Mackenzie IE.

[Participle-object agreement in French and the theory of grammatical viruses.](#)

Journal of Romance Studies 2013, 13(1), 19-33.

Copyright:

This is a post-peer-review, pre-copyedited version of an article published in *Journal of Romance Studies*.
The definitive publisher-authenticated version is available online at:

<http://dx.doi.org/10.3167/jrs.2013.130102>

Date deposited:

04/03/2015

This work is licensed under a

[Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License](#)

Participle–object agreement in French and the theory of grammatical viruses

Ian Mackenzie, Newcastle University

(Pre-copy edited draft of article published in *Journal of Romance Studies* 2013, **13**(1), 19-33)

Abstract

This paper looks at the French rule of the preceding direct object from a fresh perspective, that of Virus Theory. As is well known, the rule in question perplexes foreign learners and causes difficulty to native speakers of French. At the same time it is something of a cultural shibboleth and has attracted a quite surprising degree of interest from theoretical linguists (including Chomsky). Based on an examination of the phenomenon in terms of five signature properties, the present paper proposes that the rule is in fact a grammatical virus; that is, an epiphenomenon of language pedagogy rather than a genuine component of the French grammar. From that perspective it is similar to such constructs as the English rule which, in prestige speech, converts accusative *me* to nominative *I* after the word *and*. Linguists should thus be wary of using the paradigm of *avoir*-related participle agreement for theory construction as it appears to be something of an empirical red herring.

Keywords: French; virus; agreement; past participle; prescriptive; *wh*-movement; Kayne; hypercorrection; standardization

Introduction

Modern Standard French is widely considered to be one of the most highly codified and culturally salient of all the familiar standard languages. More than most perhaps, it evokes the words used by Milroy (2001: 537) to describe the popular conception of a standard variety: ‘a precious inheritance that has been built up over the generations, not by the millions of native speakers, but by a select few who have lavished loving care upon it’. An emblematic component of this venerable edifice is the principle known to English learners of French as the ‘rule of the preceding direct object’, which provides for agreement between a transitive verb and its object but only in very narrowly defined circumstances, viz. when the verb is a past participle and the object is preverbal, implying the latter must be either a clitic pronoun or a *wh*-expression. These two sub-cases are illustrated in the examples below (with the past participles shown in bold):

- (1) Cette section de l’autoroute, ils l’ont **refaite** il y a six mois.

‘That section of motorway, they rebuilt it six months ago.’

- (2) Quelle promesse a-t-il **faite**?

‘What promise has he made?’

Here the past participles appear in their feminine form – [(ʁə)fɛt] rather than [(ʁə)fɛ] – due to agreement with the feminine object clitic /*la*/ in (1) and the fronted feminine *wh*-phrase *quelle promesse* in (2).

Over the last few decades, the paradigm to which the above examples belong has exercised a remarkable fascination for theoretical linguists. Chomsky, for example, discusses

it quite extensively in his *Minimalist Program* (Chomsky 1995) and, more recently, Radford and Vincent (2007) have proposed an analysis based on the very latest syntactic thinking. Other theoretical linguists who have addressed this topic include Kayne (1989), Ura (1993), Bošković (1997), Richards (1997), Sportiche (1998), Déprez (1998) and Belletti (2006). At the same time, the phenomenon in question looks very much like a prescriptive artefact. It is optional in speech and is in effect forbidden in all but the most carefully self-monitored registers (Campbell 2008: 2), being in any case expressible phonologically in only a small minority of verbs (1.24% of all verbs according to Tanase [1976]). For most French speakers, in fact, it is primarily a component of orthographical competence, with mastery of even basic aspects of the paradigm often being delayed until secondary schooling or beyond (Brissaud 1999). From a diachronic perspective, moreover, participle–object agreement in modern French does not reflect undisturbed language change, but stems from an arbitrary codification of variable usage introduced by the poet Clément Marot in the sixteenth century, which subsequently became a normative *cause célèbre* (see Smith [1993] for a good overview). In modern times, it was Kayne (1989) who first mined this area of French grammar for theory-friendly data, but even he was initially sceptical about its empirical significance, stating in his *French Syntax* that ‘past participle agreement with *avoir* [the auxiliary used for transitive verbs] in French is permeated with a great deal of artificiality [...] and so is difficult to draw conclusions from’ (Kayne 1975: 101, n. 55).

It is Kayne’s initial instincts rather than his later ones that have more in common with thinking among those who have a practical connection with French usage, viz. educators, policymakers and descriptive grammarians. As early as 1900, for example, Georges Leygues, the French Minister for Public Instruction stated in a governmental *arrêté* that ‘il paraît inutile de s’obstiner à maintenir artificiellement une règle qui n’est qu’une cause d’embarras dans

l'enseignement' (cited Arrivé 1994: 71–72) ['it seems pointless to insist on the artificial maintenance of a rule that is merely an impediment to learning']. And Grevisse, probably the most celebrated of all the modern Francophone grammarians, describes participle–object agreement as 'passablement artificiel' ['rather artificial'] (Grevisse 1986: 1369). It goes without saying, of course, that generations of foreign learners of French have found the whole paraphernalia of *avoir*-related participial agreement to be both mystifying and problematic.

The key question, then, is who has the more accurate perspective? Are the theoreticians right to argue that participle–object agreement in French casts light on important aspects of the human language faculty, or is the phenomenon nothing more than received pedantry, analogous in spirit if not in form to the prohibition on split infinitives in English? Hitherto that question has not been capable of being answered in a systematic fashion, given that no framework has existed for formally assessing the extent to which a given phenomenon does or does not belong to language in the narrow sense. However, the last decade and a half has seen the emergence of a research paradigm, known as Virus Theory (Sobin 1997, Lasnik and Sobin 2000, Sundquist 2011), that is dedicated to the identification and analysis of the by-products of language pedagogy and other normative inputs. Drawing on this research, the present article attempts to show that participle–object agreement in French is a virus, in the favoured sense, and hence has little to say directly about the human language faculty (although it presumably is of some considerable significance from a sociocultural or anthropological perspective). The structure of the proposal is as follows. Section 1 contains a brief synopsis of the basic properties of grammatical viruses. In Section 2, it is shown that French participle–object agreement exhibits these properties and hence has the profile of a virus. Section 3 addresses the issue of what goes on in speakers' minds when they produce participle–object agreement. And concluding remarks are given in Section 4.

1. Brief anatomy of a virus

Broadly speaking, competence in a standardized language is the product of two distinct processes: unconscious ‘language acquisition’, which takes place most obviously in the home setting, and pedagogically induced ‘language learning’, associated typically with schooling. In many cases, language pedagogy consolidates or enriches the effects of acquisition, but at times the two conflict. An obvious example would be teaching that encourages the editing of spontaneous formulations like *Me and Jack want to play on the X-Box* towards normatively validated or ‘prestige’ patterns such as *Jack and I want to play on the X-Box*. Without necessarily going as far as Chomsky, who characterizes the artefacts of language pedagogy as a ‘violation of natural law’ (quoted in Olson and Faigley 1991: 30), it is plausible to regard such inputs as ‘grammatically deviant’ (Emonds 1986) within the context of the system acquired through basic acquisition. For example, while language pedagogy has sanctioned subjects specifically of the form ‘NP *and I*’, the sharply degraded acceptability of analogous formulations involving other nominative pronouns (cf. ‘NP *and she*’, ‘NP *and we*’ etc.) points to a system that in general disallows nominative Case immediately after a conjunction. From that perspective, ‘NP *and I*’ subjects are anomalous within the basic grammatical patterns of English, although they do conform to a naïve interpretation of the principle that subjects take nominative Case.

The grammar of a standardized language is thus heterogeneous, in that it comprises both generalized rules acquired through normal acquisition and highly specific pseudo-rules that are picked up at school or through contact with speakers who themselves have learned the relevant pseudo-rule. Virus Theory (Sobin 1997, 2009; Lasnik and Sobin 2000) captures this duality by positing the existence of parasitic rules or ‘viruses’ that colonize the basic grammar and manipulate its output. Sobin gives the following definition: ‘The particular rules that

facilitate [...] editing toward prestige constructions are called *grammatical viruses* [...] A grammatical virus is a device that can read grammatical structure and affect it, though it is grammar-external. A virus is parasitic on a grammar, and [...] it facilitates the construction of prestige forms' (Sobin 1997: 319).

According to Lasnik and Sobin (2000: 366), viruses exhibit the following signature properties:

- (i) lexical specificity
- (ii) directionality (i.e. sensitivity to a particular linear order)
- (iii) under-extension
- (iv) over-extension
- (v) late internalization¹

Property (i) was in fact illustrated at the beginning of this section, where it was observed that nominative Case assignment after a conjunction extends poorly to pronouns other than *I*. Conversely, property (ii) is illustrated by the poor acceptability of '*I and NP*' formulations, such as (3) below:

- (3) ?*I and Peter have got divorced.*

Restrictions such as these prompted Sobin (1997) to posit an '*. . . and I*' virus, for which more

¹ They in fact express this in terms of late acquisition. In view of the distinction drawn in this article between acquisition and learning, the more neutral term 'late internalization' is preferred as the label for this property.

detailed quantitative acceptability data can be found in Quattlebaum (1994). The ‘. . . and I’ virus can also be used to exemplify over-extension (property [iv]), manifested in hypercorrections such as *She wants to speak to Lesley and I*, together with late internalization (property [v]), given that nominative conjuncts are known to be an artefact of schooling rather than normal language acquisition. As regards property (iii), under-extension, this can be illustrated using the example of the English accusative pronoun *whom*, which Lasnik and Sobin (2000) treat as being virally licensed. For while the copula in English is known to select an accusative complement (cf. *It was me/her/us*), formulations such as *Whom was it?* do not seem to occur, even in the most carefully monitored registers. Usage of *whom* thus fails to extend to all the contexts in which one might reasonably expect to encounter this item.

We thus have five criteria for identifying grammatical viruses. Using these, we can now look in more detail at participle–object agreement in French.

2. A viral profile for French participle–object agreement

2.1. Lexical specificity and directionality

Looking first at properties (i) and (ii), these are rather clearly enshrined in the normative rule that is associated with participle–object agreement in French. Here I cite Grevisse’s formulation (1986: 1368), which is very typical of the pedagogical tradition: ‘le participe passé conjugué avec *avoir* s’accorde en genre et en nombre avec son objet direct quand cet objet le précède’ [‘the past participle conjugated with *avoir* agrees in gender and number with its object when this object precedes it’]. Notice first of all that reference is made specifically to the verb *avoir*, which reflects the way the phenomenon is typically conceptualized (e.g. in

schools or remedial manuals). In fact, participle–object agreement is possible in contexts that require auxiliary *être*, as in (4) below (which illustrates the principle that reflexives invariably select *être* in the perfect):

- (4) les lettres qu’il s’est écrites
 ‘the letters that he has written to himself’

However, *être*-related agreement in otherwise transitive constructions such as (4) is typically viewed as an analogical extension of the *avoir* paradigm. That perspective is apparent, for example, in Grevisse’s (1986: 1378) observation that ‘[q]uoique les verbes pronominaux se conjuguent avec l’auxiliaire *être*, ils peuvent être transitifs et assimilables aux verbes conjugués avec *avoir*’ [‘although reflexive verbs select *être*, they can be transitive and assimilable to the verbs that select *avoir*’]. French participle–object agreement is thus saliently linked to the verb *avoir*, endowing the associated rule with precisely the kind of lexical specificity that is known to be characteristic of viruses. Presumably such specificity gives speakers a concrete element on which to hang the complex abstract structure that the virus rule comprises, thus facilitating the latter’s maintenance through language pedagogy. The key point for present purposes, however, is that participle–object agreement is for French speakers an idiosyncrasy of the auxiliary *avoir* rather than a general feature of their native language.

The second thing to note about the basic normative rule is that it explicitly requires the object to precede the verb, meaning that rightwards agreement with a post-verbal object is completely ruled out. A more striking case of directionality is difficult to imagine! Notwithstanding this, under previous versions of the Generative syntactic model it was

argued that the absence of rightwards participial agreement in French was in fact predictable from general principles, under the assumption that items like subjects and objects had to move leftwards into the ‘checking domain’ of the verb with which they agreed (see Kayne 1989, Chomsky 1995 and Belletti 2006). However, the more recent ‘Agree’ framework of Chomsky (2001) abandons the concept of checking domain and assumes agreement between a verb and a post-verbal object to be entirely possible. Indeed, examples instantiating exactly this are attested in several Romance varieties (see Kayne 1989: 95). Thus the leftwards directionality of French participle–object agreement does not appear to be a syntactic necessity, even within the highly restrictive framework of Generative Grammar.

2.2. Under-extension and over-extension

Turning now to criteria/properties (iii) and (iv), we need first to define the expected limits of French participle–object agreement. This will enable us to see whether the phenomenon undershoots or overshoots its expected domain of application.

As observed in 2.1, participle–object agreement in French exhibits a categorical leftwards directionality. This implies it is related to syntactic movement, in the sense that the surface position of the object is to the left of the participle whereas its ‘base position’ (the position corresponding to its syntactic role in the sentence) is to the verb’s right. An important constraint on this principle is identified by Chomsky (1995: 325), who observes that a participle in a matrix clause does not agree with an object that has been moved out of an embedded finite clause. For example, sentence (5) below would be regarded as incorrect, owing to the agreement manifested between the participle *dite* and the feminine *wh*-phrase *quelle femme*. This configuration is ineligible for agreement because *quelle femme* has been

extracted from the lower clause *qu'il veut épouser*: informally, we can say that *quelle femme* is the object of *épouser*.

(5) *Quelle femme ai-je dite qu'il veut épouser?

'Which woman did I say he wants to marry?'

The unavailability of agreement in examples like (5) has a rather technical explanation in the theoretical literature, based on the so-called Improper Movement constraint (Belletti 2006) or, more recently, the Inaccessibility Condition of Radford and Vincent (2007: 146). Little would be gained by exploring these in detail in the present context. Suffice it to say, however, that a case can be made to the effect that the restriction illustrated by (5) is natural and predictable from general syntactic principles.²

A more dubious restriction is shown in (6) below, which is reconstructed from a normatively 'correct' example from Gide cited by Grevisse (1986: 1371):

² It is also indirectly anticipated in Grevisse's formulation of the normative rule cited at the beginning of 2.1. There, it will be recalled, the agreement-triggering object is identified explicitly as the participle's object (*son object direct*) and it is impossible for an object in a finite subordinate clause to be the object of a verb in the matrix clause. However, a characterization along those lines can only be an approximation to the underlying syntactic mechanism, because the notion of 'being the participle's object' is fundamentally semantic rather than syntactic. This latter issue is explored in more detail in Section 3.

(6) *mes résolutions (car j'en avais prises)

'my resolutions (for I had made some)'

The point here is that, according to the standard canon, participial agreement is not possible in respect of the partitive clitic *en*. Arguably this constraint is an instance of under-extension, given that there is no obvious general principle that would account for it (Italian, for example, allows participial agreement in respect of its own partitive clitic *ne*). On the other hand, Belletti (2006) views it as a manifestation of parametrization, the phenomenon whereby general principles may have partially different instantiations across distinct languages. I leave this issue open and simply accept the constraint at face value, characterizing it in terms of a requirement for the object to have structural accusative Case (rather than, say, inherent/partitive Case).³ Accordingly, a basic generalization for French participle–object agreement can be formulated as follows:

³ This would, coincidentally, account for the prohibition on agreement in impersonal constructions, illustrated in the following example (from Grevisse): 'Pour avoir une Phèdre parfaite, il l'aurait fallu écrite par Racine sur le plan de Pradon' (1986: 1373) ['To have a perfect version of Phèdre, it would need to have been written by Racine in the manner of Pradon']. The *l* of *l'aurait* in the foregoing example is an abbreviated form of the accusative fem. sing. pronoun *la*. Accordingly, agreement on the past participle *fallu* (giving *fallue*) might be expected to be possible, whereas in fact it is prohibited (Grevisse [1986: 1373–374]). As Belletti (2006) notes, however, impersonal verbs like *falloir* are unaccusative and hence do not assign structural accusative case. Thus the *l*[*a*] in the above Phèdre example must be an inherent accusative rather than a structural accusative.

- (7) A transitive perfective participle optionally agrees with a moved accusative object to its left provided the latter has not crossed a finite clausal boundary.⁴

We can use (7) to see how the phenomenon both under-extends and over-extends.

Looking first at under-extension, I want to highlight two cases, both involving infinitival complements. The first concerns verbs in the *dire*-class, which broadly includes verbs of saying, believing, knowing, determining etc. With such verbs, Standard French allows participial agreement in object–complement structures but disallows it in infinitival constructions (see Grevisse 1986: 1374–377). This is reflected in a famous contrast first noticed by Ruwet (1982: 150):

- (8) une femme qu'on a dite belle
 'a woman who has been called beautiful'

⁴ As a referee correctly observes, the sentence *Quelle femme as-tu dit qu'il a voulue?* ['Which woman did you say he wanted?'] exhibits participle–object agreement (*voulue*, as opposed to *voulue*) and yet the object *quelle femme* has moved across a finite clausal boundary, apparently contradicting the generalization in (7). According to Chomsky, however, *wh*-movement leaves phonologically null copies (previously called traces) of the moved *wh*-expression at various places in clause structure, including the left periphery of the verb phrase: *Quelle femme as-tu dit qu'il a ~~quelle femme~~ voulue?* As can be seen, the null phrase ~~*quelle femme*~~ has not itself crossed the clausal boundary. Thus if 'moved accusative object' in (7) is understood to include both overtly pronounced and phonologically null copies of the object, the generalization extends to this type of example as well.

- (9) *une femme qu'on a dite ne pas être belle
 'a woman who has been said not to be beautiful'

Agreement on the matrix participle *dite* is possible in (8) because the complement of this item is a 'small' or verbless clause, whereas such agreement is ruled out in (9) because the complement is an infinitival clause. At first glance, the contrast between (8) and (9) does not seem to be predicted by generalization (7), in that the agreement-triggering item (the relative pronoun) does not cross a finite clausal boundary in either example. However, in an influential paper Kayne (1981: 358) has proposed that infinitival clauses embedded under verbs like *dire* are 'full clauses', meaning that, despite their non-finiteness, they are in fact *structurally equivalent* to finite subordinate clauses. This analysis has been enthusiastically taken up by linguists who have analysed French past participle agreement (see e.g. Belletti 2006; Radford and Vincent 2007), effectively because it makes the contrast between (8) and (9) follow from generalization (7).⁵

However, in a long footnote to the same paper (1981: 361, n. 16), Kayne concedes that a subset of *dire*-type verbs can, through analogy with verbs like *laisser*, *voir* and *entendre*, take an infinitival complement that does not have the status of a full clause. Though Kayne sees this possibility as marginal, it is in fact reasonably well attested, particularly with *dire* itself. A widely recognized test for diagnosing whether a subordinate clause is a full clause or not is to see whether its subject can be passivized and raised to the subject position in the matrix

⁵ Note the presence of the qualifier 'effectively': I am not by any means claiming that these linguists would phrase things as I have done.

clause: full clauses disallow this operation but defective (i.e. non-full) clauses allow it. For example, whereas infinitival subjects embedded under so-called Exceptional Case Marking (ECM) verbs like English *believe* can be so raised, subjects of finite subordinate clauses cannot:

(10) Jones is believed to have left the country.

(11) *Jones is believed that left the country.

On this basis, it can be concluded that ECM infinitival complements are defective (i.e. not full clauses). Using the same test, it can be shown that the infinitival complement of a French *dire*-type can be defective too. Consider the examples below, which relate to three *dire*-type verbs, viz. *dire*, *estimer* and *déclarer*:

(12) Ces systèmes périphériques . . . *sont dits être* des modules.

‘These peripheral systems are said to be modules.’

(Ducrot and Schaeffer 1995: 291; cited in Veland 1998: 108)

(13) dix à quarante pour cent des bombardiers russes alors en service *étaient estimés avoir* la possibilité d’atteindre leur objectif

‘10 to 40 per cent of Russian bombers then in service were estimated to have the capability to reach their objective’ (Billotte 1957: 4204)⁶

⁶ This example, together with (25) and (26), were retrieved using Base textuelle FRANTEXT, <http://www.frantext.fr/> (Accessed 14 February 2013).

(14) Kasab, de nationalité pakistanaise, *a été déclaré être* l'un des deux auteurs du carnage à la gare, qui a fait 52 morts. (*Le Monde*, 29 July 2011)

'Kasab, of Pakistani nationality, has been declared to be one of the two authors of the carnage at the station, which killed 52.'

In each of the above examples, the subject of the infinitival complement of the *dire*-type verb has been passivized and raised to the subject position in the corresponding matrix clause. As just noted, passive subject raising out of a subordinate full clause is assumed to be impossible. Accordingly, (12) to (14) demonstrate that the infinitival complement of a *dire*-type verb need not have the status of a full clause. This in turn means that participial agreement in a case like (9) would not necessarily be at variance with generalization (7). Indeed, if Kayne's footnote alluded to earlier is correct and the infinitival complements of *dire*-type verbs sometimes are full clauses and sometimes are not, one would expect systematic variation in the availability of past participle agreement in such cases. That agreement is *never* available (at least not according to the conventions of the modern standard language) must thus be reckoned an instance of under-extension.

A second case of under-extension relates to infinitival complements in restructuring constructions, where the main and subordinate verbs form a single complex predicate, as in the two examples below:

(15) Je les ai fait vendre.

'I had them sold off.'

(16) Je les ai laissé voir.

‘I let them be seen.’

Here, given that the matrix verb and the infinitive are regarded as forming a single unit, one would expect the subordinate infinitival complement not to have the status of a full clause. That prediction is borne out by the fact that, as (15) and (16) in fact show, a clitic object can be extracted from inside the infinitival complement and raised to the matrix clause. The relevance of this is that clitic dependencies are known to be incapable of crossing a full clausal boundary: thus (15) and (16) must involve just a single full clause. Accordingly, generalization (7) does not predict that agreement will be impossible in cases like (15) and (16). However, the conventions of modern Standard French disallow agreement in such contexts – thus the default third-person singular morphology/spelling exhibited by the participles in (15) and (16) is mandatory.

Interestingly, Radford and Vincent (2007: 155-57) attribute the obligatory non-agreement in the (15) and (16) type of case to a virus that is specific to the verbs *faire* and *laisser*. On one level, this makes sense, given that these two verbs are subject to a blanket rule that disallows agreement whenever there is a following infinitive (for *faire*, see Grevisse [1986: 1376] and for *laisser*, see Conseil supérieur de la langue française [1990: 13]). However, there are a host of other verbs that can have restructuring occurrences like *faire* and *laisser* in (15) and (16), and matrix participial agreement is prohibited in their case as well. The examples below are based on Grevisse (1986: 1375–376).

(17) *Ces arbres, je les ai vus abattre.

‘Those trees, I saw them be felled.’

(18) *les airs que j'ai entendus jouer

'the tunes that I heard being played'

(19) *les brebis qu'on a menées égorger

'the ewes that were led away to be slaughtered'

(20) *Je les ai envoyés chercher.

'I have ordered them to be looked for.'

Agreement here should be possible, given that in each case there is just one full clause. The latter fact is evidenced by the fully acceptable extraction of the clitic *les* from inside the infinitival complement in (17) and (20), an operation that can be replicated for the other two examples: *je les ai entendu(*s) jouer* ['I heard them being played'] and *on les a mené(*es) égorger* ['They were led away to be slaughtered'].

Unlike in the case of *faire* and *laisser*, the puzzling unavailability of agreement in (17) to (20) obeys a rule of sorts, but not one that follows from any general principle of syntax. Thus agreement becomes possible if the infinitival clause has an active interpretation rather than a passive one as in the examples above. This is illustrated in (21) to (24) below (from Grevisse 1986: 1375).

(21) Je les ai vus partir comme trois hirondelles.

'I saw them depart like three swallows.'

- (22) les violonistes que j'ai entendus jouer
 'the violinists that I heard playing'
- (23) des chèvres que j'aurais menées brouter dans les buissons
 'some goats that I would have led away to graze in the bushes'
- (24) des hommes que l'on avait envoyés combattre
 'some men that had been sent off to fight'

However the passive–active alternation is analysed, there is no obvious reason why it should affect agreement, given that in both cases the infinitival complement freely allows clitic extraction and should therefore be analysed as being defective (i.e. not a full clause). Thus the prohibition illustrated by (17) to (20) appears to be syntactically arbitrary, diagnosing a built-in propensity for French participle–object agreement to under-extend. The cases of *faire* and *laisser* are salient instances of this but the problem, as we have seen, is much more generalized.

Turning now to over-extension (signature property [iv]), this really amounts to hypercorrection, in that the latter can be defined as 'the extension of some rule or principle, on the basis of a misunderstanding of its domain of application, to a range of phenomena to which, originally, it did not apply' (Lyons 1981: 51). With that in mind, consider examples such as the following, where past participle agreement is made in respect of the partitive clitic *en*, in violation of the constraint that excludes that possibility:

(25) – C’était pas des vacances. –Toi tu n’en as pas prises. (Queneau 1951: 166)

‘Those weren’t holidays.’ ‘You, you haven’t taken any.’

(26) Mais des réformes comme tu en as entreprises, Seigneur! (Grèce 1982: 320)

‘But reforms such as you have undertaken, sire!’

Grevisse (1986: 1371) highlights this type of case as a common divergence from received usage. Plausibly, then, it can be regarded as a relatively productive pattern of hypercorrection/over-extension, comparable, for example, to post-verbal and post-prepositional ‘... *and I*’ in English.

The foregoing remarks should not be understood as implying that participial agreement in respect of a partitive clitic is syntactically unnatural. Clearly this is not the case, as Italian, for example, systematically allows such agreement (see Belletti 2006). The relevant point is that, in Lasnik and Sobin’s words (2000: 352), viruses ‘may apply to structures that they were not “intended” to affect, resulting in hypercorrection’. In the present case, the class of structures in which participial agreement is ‘intended’ to be available excludes those in which the object is partitive rather than accusative. Thus, while agreement with such an object may in fact be perfectly natural from the point of view of syntactic theory, the implementation of such agreement in French constitutes an overshooting of the normative target, and it is in this sense that over-extension can be said to occur.

2.3 Late internalization

Finally, it seems likely that participle–object agreement in French is internalized late, if at all. Given that (i) it is associated primarily with formal registers and (ii) it is in most cases expressible only orthographically, one would not expect it to be more than a marginal input to early grammar construction. Such is the conjecture of Müller et al. (2006: 92), for example. However, there are few studies that provide empirical confirmation of this. Pirvulescu and Belzil (2008) provide data for French Canadian children, reporting that participial–object agreement is marginal in early grammar in the variety they examine, but there appears to be no similar study for European French. On the other hand, Brissaud (1999) reports that high-school children in Grenoble exhibit persistent orthographic difficulties stemming from *avoir*-related participial agreement, a finding which is coherent with the assumption that the relevant syntactic mechanism is not successfully acquired in infancy. It is also the case, as is noted in Campbell (2008), that there exist numerous websites and manuals that provide remedial tutoring in this area of grammar. Prima facie, this should not be needed if the underlying syntax is acquired in the normal way (cf. Chomsky’s remark ‘You don’t have to teach people their native language because it grows in their minds’, cited in Olson and Faigley [1991: 30]).

3. How is transitive past participle agreement generated?

The discussion in the previous section indicates that French participle–object agreement has the five signature properties of viruses highlighted in Lasnik and Sobin (2000). It is saliently linked to the auxiliary verb *avoir*, extending analogically in certain instances to *être*, and hence is lexically specific. It requires a particular linear word order and hence is directionally specific.

It exhibits syntactically arbitrary gaps in its distribution and hence under-extends. Speakers apply the rule to structures that are outside its intended domain of application, implying that it over-extends. And, as we have just seen, there is evidence that the rule is assimilated outside of the normal acquisition process. All of this, taken in conjunction with the status of the phenomenon as a cultural institution and normative shibboleth in the French-speaking world, constitutes quite a compelling case for viewing it as viral in nature.

An interesting question that such an analysis raises is what actually takes place in speakers' minds when they produce agreeing past participles in transitive structures. In other words, if the relevant outputs are indeed deviant, what component of the generative machine is responsible for them and what operations are involved?

As regards the first of these questions, Lasnik and Sobin (2000: 355) and Sobin (2009: 32, 52) have identified the working space for viruses as 'spellout', the component of the grammar that assigns phonetic form to abstract linguistic structures generated by the strictly syntactic component. An interesting coincidence in that regard is that D'Alessandro and Roberts (2008) have independently come to the conclusion that participle–object agreement paradigm in Standard Italian is a reflex of the general way in which clauses are spelled out. Their argument is that the leftwards agreement pattern found in Standard Italian results from the operation of Chomsky's Phase Impenetrability Condition (PIC), which holds that clauses are spelled out in discrete units, based on what Chomsky terms 'phases'. According to the PIC, a verb and an object to its right belong to distinct spellout units, and hence are spelled out on distinct cycles, whereas a verb and an object to its left belong to the same unit and hence are spelled out on the same cycle. D'Alessandro and Roberts propose that overt past participle agreement – and indeed overt agreement generally – requires the agreeing items to be spelled out on the same cycle. Thus both the Sobin–Lasnik view concerning viruses in general and D'Alessandro and

Roberts's more specific finding concerning (Italian) past participle agreement appear to point in the same direction, viz. that spellout is the likely host for any viral rule to which French participle–object agreement can be attributed.⁷

French speakers who produce agreeing transitive past participles can thus be characterized as having an additional spellout rule, internalized through language pedagogy, which other French speakers lack. In broad terms, this rule can be envisaged as making available the option to give overt phonetic expression to an abstract structural relation that would otherwise lack any surface reflex. In effect, then, the rule of the preceding direct object is a pronunciation rule rather than a rule of syntax.

Turning to the issue of the specific operations involved, the null hypothesis would be that D'Alessandro and Roberts's analysis in terms of spellout cycles also holds good, in broad terms, for French. Thus the familiar requirement that the direct object must be a 'preceding' one can be regarded as a reflex of the constraint that the participle only agrees with an object if the two items are spelled out on the same cycle. This would account straightforwardly for the exclusion of overt agreement with an unmoved object (i.e. one to the verb's right).

⁷ Note that the remarks in the text are not intended to imply that Italian transitive past participle agreement is viral (although this is not ruled out). The phenomenon is in fact much more firmly grounded than its French counterpart, in that it is normal in speech and speakers internalize the rule from an early age. Moreover, there are fewer inconsistencies of the sort highlighted in Section 2 of the present article.

However, French speakers whose language exhibits the relevant agreement also appear to have internalized the normative precept that the agreeing object must be the *participe's* object (see also note 2), and it is arguably this that bears the primary responsibility for the exceedingly fine-grained nature of the full normative agreement paradigm. For whether a given object can be regarded as being the object specifically 'of' a particular verb is fundamentally a semantic concept, in that it relates to the assignment of thematic roles such as 'agent' and 'patient'. Therefore it is not a question that has any bearing on purely structural relations, which are assumed to include agreement in the abstract sense (as in the 'Agree' system of Chomsky [2001], for example). Replication of the normative paradigm for transitive participle agreement thus presupposes an operation involving the application of semantic criteria in a domain to which such criteria are extraneous, an operation which appears doomed to result in a deviant output. Indeed, an oblique recognition of this can be detected in certain problems that Grevisse highlights (1986: 1376–377) in terms of determining whether a given object should or should not be regarded as the participle's object (and hence as eligible for agreement).

Notice that the foregoing account distinguishes between abstract agreement, which holds whenever a given structural condition is satisfied, and the overt marking of agreement, which (if D'Alessandro and Roberts are correct) only arises when the agreeing items are spelled out on the same cycle. As noted in the Introduction, however, the majority of verbs in modern French have phonologically *invariant* past participles, meaning there can be no overt manifestation of agreement at the spoken level. In those cases, the purely orthographic marking of agreement must be taken as a proxy for true morphophonological agreement, in the sense that it evidences speakers' knowledge that the relevant type of case is one in which overt agreement would be possible if the participle had a rich enough morphology.

To sum this section up: speakers who produce agreeing transitive perfective participles apply a spellout rule that translates abstract agreement into overt agreement, provided the participle and the object are in the same unit for spellout purposes. However, extraneous semantic criteria conspire to exclude certain legitimate agreement structures from being overtly spelled out as such, resulting in a paradigm that is characterized by under-extension. In cases in which participle–object agreement is purely orthographical, the virus can be assumed to rely on speakers’ ability to analogize from cases in which the agreement is manifested phonetically.

4. Conclusion

The purpose of this paper has been to explore whether participle–object agreement in French can be regarded as a further example of a linguistic virus, as the latter construct has been defined in recent years. The evidence presented strongly suggests that this aspect of traditional French grammar can indeed be so regarded. This is a significant result, for several reasons. Firstly, the inclusion of French participle–object agreement among the stock of recognized viruses provides for a sharper perception of the nature of these deviant linguistic rules and, together with other non-English phenomena (see e.g. Sundquist 2011), broadens the cross-linguistic basis for the associated research programme. Secondly, technical recognition of the asystemic nature of this particular agreement paradigm may be helpful in terms of providing a more rational framework in which to examine the pedagogical merits of enforcing it through schooling. And thirdly, acceptance of the viral status of French participle–object agreement would curb its use in theory construction and so limit the impact within academic linguistics of what now appears to be an empirical red herring.

References

- Arrivé, Michel (1994) 'Un débat sans mémoire: la querelle de l'orthographe en France (1893-1991)', *Langages* 114, 69–83.
- Belletti, Adriana (2006) '(Past) participle agreement', in *The Blackwell companion to syntax vol III*, ed. Martin Everaert and Henk Van Riemsdijk (London/New York: Blackwell), 493–521.
- Billotte, Pierre (1957) *Considérations stratégiques* (Paris: Société nouvelle de l'Encyclopédie française).
- Bošković, Željko (1997) 'On certain violations of the superiority condition, AgrO and economy of derivation', *Journal of Linguistics* 33, 227–54.
- Brissaud, Catherine (1999) 'La réalisation de l'accord du participe passé employé avec *avoir*. De l'influence de quelques variables linguistiques et sociales', *Langage et société* 88, 5–24.
- Campbell, John (2008) 'Sarkozy and the past participle: *accord . . . ou pas d'accord?*', *French Studies Bulletin* 29.1, no. 106. <http://fsb.oxfordjournals.org/> (accessed 27 February 2010).
- Chomsky, Noam (1995) *The Minimalist Program* (Cambridge, MA: MIT Press).
- Chomsky, Noam (2001) 'Derivation by Phase', in *Ken Hale: a life in language*, ed. Michael Kenstowicz (Cambridge, MA: MIT Press), 1–52.
- Chomsky, Noam (2008) 'On Phases', in *Foundational issues in linguistic theory*, ed. Robert Freidin, Carlos Otero and María Luisa Zubizarreta (Cambridge, MA: MIT Press), 133–66.
- Conseil supérieur de la langue française (1990) 'Les rectifications de l'orthographe (Rapport)', *Journal officiel de la République Française, édition des documents administratifs* 100 (December), 7–18.
- D'Alessandro, Roberta and Ian Roberts (2008) 'Movement and Agreement in Italian past participles and defective phases', *Linguistic Inquiry* 39, 477–91.

- Déprez, Viviane (1998) 'Semantic effects of agreement: the case of French past participle agreement', *Probus* 10, 1–65.
- Ducrot, Oswald and Jean-Marie Schaeffer (1995) *Nouveau dictionnaire encyclopédique de sciences du langage* (Paris: Larousse).
- Emonds, Joseph E (1986) 'Grammatically deviant prestige constructions', in *Festschrift for Sol Saporta*, ed. Michael Brame, Heles Contreras and Frederick J. Newmeyer (Seattle: Noit Amrofer), 93–129.
- Grèce, Michel De (1982) *La Nuit du sérail* (Paris: Gallimard).
- Grevisse, Maurice (1986) *Le bon usage*, 12th edn by André Goose (Paris: Duculot).
- Kayne, Richard S. (1975) *French syntax: the transformational cycle* (Cambridge, MA: MIT Press).
- Kayne, Richard S. (1981) 'On certain differences between French and English', *Linguistic Inquiry* 12, 349–371.
- Kayne, Richard S. (1989) 'Facets of Romance past participle agreement', in *Dialect variation and the theory of grammar*, ed. Paola Benincà (Dordrecht: Foris), 85–103.
- Lasnik, Howard and Nicholas Sobin (2000) 'The *who/whom* puzzle: on the preservation of an archaic feature', *Natural Language and Linguistic Theory* 18, 343–71.
- Lyons, John (1981) *Language and linguistics* (Cambridge: Cambridge University Press).
- Milroy, James (2001) 'Language ideologies and the consequences of standardization', *Journal of sociolinguistics* 5.4, 530–55.
- Müller, Natasha, Katrine Schmitz, Katja Cantone and Tanja Kupisch (2006) 'Null arguments in monolingual children: a comparison of Italian and French', in *The acquisition of syntax in Romance languages*, ed. Vicent Torres and Linda Escobar (Amsterdam: John Benjamins), 69–93.

- Olson, Gary A. and Lester Faigley (1991) 'Language, politics and composition: a conversation with Noam Chomsky', *Journal of Advanced Composition* 11, 1–35.
- Pirvulescu, Mihaela and Isabelle Belzil (2008) 'The acquisition of past participle agreement in Québec French L1', *Language acquisition* 15, 75–88.
- Quattlebaum, Judith A. (1994) 'A study of Case assignment in coordinate noun phrases', *Language Quarterly* 32, 131–47.
- Queneau, Raymond (1951) *Le dimanche de la vie* (Paris: Gallimard).
- Radford, Andrew and Michele Vincent (2007) 'On past participle agreement in transitive clauses in French', in *Proceedings of the XXXIII Incontro di grammatica generativa, Bologna, March 1–3, 2007*, ed. Antonietta Bisetto and Francesco E. Barbieri (Bologna: Università di Bologna), 140–61.
- Richards, Norvin (1997) What moves where when in which language? PhD diss. MIT.
- Ruwet, Nicolas (1982) *Grammaire des insultes et autres études* (Paris: Seuil).
- Smith, John Charles (1993) 'The agreement of the past participle conjugated with *avoir* and a preceding direct object – a brief history of prescriptive attitudes', in *Authority and the French language. Papers from a conference at the University of Bristol*, ed. Rodney Sampson (Münster: Nodus), 87–125.
- Sobin, Nicholas (1997) 'Agreement, default rules, and grammatical viruses', *Linguistic Inquiry* 28, 318–43.
- Sobin, Nicholas (2009) 'Prestige Case forms and the Comp-trace effect', *Syntax* 12, 32–59.
- Sportiche, Dominique (1998) *Partitions and atoms of clause structure: subjects, agreement, case and clitics* (Abingdon: Routledge).
- Sundquist, John D. (2011) 'Negative movement in the history of Norwegian: the evolution of a grammatical virus', in *Grammatical change: origins, nature, outcomes*, ed. Diane Jonas,

John Whitman and Andrew Garrett (Oxford: Oxford University Press), 293–312.

Tanase, Eugène (1976) 'L'accord du participe passé dans le français oral', in *Actes du XIIIe Congrès international de linguistique et philologie romanes: tenu à l'Université Laval (Québec, Canada) du 29 août au 5 septembre 1971*, ed. Marcel Boudreault and Frankwalt Möhren (Québec: Presses de l'Université Laval), 475–82.

Ura, Hiroyuki (1993) 'On feature-checking for *wh*-traces', *MIT Working Papers in Linguistics* 18, 243–80.

Veland, Reidar (1998) 'Une construction dite ne pas exister en français moderne: le passif suivi d'un infinitif nu', *Journal of French language studies* 8, 97–113.