued person and number features, T probes for DP. T also has an EPP feature,

and so DP raises to SpecTP. DP's Case feature is checked by T since all of DP's features are checked by T at this point. The derived structure, along with the feature-valuing relations, is thus as in (3).



Although it appears to replicate several aspects of Kayne's analysis, this approach however has two serious problems. First, it predicts that the unmoved direct object of a transitive verb will show morphological agreement with the direct object, since it Agrees with that object and licenses its Case feature. For Standard Italian, this is incorrect:

- (4) *Ho mangiata la mela.
 I-have eaten-FEM SG the-FEM SG apple-FEM SG
 'I have eaten the apple.'

Second, given the option of leaving the direct object in situ, but retaining agreement, as shown in (5), we have to assume either that the EPP feature is optional or that it can be satisfied by an expletive *pro*, since Italian is a null-subject language (or by some equivalent mechanism peculiar to null-subject languages, as in Alexiadou & Anagnostopoulou (1998)):

- (5) Sono arrivate le ragazze.
 are-PL arrived-FEM PL the-FEM PL girls-FEM PL
 ‘The girls have arrived.’

However, just where T’s EPP feature is either absent or satisfied by *pro* or its equivalent, the EPP feature of *v* must also be either absent or satisfied by *pro*. Otherwise ungrammatical sentences like (6) can result.

- (6) *Sono le ragazze arrivate.
 are-PL the-FEM PL girls-FEM PL arrived-FEM PL
 ‘The girls have arrived.’

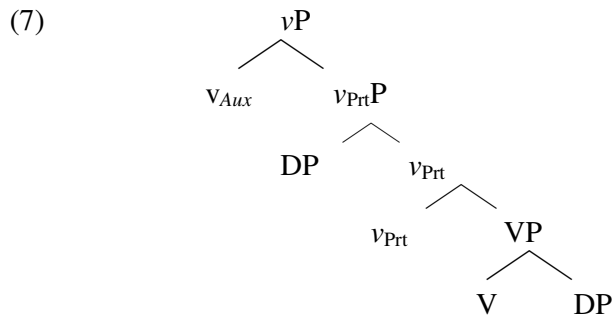
One possible solution to this problem would be to merge expletive *pro* in SpecvP and raise it to SpecTP, thereby satisfying both EPP features (see Richards & Biberauer (2005) on overt expletives in Germanic). This strikes us as unsatisfactory, however, to the extent that the postulation of expletive *pro* is dubious, since this element has no interface properties (it is silent, and therefore has no PF property, and it is an expletive and so has no LF property).

Because of these problems, we propose a different, phase-based account of the relation between Italian past-participle agreement and the argument structure of the verb. Our analysis avoids the problems just mentioned, retains some of the central insights of Kayne’s analysis (e.g. the connection between overt past-participle agreement and the argument structure of the clause), and is also consistent with observations originally made by Cinque (1999), regarding the different positions of

transitive as opposed to passive and unaccusative participles in Italian. The analysis makes crucial use of Chomsky's recent (2001, 2005) proposals regarding the Phase Impenetrability Condition (PIC) and the distinction between defective and non-defective vPs.

2. Transitive vP

We assume the following structure, involving an iterated vP, for periphrastic tenses in Romance generally:



We take it that the external argument is merged in Spec_{vPrtP}. This amounts to treating the auxiliary, whose merged position we have given as v_{Aux} in (7), as a raising predicate which selects v_{PrtP} (see Ross (1969)). The head v_{Prt} assigns the external θ -role to the external argument and Agrees with the direct object in ϕ -features, thereby valuing the direct object's Case feature. As such, v_{Prt} heads a non-defective phase in the sense of Chomsky (2001), an instance of v^* . The question that arises now is the one we raised in the previous section for (our adaptation of) Kayne's analysis: why does the past participle not show agreement with the postverbal object? In other words, why are examples like (4) ungrammatical?

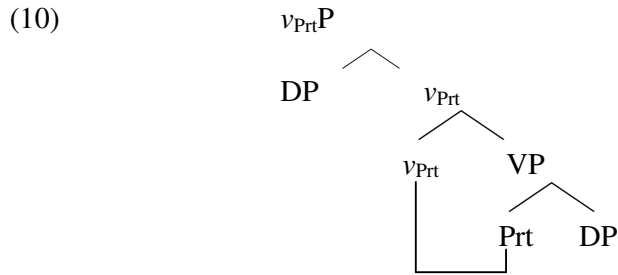
We propose that the answer to this question can be found in a phase-based approach to derivations, along with assumptions regarding the mapping to PF. Cinque (1999:102-3; 146ff.; see also Belletti 2001:30) observes that active transitive past participles must raise over a certain class of manner adverbs in Italian:

- (8) a. Hanno accolto bene il suo spettacolo solo loro.
 have-PL received well the his show only they
- b. *Hanno bene accolto il suo spettacolo solo loro.
 have well received the his show only they
 ‘They alone have well received his show.’

On the other hand, passive participles may remain in a lower position:²

- (9) a. Questo genere di spettacoli è sempre stato bene accolto.
 this kind of shows is always been well received
- b. Questo genere di spettacoli è sempre stato accolto bene.
 this kind of shows is always been received well
 ‘This kind of show has always been well received’

We interpret the obligatory raising of the participle in (8a) as movement to v_{Prt} in (7), assuming that adverbs like *bene* are adjoined to VP:



At the point of Spell Out, then, the participle occupies v_{Prt} . Since v_{Prt} heads a non-defective phase, its complement VP is sent to PF on a distinct cycle. Let us now suppose the following condition on the morphophonological realisation of agreement:

(11) Overt morphophonological agreement between a Probe P and a Goal G is realised iff P and G are contained in the complement of the minimal phase-head H.

(12) XP is the complement of a minimal phase head H iff there is no distinct phase head H' contained in XP whose complement YP contains P and G.

(11) and (12) effectively state that morphophonological agreement, like many other phonological processes (cf. for example Biberauer & D'Alessandro (2006), Bobaljik (2006)), takes place within the complement to a phase head, i.e. the substructure which is transferred to PF as a single unit.

(11) is not a separate stipulation, but instead follows from the Phase Impenetrability Condition. The version of this condition given in Chomsky (2001:13), runs as follows:

(13) For a strong phase HP with head H, the domain of H is not accessible to operations outside HP; only H and its edge are accessible to such operations.

In these terms, (11) can be understood as stating that overt morphophonological agreement in Standard Italian arises only within the complement of H, and thus is constrained by this version of the PIC. This is of course an entirely natural conclusion, given the idea that the PIC defines domains for cyclic Spell Out, and overt agreement is determined by this. In this sense, our account is more natural than one based on Spec-head agreement.

In (10), since the participle has raised to v_{Prt} , and v_{Prt} is a phase head, it is no longer contained at PF in the sister of v_{Prt} , VP. The direct object, on the other hand, is of course contained in VP. This is why the participle fails to show agreement in ϕ -features with the direct object. At PF, when the participle is spelled out, it defaults to masculine singular agreement. The result is that (14) is grammatical, while (4), repeated here as (15), is not.

- (14) Ho mangiato la mela.
 I-have eaten-MASC SG the-FEM SG apple-FEM SG
 ‘I have eaten the apple.’

- (15) *Ho mangiata la mela.³

3. Non-transitive vP

Let us now consider the cases in (1), which we repeat as (16).

- (16) a. Le ragazze sono arrivate.
 the girls-FEM PL are arrived-FEM PL
 ‘The girls have arrived.’

- b. Le ragazze sono state arrestate.
 the girls-FEM PL are been-FEM PL arrested-FEM PL
 ‘The girls have been arrested.’
- c. Si sono viste le ragazze.
 SI are seen-FEM PL the-FEM PL girls-FEM PL
 ‘We have seen the girls/the girls have been seen.’
- d. Le ragazze si sono guardate allo specchio.
 the girls selves are seen-FEM PL at-the mirror
 ‘The girls have seen themselves in the mirror.’
- e. Le abbiamo salutate.
 them-FEM PL we-have greeted-F PL
 ‘We have greeted them.’

Consider first the unaccusative in (16a). Here we assume that there is a vP, in fact an iteration of vPs, the higher containing the auxiliary and the lower the participial head as in (7). The difference with (7), however, is that v_{Prt} is not the head of a non-defective phase: there is no external argument and v_{Prt} is unable to Case-license the object DP (see Burzio’s generalisation (Burzio 1986:178f.), and Kratzer (1989)). Therefore, given (11), even if the participle raises to v_{Prt} , giving a derived structure like (10), the participle and the object are contained in the complement of the same minimal phase head (in this case the TP dominating the higher vP, the complement of C). Because of this, overt morphophonological agreement between the participle and the direct object is possible, as a reflex of the Agree relation. (As described above, the object must also Agree with T in order to be Case-licensed since unaccusative v_{Prt} cannot Case-license the underlying object).

Consider next the passive example in (16b). Here again, v_{Prt} is the head of a defective phase, and so, by exactly the same reasoning as for the unaccusative example which we have just looked at, (11) predicts that the participle and the direct object will show overt agreement. (Note that this is true whether or not the participle raises over VP-adjoined adverbs such as *bene*, cf. the examples in (9) and Note 1). We assume that essentially the same holds for structures containing mediopassive *si* in (16c) (for more details on *si*-constructions in minimalist syntax, see D'Alessandro (2004)). As we mentioned above, we can follow Kayne (1988) in taking sentences with reflexive *si* also to involve a “medio-passive” like structure. In both of these cases, the central point for our analysis must be that, presumably owing to the presence of *si*, v_{Prt} cannot be a non-defective phase head (for similar ideas, see Belletti (1982), Burzio (1986), Cinque (1988), Reinhart & Siloni (1999)).

Finally, let us look at (16e), where past-participle agreement is triggered by clitic-movement. Here, v_{Prt} is clearly active and transitive, and so there is no motivation for not treating it as a non-defective phase head. We have given an account for why active transitive participles fail to agree with direct objects in general, in cases such as (16a). Here, however, agreement is required owing to the movement of the clitic object, as has often been observed (Kayne (1989), Belletti (2001)). In our terms, the relation between clitic-movement and agreement is very direct: the clitic moves to the higher v (for reasons that are explored in Mavrogiorgos (to appear), Roberts (2006)). As such, it is in the complement of the same phase head, C , as the raised participle at Spell Out. Hence, by (11), overt morphophonological agreement is expected.

We are thus able to account for the basic cases of participle agreement in Standard Italian, in terms of a fairly simple structure for periphrastic tenses of the type

in (7), standard assumptions regarding the status of passives and unaccusatives, independently motivated differences in participle placement in passive as opposed to active clauses, and the condition on overt agreement in (11). This analysis captures the basic facts of past-participle agreement in Standard Italian without making reference to Spec-head agreement or Agr-projections, and in these respects is more readily compatible with the proposals in Chomsky (2001, 2005) than the analyses proposed by Kayne and Belletti cited above.

4. Absolute small clauses

Belletti (1990, 2001, 2005) observes that transitive participles agree in absolute small clauses such as those in (17):

- (17) a. Arrivata Maria, siamo andati al cinema.
 arrived-FEM SG Maria are gone to-the cinema
 ‘Maria having arrived, we went to the cinema.’
- b. Conosciutala, Marco non ebbe più paura.
 known-FEM SG-her-FEM-SG Marco not had more fear
 ‘Having met her, Marco was not afraid anymore.’
- c. Mangiata la mela, Gianni si mise al lavoro.
 eaten-FEM SG the-FEM SG apple-FEM SG Gianni SI put to work
 ‘Having eaten the apple, Gianni began to work’

(17a) clearly poses no particular problem for our approach because, whatever the nature of the absolute clause, participial vP is not a non-defective phase since it is

unaccusative. Hence there is essentially no difference between this case and standard examples of unaccusative such as (1a/16a).

(17b) is similar to (16e), in that it involves participle agreement with a clitic object. Here, however, the clitic is enclitic to the participle. Following Kayne (1989, 1994), we assume that the participle has moved to a position higher than that occupied by the clitic. Assuming the clitic to be in the higher v, as in (16e), the participle is clearly in a higher position still. Presumably this position is either C or T. For our purposes either possibility will give the correct result since T is not a phase head, and non-finite C may be defective, which we assume it is here.

(17c) appears more problematic, however. Here we have a transitive vP, and clearly there is agreement between the participle and the object. There is evidence for an external argument here, in that reflexive/reciprocal *si* is possible, as in (18).

- (18) a. Una volta vestitasi, Maria fu pronta per la serata .
 A time dressed-FEM SG-si Maria was ready for the evening
 ‘Once dressed, Maria was ready for the evening.’
- b. Dopo essersi baciati, Gianni e Maria si innamorarono.
 after be-REFL kissed Gianni and Maria REFL fell-in-love
 ‘After kissing each other, Gianni and Maria fell in love.’

So it appears that there is an external argument and accusative case within the absolute participial phrase. Moreover participle-movement over adverbs like *bene* is possible:

- (19) Imparata bene la scala pentatonica, .. (Google)
 learnt-FEM SG well the-FEM SG scale-FEM SG pentatonic-FEM SG
 ‘Having learnt the pentatonic scale, ...’

It seems, then, that the absolute participial phrase has all the properties of a regular transitive vP. In that case, we do not expect to find past-participle agreement and yet we do. In our terms, then, the v_{Prt} P here must not be a non-defective phase, despite the fact that it closely resembles a regular transitive vP.

Belletti (1990, Chapter Two) provides abundant evidence that the sequence of participle and object in examples of this type is a small clause. Chomsky (2006:15, note 31) observes that the nature of small clauses is unclear in the current framework, but we can at least observe that such clauses must contain a highly defective C-T system. However, some aspect of the C-T system must be present in order to attract the verb to a position higher than v, as suggested above in connection with (17b). So, at the very least, we know that the absolutive participial phrase contains a C or T head which attracts the participle and selects v_{Prt} P.

In fact, the participial has a range of rather unusual properties which distinguish it from transitive vPs (or v_{Prt} Ps). First, unergative intransitives are impossible, as in:

- (20) *Telefonato a Gianni, Maria andò all’ appuntamento.
 telephoned-MASC SG to Gianni Maria went to-the meeting

Second, there is no way to license an overt preverbal subject:

- (21) *Gianni mangiata la mela, si mise al lavoro.
 Gianni eaten-FEM SG the-FEM SG apple-FEM SG SI put to-the work

It is possible that there is a null subject (*pro* or PRO) in this construction (see again Belletti, who argues for PRO in certain cases), but there is clearly no possibility of an overt subject argument.

Third, although a passive *by*-phrase is possible, it cannot cooccur with an overt internal argument here (Belletti (1990:105)):

- (22) a. Vista da Gianni, la situazione era
 seen-FEM SG by Gianni the-FEM SG situation-FEM SG was
 tutt'altro che favorevole.

all-other than favourable

- a. *Vista la situazione da Gianni,
 seen-FEM SG the-FEM SG situation-FEM SG by Gianni
 era tutt'altro che favorevole.
 was all-other than favourable

'As seen by Gianni, the situation was everything but favourable.'

These facts can be straightforwardly accounted for by supposing that v_{Prt} is able to probe an argument while T is not in these sentences. Thus arguments in the c-command domain of v_{Prt} are realised normally: objects of transitives (including clitics) and the sole of argument of unaccusatives. The v_{Prt} can also be passivised, as (22) shows; whatever precisely is involved here, we can see that an overt external argument can be licensed when it is a *by*-phrase, i.e. when it is in the c-command

domain of v_{Prt} . Thus it appears that v_{Prt} is not defective, while the C-T system is highly defective. In fact the C-T system has just two properties that we can discern: it selects v_{Prt} and it attracts the participial verb.

We suggest that this last property is the crucial one in the present context. Gallego (2006:26) proposes that when v moves to T it causes the phase boundary to be “pushed up” to T. This is the case because v -to-T is a case of syntactic head-movement which gives rise to “reprojection” when v combines with T “creating a hybrid label from which all operations are triggered” (Gallego (2006:15-16)). Most importantly for our purposes, this means that “all the phase phenomena that must occur within the v^*P domain are postponed to the v^*/TP domain” (Gallego (2006:16)). Given the characterisation of the domain of morphophonological agreement in (11), this means that $v_{\text{Prt}}P$ is the complement of the minimal phase head T. Because of this, a copy of v_{Prt} is sent to Spell Out along with VP. At PF, the copy of v_{Prt} is in the same spell-out domain as the object, and hence, by (11), agreement is realised on the participle. This is so despite the fact that the participle is spelled out in its post-movement position in T, but the nature of the features it realises must be determined in part by the nature of the position of the copy inside $v_{\text{Prt}}P$.

5. Cross-linguistic implications

The wider consequence of our analysis is that overt agreement relations ought to generally be constrained by a condition like (11). In general, we expect that overt agreement to be realised just where the probe and the goal are in the same spell-out domain. Interestingly, standard assumptions predict a subject-object asymmetry in

this respect, as we can see if we consider the domains for subject- and object-agreement on standard current assumptions:

(23) a. [CP C [TP SU T [vP SU v VP]]] -- subject agreement

b. [vP v [vP V OB]] -- object agreement

As (23a) shows, whether the subject raises to SpecTP or not, it is in the same spell-out domain as T, namely TP. On the other hand, as we have already pointed out, an object which remains in its first-merged position is not in the same Spell-Out domain as its probe, v. All other things being equal then, we observe a subject-object asymmetry. This seems to us to be a very good result, since it is known that subject-agreement is much more frequent cross-linguistically than object agreement. According to the *World Atlas of Language Structures* (WALS; Haspelmath, Dryer, Gil & Comrie (2005), Maps 100 and 102), object agreement without subject agreement is only found in one non-ergative language (Khoekhoe, a Khoisan language spoken in Namibia). Second, to the extent that null arguments are licensed by overt “rich” agreement, we predict that null subjects are more cross-linguistically frequent than null objects. This is a correct prediction, as far as we are aware.

Of course, the object may move to the edge of vP. Following Kayne (1994), this happens systematically in OV languages. In this case, the object and v are in the same spell-out domain and therefore overt agreement should be visible (cf. the above account of participle-agreement with object clitics in Italian). We therefore expect overt object agreement to be more frequent in OV languages than in VO languages, all other things being equal. The only non-ergative language in WALS with object-

agreement only, Khoekhoe, is indeed an OV language. However, according to *WALS* (Maps 83 and 102), 81 VO languages have both subject- and object-agreement, while 78 OV ones do; hence there is apparently no correlation here.⁴

6. Conclusion

Kayne's original analysis had the merit of assimilating the configuration of past-participle agreement to that of subject-verb agreement. Following on from his proposals, the idea that Spec-head relations were central for determining agreement became pervasive, and was incorporated into early versions of minimalist checking theory (see in particular Chomsky (1993)). However, more recent versions of minimalism have effectively abandoned Spec-head agreement: "there can be no general Spec-head relation at all" (Chomsky (2004:109)). In that case, the phenomena previously accounted for in terms of Spec-head agreement must be analysed in another way, the obvious mechanism being Agree. The analysis of past-participle agreement given in Section 2 does exactly what is required in replacing Spec-head agreement with Agree. As we noted earlier, the strong condition on the overt realisation of Agree in (11), and which arguably instantiates a version of the PIC, is a more natural condition on the realisation of overt agreement than Spec-head agreement. The fact that it has interesting cross-linguistic consequences, in addition to providing a natural analysis of the facts of Italian past-participle agreement, further supports this approach.

References

- Alexiadou, Artemis, and Elena Anagnostopoulou. 1998. Parametrizing AGR: Word order, V-movement and EPP Checking. *Natural Language and Linguistics Theory* 16: 491-539.
- Belletti, Adriana. 1982. "Morphological" passive and pro-drop: the impersonal construction in Italian. *Journal of Linguistic Research* 2, 1-34.
- Belletti, Adriana. 1990. *Generalized verb movement*. Turin: Rosenberg & Sellier.
- Belletti, Adriana. 2001. (Past-)participle agreement. Ms. Università di Siena.
- Belletti, Adriana. 2005. (Past-)participle agreement. *Blackwell Companion to Syntax* vol III, eds. Martin Everaert, Henk van Riemsdijk. Oxford: Blackwell.
- Biberauer, Theresa, and Roberta D'Alessandro. 2006. Syntactic doubling and the encoding of Voice in Abruzzese. Paper presented at WCCFL 25, University of Washington, Seattle.
- Bobaljik, Jonathan. 2006. Where's Φ ? Agreement as a post-syntactic operation. Ms. University of Connecticut.
- Burzio, Luigi. 1986. *Italian Syntax. A government-binding approach*. Dordrecht: Reidel.
- Chomsky, Noam. 1993. A Minimalist Program for Linguistic Theory. In *The view from Building 20*, ed. Ken Hale and Samuel J. Keyser, 1-52. Cambridge, Mass: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale. A life in language*, ed. Michael Kenstowicz, 1-52. Cambridge, Mass: MIT Press.

- Chomsky, Noam. 2004. Beyond explanatory adequacy. In *Structures and Beyond*, ed. Adriana Belletti. Oxford: Oxford University Press.
- Chomsky, Noam. 2005. On phases. Ms. MIT.
- Chomsky, Noam. 2006. Approaching UG from below. Ms. MIT.
- Cinque, Guglielmo. 1988. On *Si* Constructions and the Theory of *arb*. *Linguistic Inquiry* 19, 521-582.
- Cinque, Guglielmo. 1999. *Adverbs and functional heads*. Oxford: Oxford University Press.
- D'Alessandro, Roberta. 2004. *Impersonal si constructions. Agreement and Interpretation*. Doctoral dissertation, Universität Stuttgart.
- D'Alessandro, Roberta & Ian Roberts. 2006. Past participle agreement in Abruzzese: split auxiliary selection and the null-subject parameter. Paper presented at WCCFL 25, University of Washington, Seattle.
- Gallego, Angel. 2006. Phase Sliding. Ms. UAB & UMD.
- Haspelmath, Martin, Matthew S. Dryer, David Gil, and Bernard Comrie, eds. 2005. *World Atlas of Language Structures*. Oxford: Oxford University Press.
- Kayne, Richard. 1988. Romance *se/si*. *GLOW newsletter* 20.
- Kayne, Richard. 1989. Facets of Romance past participle agreement. In *Dialect Variation and the Theory of Grammar*, ed. Paola Benincà. Dordrecht: Foris.
- Kayne, Richard. 1994. *The antisymmetry of syntax*. Cambridge, Mass: MIT Press.
- Kratzer, Angelika. 1989. An investigation into the lumps of thought. *Linguistics and Philosophy* 12, 607-653.

- Mavrogiorgos, Marios. to appear. The status of Greek clitic as morpho-syntactically independent phi-phrases. In *Proceedings of the 7th International Conference on Greek linguistics*.
- Reinhart, Tanya, and Tali Siloni. 1999. Against the Unaccusative Analysis of Reflexives. In *The Unaccusativity Puzzle*, eds. Artemis Alexiadou, Elena Anagnostopoulou, and Martin Everaert. Oxford: Oxford University Press.
- Richards, Marc, and Theresa Biberauer. 2005. Explaining *Expl*. In *The function of function words and functional categories*, eds. Marcel den Dikken and Christina Tortora, 115-154. Amsterdam: John Benjamins.
- Roberts, Ian. 2006. Speculations about clitics and phases. Ms., University of Cambridge.
- Ross, John R. 1969. Auxiliaries as main verbs. In *Studies in Philosophical Linguistics*, ed. W. Todd, 77-102. Evanston, IL: Great Expectations Press.

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² As Cinque points out, raising of the passive participle seen in (9b) is characterised by specific time reference. As we will see below, this optional movement does not create any special problems for our analysis, and, as Cinque suggests, it may well be caused by some factor orthogonal to the licensing of the arguments and participles involved here.

³ Observe that the agreement pattern exemplified in (15) is grammatical in some southern Italian dialects. Strikingly, in those dialects, the past participle does not raise (see D'Alessandro & Roberts 2006 for further details).

⁴ However, it should be observed that the criteria for object-agreement adopted in *WALS* do not correspond to our assumptions here. For example, both Spanish and Greek are classified as object-agreement languages because they show systematic clitic-doubling with objects. But this phenomenon is usually considered to be distinct from genuine object-agreement in analyses of clitics stemming from Kayne (1975).