

French double Agents: a force-theoretic account of *de* and *par*

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In French passives, there is a contrast between Agents that are introduced by the preposition *par* ‘by, via’ and those that are introduced by *de* ‘from’. In the sentences in (1), *par* is the only option, while the sentences in (2) allow for an alternation between *par* and *de*, and those in (3) allow only *de*.

- (1) a. *Le chien est lavé par/ *de Marie.* (Straub 1974: 584)
‘The dog is washed by Mary.’
b. *La fenêtre a été brisée par/ *d’ un rocher.* (Straub 1974: 584)
‘The window has been broken by a rock.’
- (2) a. *Le professeur était respecté par/ de ses élèves.* (Straub 1974: 585)
‘The professor was respected by his students.’
b. *Le garçon est adoré par le/ du grand-père.* (Clédat 1900: 223)
‘The boy is loved by his grandfather.’
- (3) a. *Le mois de février est précédé du/ *par le mois de janvier.* (Straub 1974: 591)
‘The month of February is preceded by the month of January.’
b. *Le dernier chapitre est suivi d’/ *par une table des matières.*
‘The last chapter is followed by a table of contents.’

It is generally agreed that passive Agents in French are by default introduced by *par* ‘by, via’, while the conditions on the use of Agentive *de* ‘from’ are more intricate and elusive. This distinction has been analysed in terms of style (*de* being more formal than *par*; e.g. Gougenheim 1938: 307) and Aktionsart (*de* only being used with stative verbs, e.g. Zumthor & von Wartburg 1947: 297). However, careful description shows that these analyses cannot account for all cases (Gaetone 1998). Straub (1974) provides the most complete descriptive generalisations so far:

- (4) a. The Agent of a verb that brings about a change is always marked by *par* (cf. (1)).
b. Verbs denoting states with animate Agents can be marked by both *de* and *par* (cf. (2)).
c. Verbs denoting states with inanimate Agents always take *de*. (cf. (3))

Generalization (4c) is too restrictive: many examples can be found online of *précédé/ suivi par* ‘preceded/ followed by’ in the relevant context, contradicting the judgments in (3). Generalization (4b) is not restrictive enough: *de* is not always allowed with verbs that do not involve change of state. This is shown by the contrasts in (5-6):

- (5) a. *Les étudiantes sont accompagnées par/de leurs familles.* (after Gaetone 1998: 200)
‘The students are accompanied by their families.’
b. *Le détenu est accompagné par le/*du policier.*
‘The prisoner is accompanied by the policeman.’
- (6) a. *La rock star est toujours suivie d’/ par une foule d’admirateurs.* (Straub 1974a: 25)
‘The rock star is always followed by a crowd of admirers.’
b. *Le criminel a été suivi par le / *du détective.* (after Gaetone 1998: 203)
‘The criminal has been followed by the detective.’

We propose a formalization of the semantics of *de* and *par* that both simplifies and derives the generalizations in (4), while also capturing the contrast in (5-6). The intuition is as follows. When a prisoner is accompanied by a policeman, that policeman is pragmatically interpreted as exerting force on the prisoner, while students accompanied by their families are not viewed as being subject to a similar force. We therefore propose that in (5b-6b), *de* is excluded because the Agent is viewed as exerting a tangible influence on the prisoner or criminal, whereas the students and the rock star in (5a-6a) remain entirely unaffected by the Agent. This distinction can be captured in terms of Talmy’s (1988, a.o.) force dynamics, formalized in the framework of Copley & Harley (2015) as in (7), and less formally in (8):

- (7) a. $[[de]] = \lambda s.\lambda e.\lambda f. \text{Source}(f, e) \wedge f(s) = s$

b. $[[par]] = \lambda s.\lambda e.\lambda f. Source(f, e)$

- (8) a. *De* selects DPs naming the source of a force that does not yield a new situation.
b. *Par* selects DPs naming the source of a force that may or may not yield a new situation.

This formulation derives a number of properties of *de* and *par*. First of all, the semantics of *par* is less specific than that of *de*. This derives the observation that *par* is the default option for expressing passive Agents in French. Secondly, *de* carries a specification that it marks a force that does not yield a new situation: this derives the observation that *de* can only be used to refer to Agents that do not influence the Patient. The analysis also accounts for aspectual differences. In (9), the aspectual interpretation of the event varies with the preposition: with *de*, the event describes a continuous state; with *par*, it is inchoative:

- (9) *Les élèves sont émerveillés de/par ses découvertes.* (Straub 1974: 590)
'The students are amazed by his/her discoveries.'

This aspectual effect derives from our analysis. The use of *de* requires an interpretation in which the students are in a state of amazement at the discoveries without being changed by them, while *par* demands an interpretation in which the students are being brought into a state of amazement by a force inherent in the discoveries. Finally, the literature suggests that the analysis extends to the counterparts of *de* and *par* in Spanish (Suñer 1981) and Portuguese (Moody 1972).

Regarding the division of labor between *par* and *de*, we argue that when *par* became the default marker for Agent in passives, *de* was reinterpreted as a marker of Agents whose force does not exert an influence over the Patient. The preposition thus came to express 'non-influential involvement' in a situation. This development can be related to the spatial origins of the prepositions: *de* 'from' marks a more remote location than *par* 'by, via'. We suggest that the greater spatial distance expressed by *de* is reinterpreted force-dynamically as a smaller influence.

Finally, we discuss the theoretical implications of our analysis for the formal force-theoretic framework developed by Copley & Harley (2015). Note that we have to distinguish situations with a non-influential force (as with *de*) from situations in which there is no force at all (e.g., with predicates like *resemble*, *be green*). This allows us to account for predicates that require energy input from some Agent but do not affect the Patient, as we see in examples like (5–6). A similar distinction is needed to account for verbs of maintaining (e.g. *keep*, *stay*), which presuppose a force, as opposed to simple *be* (Copley & Harley 2015: 146–150). Our work thus provides additional evidence that the force-theoretic framework needs to be able to distinguish three cases: (a) the lack of a force; (b) the presence of a force that does not effect a change (i.e., does not yield a new situation); (c) the presence of a force that does effect a change (i.e., yields a new situation).

Summarizing, the contributions of our paper are threefold:

1. We provide a simpler yet more accurate account of the prepositions *de* and *par* in French passive sentences, and their cognates in Spanish and Portuguese.
2. We suggest a spatial origin for the development of *de* into a marker of non-influence.
3. We provide evidence for a distinction between the absence of a force and the presence of a force that does not effect a change in the force-theoretic framework of Copley & Harley (2015).

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