Orphan Prepositions in French and the Concept of 'Null Pronoun'

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AND THE CONCEPT OF 'NULL PRONOUN'

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This paper will be devoted to a class of French constructions, so far left untouched in generative literature, which contain what I shall call an ORPHAN PREPOSITION, as in (2) or (3):

(1) Je voyage toujours avec cette valise.  
'I always travel with this suitcase.'

(2) Cette valise, je voyage toujours avec.  
this suitcase, I travel always with  
'This suitcase, I travel always with it.'

(3) Je connais bien cette valise, car je voyage toujours avec.  
I know well this suitcase, for I travel always with  
'I know this suitcase well, for I always travel with it.'

The term orphan preposition\(^2\) (from now on: OP) metaphorically describes the fact that the italicized element (avec), which occurs as a preposition in (1), has "lost" in (2) and (3) its lexical complement. It will first be shown (Sections 1 and 2) that, unlike English stranded prepositions, French OPs do not govern the trace of a moved NP or WH-NP. Since they nevertheless contain a null, or elliptical, argument, French OP structures seem to raise some questions of theoretical interest within a syntactic framework that includes the concept of 'empty category'. The empirical evidence offered in Sections 3 and 4 will lead me to conclude (Section 5) that OPs govern a null, non-anaphoric, empty pronominal, a conclusion that calls for some extension of the concept of 'null pronoun', as defined in Chomsky (1982).

1. Stranded Prepositions

The English examples of (4) and (5) illustrate the syntactic phenomenon commonly referred to as 'preposition stranding':

(4)a Who did you take pictures of?  
   b Who did you take advantage of?  
   c What (bed) did you sleep in?  
   d What (chair) did you climb on?

(5)a John was taken pictures of.  
   b John was taken advantage of.  
   c This bed was slept in.  
   d This chair was climbed on.
It is widely assumed that the italicized preposition in each of these sentences has been 'stranded' by the rule Move-\(\alpha\), which moved to the left the prepositional or WH-NP. Within the trace theory of movement rules, the stranded P is thus followed, in surface structure (S-structure), by an empty nominal position, as indicated in (6) and (7) (where \(ec = \) 'empty category'):

(6)a \(\text{who}_i\), did you take pictures of \(ec_i\),
   \(\text{b who}_i\), did you take advantage of \(ec_i\),
   \(\text{c what (bed)}_i\), did you sleep in \(ec_i\),
   \(\text{d what (chair)}_i\), did you climb on \(ec_i\),

(7)a \(\text{John}_i\), was taken pictures of \(ec_i\),
   \(\text{b John}_i\), was taken advantage of \(ec_i\),
   \(\text{c this bed}_i\), was slept in \(ec_i\),
   \(\text{d this chair}_i\), was climbed on \(ec_i\),

As emphasized by van Riemsdijk (1978), P-Stranding appears as a marked (rare) phenomenon, from a cross-linguistic point of view. In particular, P-Stranding seems unheard of in Romance languages, including French, where examples (8) and (9)—French counterparts of (4) and (5)—are clearly ungrammatical, in all dialects:

(8)a \(^\star\text{Qui as-tu pris des photos de?}\)
   \(\text{b Qui as-tu tiré profit de?}\)
   \(\text{c Quel lit as-tu dormi dedans?}\)
   \(\text{d Quelle chaise es-tu monté dessus?}\)

(9)a \(^\star\text{Pierre a été pris des photos de.}\)
   \(\text{b Pierre a été tiré profit de.}\)
   \(\text{c Ce lit a été dormi dedans.}\)
   \(\text{d Cette chaise a été montée dessus.}\)

Van Riemsdijk (1978) derives the P-Stranding data of (4) and (5) through rules (10) and (11), occurring as marked properties of the grammar of English:

(10) \(P'' \rightarrow \text{COMP P'}\)

(11) Reanalysis: \([VP[V]_{\text{ppP NP}}] \rightarrow [VP[V\text{V+P]}_{\text{NP}}]\)

Rule (10), by generating a COMP node to the left of English prepositional phrases, allows NP-extraction from a PP via WH-Movement, as in the
derivation of examples (4). Rule (11) allows leftward movement of a
postverbal NP, previously unextractable when included within a PP.
The applicability of rule (11) is partially dependent on lexical and syn-
tactic factors: in particular, V and P may not be separated by a direct
object of the verb, as in (13):

(12)a Someone ate on this table.
   b This table was eaten on.

(13)a Someone ate peanuts on this table.
   b *This table was eaten peanuts on.

Apparent exceptions to this contiguity constraint, involve a postverbal
NP included within the V, as in [\text{\_\_\_take pictures}], [\text{\_\_\_take advantage}],
(see 5a, b).

2. Orphan Prepositions: A First Survey

2.1 While clearly excluding such sequences as (8) and (9), French allows
such sentences as (2) or (3), repeated in (14) and (15) with a few others
of the same type:

(14)a Cette valise, je voyage toujours \textit{avec}.  \(=\) 2)
   
   b Ce banc, vous pouvez sauter \textit{par-dessus}.
        this bench, you may jump over
'这一点, you may jump over it.'

   c Les arbres, Pierre se cache toujours \textit{derrière}.
        trees, Pierre hides always behind
'Trees, Pierre always hides behind them.'

   d Notre-Dame, vous venez de passer \textit{devant}.
      Notre-Dame, you just passed in front
'Notre-Dame, you just passed it.'

(15)a Je connais bien cette valise, car je voyage toujours \textit{avec}.  \(=\) 3)
   
   b Lorsque je vois un banc, je saute \textit{par-dessus}.
when I see a bench, I jump over
'Whenever I see a bench, I jump over it.'

   c Chaque fois qu'il trouve un arbre, Pierre se cache \textit{derrière}.
every time he finds a tree, Pierre hides behind
'Every time he finds a tree, Pierre hides behind it.'
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Pendant que nous visitions Notre-Dame, Pierre est passé devant.

The italicized element, in these examples, otherwise occurs as a preposition as in (16):

(16)a Je voyage toujours avec cette valise.  (= 1)

b Vous pouvez sauter par-dessus ce banc.

'You may jump over this bench.'

c Pierre s'est caché derrière un arbre.

'Pierre hid behind a tree.'

d Pierre vient de passer devant Notre-Dame.

'Pierre just drove past Notre-Dame.'

The properties of P-Stranding constructions summed up in (15) suggest, however, that the italicized element in examples (14) and (15) is not a stranded preposition, a point to be confirmed in the next subsection.

2.2 Examples (15)

In each one of sentences (15), the null argument of the OP does not correspond to any lexical constituent which may have been extracted from the PP. This null argument, which I shall call GAP and symbolized by Δ, is a terminology and notation which do not involve any specific identification for the gap (see below)--is optionally coindexed with some NP in the sentence or discourse; thus (15d) may be interpreted as in (17) or (18):

(17) Pendant que nous visitions Notre-Dame, Pierre est passé devant Δj.

'While we were visiting Notre-Dame, Pierre drove past it.'

(18) Ton fils a-t-il vu la Sainte-Chapelle?--Oui: pendant que nous visitions Notre-Dame, Pierre est passé devant Δj.

'Has your son seen the Sainte-Chapelle?--Yes: while we were visiting Notre-Dame, Pierre drove past it.'

The OP-gap may also receive a diectic interpretation, i.e., be directly associated with a referent in the non-linguistic context. By these interpretive properties, the OP-gap in (15) behaves unlike a trace (an
element defined as obligatorily bound in S or S^1), but rather like a pronoun, or else, like the null predicate of (19) or (20):

(19) Mary doesn't like to run_i, but John nevertheless expects her to \( \Delta_j \).

(20) Is your sister going to win_j?—Well, Mary doesn't like to run, but John nevertheless expects her to \( \Delta_j \).

On the other hand, the English analogues of (15), with an OP, are ungrammatical:

(21a) I know this suitcase_i very well, for I always travel with \( \{ \Delta_i, \Delta_i \} \).

b When I see a bench_i, I jump over \( \{ \Delta_i \} \).

c Every time he finds a tree_i, John hides behind \( \{ \Delta_i \} \).

d While we were visiting Notre-Dame_i, John drove past \( \{ \Delta_i \} \).

2.3 Examples (14)

In examples (14), the OP-gap seems obligatorily coindexed with the Topic NP. It may, however, be shown that the OP of sentences (14) does not govern a trace, thus contrasting with the preposition of English examples (22):

(22a) This sort of thing_i, I would usually step on \( \epsilon \).

b This sort of book_i, I seldom look at \( \epsilon \).

Chomsky (1977) analyzes such English sentences as involving a stranded preposition governing a \( WH \)-trace, as in (6). This analysis is supported by the fact that the relation of the gap to its antecedent, in (22), exhibits properties regarded as diagnostic of the rule \( WH \)-Movement, e.g.:

(1°) unboundedness
(2°) obeys the Complex-NP Constraint (CNPC)
(3°) obeys the \( WH \)-Island Constraint
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Each one of these properties is illustrated by an example in (23):

(23)a What book\textsubscript{i} did you ask Bill to get his students to look at \\
\phantom{\textsubscript{e}}e\textsubscript{c}\textsubscript{i} \hspace{1cm} (unbounded)

b \*What book\textsubscript{i} did you accept the argument that John should \\
look at e\textsubscript{c}\textsubscript{i} \hspace{1cm} (CNPC)

c \*What book\textsubscript{i} do you wonder who looked at e\textsubscript{c}\textsubscript{i} \hspace{1cm} (\textit{WH}-Island)

Paradigm (24) shows that topicalized structures, such as (22), although 
containing no explicit \textit{WH}-phrase, exhibit the three diagnostic properties listed above:

(24)a This book\textsubscript{i}, I asked Bill to get his students to look at \\
\phantom{\textsubscript{e}}e\textsubscript{c}\textsubscript{i} \hspace{1cm} (unbounded)

b \*This book\textsubscript{i}, I accept the argument that John should look at \\
e\textsubscript{c}\textsubscript{i} \hspace{1cm} (CNPC)

c \*This book\textsubscript{i}, I wonder who looked at e\textsubscript{c}\textsubscript{i} \hspace{1cm} (\textit{WH}-Island)

To express this formal symmetry between (23) and (24), Chomsky (1977) 
assumes that topicalized structures are derived via \textit{WH}-Movement:

(25)a input: [\textsubscript{TOP}this book\textsubscript{i}[S\textsubscript{i}][COMP][S\textsubscript{i} I seldom look at what\textsubscript{i}]]

b \textit{WH}-Movement: [this book\textsubscript{i}[[what\textsubscript{i}][I seldom look at e\textsubscript{c}\textsubscript{i}]]]

c \textit{WH}-Deletion: [this book\textsubscript{i}[[\emptyset][I seldom look at e\textsubscript{c}\textsubscript{i}]]]

This conception is preserved, in spirit if not in execution, in Chomsky 
(1982), where the troublesome \textit{WH}-Deletion rule is disposed of by assuming 
an empty operator, invisibly moved into COMP:

(26)a input: [\textsubscript{TOP}this book\textsubscript{i}[S\textsubscript{i}][COMP][S\textsubscript{i} I seldom look at 0\textsubscript{i}]]

b Operator-Movement: [this book\textsubscript{i}[[0\textsubscript{i}][I seldom look at e\textsubscript{c}\textsubscript{i}]]]

In both versions (25 and 26), this analysis identifies the gap in topo-
calized structures (22), as an empty nominal category, and more specifi-
cally, as the trace of an element moved into COMP. It may be added that,
as any variable--defined in terms of its relation to an operator--and unlike a pronominal, the empty nominal in (22) may not be free within S′, cf:

(27)a  I did read this book, i once, but I hardly ever look at \( \{ \text{it}_i \} \)

\( \{ \text{rec}_i \} \)

any more.

b Have you seen my glasses, i?--I'm afraid I stepped on \( \{ \text{them}_i \} \)

\( \{ \text{rec}_i \} \)

Now turning to French, one may first easily check that the rule WH-Movement, whenever it applies explicitly in this language, exhibits just as in English each one of the diagnostic properties: unboundedness (28a), CNPC (28b), WH-island (28c):

(28)a  Quel livre, j'ai croisé que Jean prétende que Marie ait lu \( \text{ec}_i \) ?

What book do you believe that Jean says that Marie read

b  *Quel livre, j'ai défendu l'hypothèse que Marie ait lu \( \text{ec}_i \) ?

What book do you defend the hypothesis that Marie read

c  *Quel livre, j'ai cherché qui a lu \( \text{ec}_i \) ?

What book do you wonder who read

Now consider the French topicalized structures in (14), superficially similar to (22). Examples (29) show the gap-antecedent relation to be unbounded:

(29)a  Cette valise, i, j'ai demandé à Jean de dire à Marie que

je voyage toujours avec \( \Delta_i \)

I travel always with

b  Ce banc, j'ai vous n'avez qu'à prévenir Marie qu'elle doit

this bench, you just have to warn Marie that she must

sauter par-dessus \( \Delta_i \)

jump over

c  Les arbres, i, Marie croit toujours que je conseille à Pierre

trees, Marie believes always that I advise Pierre
de se cacher derrière $\Delta_i$
to hide

d Notre-Dame, j'ai dit au conducteur de vous expliquer que
Notre-Dame, I told the driver to explain to you that

vous ne passerez plus devant $\Delta_i$
you will no more drive past

However, the gap-antecedent relation in (14) is revealed by the
GRAMMATICAL examples in (30) and (31) to abide neither by the CNPC nor
by the WH-Island Constraint:

(30)a Cette valise, j'ai conçu l'hypothèse que Marie pourrait
this suitcase, I conceived the hypothesis that Marie might
voyager avec $\Delta_i$
travel with

b Ce banc, je déplore le fait que Marie refuse de sauter
this bench, I deplore the fact that M. refuses to jump
par-dessus $\Delta_i$
over

c Les arbres, je conteste violemment l'idée qu'il puisse
trees, I disapprove vehemently the idea that it may
être plaisant de se cacher derrière $\Delta_i$
be pleasant to hide

d Notre-Dame, je regrette vivement le fait que vous n'ayez pu
Notre-Dame, I regret strongly the fact that you could not
passer devant $\Delta_i$
drive past

(31)a Cette valise, j'aimerais bien savoir qui pourrait
this suitcase, I would like to know who might
voyager avec $\Delta_i$
travel with
(31) (Continued)

b Ce banc, savez-vous qui doit sauter par-dessus $\Delta_1$
this bench, do you know who must jump over

c Les arbres, je me demande qui peut bien vouloir se cacher
trees, I wonder who could want to hide
derrière $\Delta_1$
behind

d Notre-Dame, dites-moi je vous prie qui vient de passer
Notre-Dame, tell me please who just drove
devant $\Delta_1$
past

These properties of the French examples in (14) show that the OP-gap
does not bear the same syntactic status as the $\check{e}$ governed by a stranded
preposition in (22). That is to say, the OP-gap appears to behave not
like a $WH$-trace, but rather like a pronominal, or like the null constitu-
ent of examples (19) and (20). The restriction imposing that the gap
be coindexed with the Topic NP in (14) will therefore have to be accounted
for separately (see §4.5).

3. Some Questions on the Way

The remarks in section 2 lead me to conclude, negatively, that OP-
gaps do not identify as NP or $WH$-traces. These remarks do not, however,
suffice to establish, positively, that OP structures contain in their
syntactic representation an 'empty category' in the sense of Chomsky (1981,
1982). Within the GB framework, several hypotheses seem to be conceivable:

The Null Pronoun Hypothesis (NPH)

OP gaps are identified as null NPs, to be included within the empty
category typology connected with the Government Theory and the Binding
Theory. The remarks in Sections 2 and 4 suggest that OP gaps would then
identify as definite, non-anaphoric pronominals, abiding by principle B
of the Binding Theory (see section 4.7).

Elliptical Structure Hypotheses (ESH)

OP sentences are regarded as elliptical constructions, which could
mean:
...either (ESH-1), that they do contain an empty NP node, of a type, however, that does not fall under the Empty Category Theory outlined in Chomsky (1981, 1982),

--or (ESH-2), that they are syntactically complete utterances (i.e., contain no gap at all), the 'missing argument' of the OP being construed through some discourse mechanisms. The only hypothesis available within a syntactic theory that would not include the concept of an empty node, ESH-2 embodies traditional accounts of French OPs as 'adverbially used prepositions' (see Grevisse (1969), Wagner and Pinchon (1962), Le Bidois (1967), Chevalier, et al. (1964)). Within the generative-transformational framework, ESH-2 would essentially fit the general theory of ellipsis developed by Shopen (1972) to account for various English constructions.

Leaving this theoretical issue open until Section 5, I shall present further empirical evidence concerning French OPs.

4. More Data on French OPs

4.1 The Prepositions Involved

If we regard as a member of the class P, in French, any element invariable in person, number and Case, which may govern an NP, French prepositions appear in their large majority acceptable as OPs. A list of the elements involved would include most locative Ps (contre, devant, derrière, entre, autour de, à l'extérieur de, près de, par-dessus, etc.), time Ps (après, avant, depuis, pendant, la veille de, etc.), and others (pour, contre, avec, sans, selon, etc.).

Six Ps, however, never occur as OPs in any dialect I know of:

(32) à (jusqu'à), de, par, en, chez, vers.

Thus we have (or rather, do not have):

(33)a *Paris, J'adore aller à
   Paris, I love to go to

   b *Pierre, je viens d'aller chez
   Pierre, I just went to
   (chez Pierre = 'to Pierre's,
    at Pierre's)

   c *Paris, je rêve souvent de
   Paris, I dream often of

   d *Paris, je viens de rentrer de
   Paris, I just came back from
(33) (Continued)

<table>
<thead>
<tr>
<th>Letter</th>
<th>French</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>e</td>
<td>Mon pouvoir, Pierre est en</td>
<td>my power, Pierre is in</td>
</tr>
<tr>
<td>f</td>
<td>Paris, je suis passé par</td>
<td>Paris, I drove through</td>
</tr>
<tr>
<td>g</td>
<td>Ce film, j'ai été bouleversé par</td>
<td>this film, I was upset by</td>
</tr>
<tr>
<td>h</td>
<td>L'Amérique, je me dirigeais vers quand l'avion a explosé</td>
<td>America, I was heading towards when the plane exploded</td>
</tr>
</tbody>
</table>

I have at this point no intuitive explanation to offer for these facts, which may derive from different properties in each separate case. It may be worthwhile noting that the elements listed under (32) include 'colorless' prepositions (à, de, par, en), while OPs seem generally characterized by a 'heavy' semantic content. Chez not only selects a human complement (a property incompatible with OPs, see Section 4.6), but also stands for various reasons as a marginal member of the P class. En imposes peculiar restrictions onto the specifier of its NP complement. But vers, a semantically heavy P, is nevertheless banned from OPs. This is another open question.

4.2 Morphology

In most cases, the null vs. full nature of the preposition argument triggers a morphological variation on the preposition itself:

(1°) Prepositions dans, sur, sous, occur as dedans, dessus, dessous, when used as OPs. Note, however, that this variation would not suffice to invalidate NPH, for dedans, dessus, dessous, were commonly used as prepositions in classical French, and continue to be thus used in place of their de-less counterpart in various styles and dialects--popular songs, for instance, from which examples (34) are drawn:

(34)a Mon père a tant souffert, il est dedans sa tombe
my father suffered so, he lies in his grave

b Mais il ne faut pas rouler dessous la table
but one mustn't roll under the table

c Nous coucheron dessus la paille
we shall sleep on the straw

(2°) All complex prepositions of the form: X + de, lose their final de when used as OPs:
(35)a Des enfants couraient autour de la pelouse
children were running around the lawn

b *La pelouse, des enfants couraient autour de

pothesis, des enfants couraient autour

More than the previous structure, this formal variation might be regarded
as supporting ESH-2, the dropping of de somehow suggesting loss of pre-
position status. However, the dropping of de might as well derive from
other properties of de (or maybe, of 'colorless prepositions', as a whole).
This is yet another open question.

4.3 No Reanalysis V+P

For simplicity's sake, most of the examples in this paper involve
an intransitive VP. However, there is no general constraint preventing
insertion of a direct object between the V and the OP; thus we may have:

(36)a Ton cahier, Pierre a renversé du lait dessus
your notebook, P. spilled milk on

b La boîte métallique, Pierre range ses chaussures dedans
the metal box, P. puts his shoes in

c Le champ de blé, on a mis des barbelés autour
the wheat field, they put barbed wire around

This suggests that no reanalysis process such as (11) is at work in the
derivation of OP sentences.

4.4 Style

Normative grammars of French grant little space to 'adverbially used
prepositions', regarded as colloquial constructions. Such a description
seems to me inaccurate. For one thing, such prepositions as au-delà de,
*en-deçà de* which are clearly on the literary side, may occur as OPs:

(37)a Cette frontière, Pierre n'est jamais allé au-delà
this border, P. never went beyond

b La vérité, nous restons malheureusement en-deçà
the truth, we remain unfortunately below
'The truth, we unfortunately underevaluate it.'

On the other hand, the style of OP structures is partially dependent (as
will be shown in section 4.6) on the human or non-human interpretation
of the OP-gap. If, as will be suggested below, the OP-gap is basically non-human, then examples such as (38) will tend to appear more 'colloquial' than those in (39):

(38)  ?Marie, je voyage toujours avec
      Marie, I always travel with

(39)  a  Marie, je voyage toujours avec elle
       Marie, I always travel with her

b  Cette valise, je voyage toujours with (=2)

4.5 Topicalized Constructions

As noted above (§2.3), the gap in such topicalized constructions as (14) seems to be obligatorily coindexed within the sentence—a restriction which does not apply, for instance, to the gap in (15). This property of sentences (14) reflects a general constraint on the interpretation of topicalized constructions in such languages as French and English. Thus we have:

(40)a  This book, I seldom look at it.

b  This book, I seldom look at (but that one, I read all the time).

c  This sort of book, I always like to read.


(41)a  Cette valise, je l'ai achetée l'année dernière
       this suitcase, I bought it  last year

b  Cette valise, je voyage toujours avec (=2)

c  ?Cette valise, je déteste les bagages
    this suitcase, I hate  luggage

The general principle may be informally worded as follows: in a topicalized structure of the form [TOP S'1], the two components, TOPIc and S', must bear an explicit semantic relation. This condition is satisfied in particular whenever S, included within S', contains some referentially open position,4 call it x, such that x be coindexed with the Topic phrase. Such is the case in (40a) and (41a), where x is filled by a lexical pronomn; such is also the case in (40b,c), where x identifies as a WH-trace (see section 2.3). The relative ill-formedness of examples (40d) and (41c) may thus be attributed to the fact that the TOP/S'1 relation is not explicit enough, or more precisely to the fact that S does not contain
any open position (pronominal, or \( \omega \)) to be coindexed with the Topic phrase. Within this general approach, the well-formedness of such sentences as (14) or (41b), may be regarded as supporting NPH.

Apparent counterevidence to the above principle on topicalized structures is provided by the well-formedness of sentence (42) (contrasting with 41c):

\[(\text{42})\quad \text{La grammaire générative, mieux vaut apprendre l'anglais} \]
\[
\text{Generative grammar, one had better study English} \]
\[
d'abord \]
\[
\text{first} \]

In this case, \(d'abord\) ("first"), an adverbial which is hardly likely to govern an NP position, seems to make the TOP/S\(^1\) relation explicit enough for the topicalized sentence to be well-formed. It must be noted, however, that a relevant property of adverbial \(d'abord\) is the fact that it is semantically 'dependent', in the sense that its interpretation involves its relation to a semantic correlate such as \(\text{ensuite}\) ("then"), placed in some other component of the sentence. The \(\text{ensuite}\) counterpart must be overtly present when placed to the right of \(d'abord\) (as shown in 43a/b), but it may not be so when \(d'abord\) occurs to the right (as shown in 44):

\[(\text{43})a\quad \text{D'abord Marie a écrit, (mais) ensuite elle a téléphoné} \]
\[
\text{First Marie wrote (but) then she phoned} \]
\[
\text{b} \quad \text*{D'abord Marie a écrit, (mais) elle a téléphoné} \]

\[(\text{44})a\quad \text{\&\&\text{ensuite Marie a téléphoné, (mais) d'abord elle a écrit} \}
\[
\text{Then Marie phoned (but) first she wrote} \]
\[
\text{b} \quad \text{Marie a téléphoné, (mais) d'abord elle a écrit} \]

The dependent character of such time adverbials as \(d'abord,\) \(\text{ensuite},\) is accounted for straightforwardly if we assume that any occurrence of one of these elements must be coindexed in LF either with an occurrence of its counterpart within the same discourse or with an S (as in 44b) or processive NP (as in 42). In other words, example (42) comes in SUPPORT of a general principle on topicalized constructions, stated under (45):

\[(\text{45})\quad \text{In a topicalized structure of the form: } [S'_{\text{TOP}} S'], \]
\[
\text{TOPIC and S'} \text{ must be formally related through some open} \]
\[
\text{position placed in S and coindexed with an 'antecedent' in} \]
\[
\text{TOP.} \]

Assuming principle (45) to be correct, the well-formedness of topicalized OP sentences such as (14) may be taken as supporting NPH or ESH-1, as opposed to ESH-2.
4.6 Non-human Gaps

In what follows, the OP-gap will be shown to bear a non-human interpretation, hence contrasting with full strong pronouns which steadily receive a human interpretation in standard French.

The general pattern is synthesized in the following examples:

(1°) The OP-gap is related to a non-human antecedent:

(46)a Ce puits, semble avoir une profondeur vertigineuse, mais this well seems to have a depth terrific, but

Pierre est déjà descendu jusqu'au fond

\[ \Delta_i \]

\[ *\text{de lui}_i \]

Pierre has already gone down to the bottom (of PRONOUN)

b Marie a acheté ce hangar, sachant que Christine Marie bought this barn, knowing that Christine

habite à proximité

\[ \{ \Delta_i \} \]

\[ *\text{de lui}_i \]

lives at a short distance (from PRONOUN)

c La bouteille, le liquide doit rester au-dedans

\[ \{ \Delta_i \} \]

\[ *\text{d'elle}_i \]

the bottle, the liquid must remain inside (PRONOUN)

d Ce mur, le fantôme passe facilement à travers

\[ \{ \Delta_i \} \]

\[ *\text{lui}_i \]

this wall, the ghost passes easily through (PRONOUN)

(47)a J’étais devant la maison, et Pierre était derrière

\[ \{ \Delta_i \} \]

\[ \text{elle}_i \]

I was in front of the house, and Pierre was behind (PRONOUN)

b Je suis étonné de ne pas retrouver mon chapeau, car I am surprised not to find my hat, for
(Continued)

j'étais sûr d'être arrivé avec $\{\Delta_i\} \{?\text{lui}_i\}$
I was sure to have come with (PRONOUN)

c Quand ce chien voit une pelouse, il court tout autour $\{\Delta_i\} \{?d'\text{elle}_i\}$
when this dog sees a lawn, it runs all around (PRONOUN)

d La mairie, j'habite en face $\{\Delta_i\} \{?d'\text{elle}_i\}$
the town hall, I live across the street (from PRONOUN)

(2°) The OP-gap is related to a human antecedent:

(48)a Un homme était debout au milieu de la pelouse, et des enfants
a man was standing in the middle of the lawn, and children

couraient derrière $\{\text{lui}_i\} \{?\Delta_i\}$
were running behind (PRONOUN)

b Marie? Je croyais que tu étais venu avec $\{\text{elle}_i\}$ !
Marie? I thought that you had come with (PRONOUN)

$\{?\Delta_i\}$

Un homme était debout au milieu de la pelouse, et des enfants

Pierre était installé sur l'herbe et des enfants

Pierre was settled on the grass and children

jouaient autour $\{\text{de lui}_i\} \{?\Delta_i\}$
were playing around (PRONOUN)

d Marie, Pierre était assis en face $\{d'\text{elle}_i\} \{?\Delta_i\}$
Marie, Pierre was sitting facing (PRONOUN)

In none of examples (46) and (47) can the gap be filled by a lexical pronoun. But the result obtained by inserting a full pronoun into the gap
is clearly worse in cases (46) than in cases (47). It should be emphasized, on the other hand, that all of the OPs in (46) and (47) may govern a lexical NP or pronoun providing it receives a human interpretation. The well-formedness of examples (48) show this for the Ps in (47); and the well-formedness of examples (49) show it as regards (46):

(49)a  P = (jusqu') au fond de

Pierre cherche (jusqu') au fond de lui les racines de
Pierre searches to the bottom of him the roots of
son insatisfaction
his dissatisfaction

'Pierre searches deep inside himself the roots of his dissatisfaction.'

b  P = à proximité de

Pierre aime savoir ses enfants à proximité de lui.
Pierre likes to know his children close to him

'Pierre likes to feel his children near him.'

c  P = au dedans de

Les sentiments gardés trop longtemps au-dedans de nous ...
The feelings kept for too long within us

'The feelings kept for too long within ourselves . . .'

d  P = à travers

Ce mage hindou a un regard qui vous transperce, il semble
This Indian guru has a piercing glance, he seems

capable de voir à travers vous.
capable of seeing through you

What seems to distinguish the Ps in (46), (49), from those in (47), (48), is the likeliness of their governing a human NP, which is much greater for the second group. The full pronoun in examples (47) and the OP in examples (48) are not ungrammatical but semantically deviant, in the sense that they result in misassigning the features human to the antecedent NP. For some speakers, the examples in (47) with a full pronoun seem more deviant than the OP in (48); this may follow from the fact that grammatical dehumanization of humans is on the whole more common than humanization of non-humans. Thus sentence (50), where a 'normally' human
NP has been inserted to the left of a non-human-subject V, is a rather ordinary French sentence, although it involves metonymic interpretation of the subject; but sentence (51), in which a 'normally' non-human NP has been inserted to the left of a human-subject V, stands as an allegory or joke of some sort:

(50) Les femmes concernent Pierre.
    women concern Pierre
    'The woman question concerns Pierre.'

(51) ?La table m'a raconté des blagues.
    'The table told me lies.'

In a similar fashion, the use of a non-human full pronoun in examples (47) seems semantically deviant, while the use of a human gap in examples (48) tends to stand as acceptable, though 'colloquial' or 'substandard'.

To sum up, the features +human and -human appear in complementary distribution in the construction P + pronoun and P + gap, a conclusion synthesized in examples (52) and (53):

(52)a  Marie, j'étais venu avec elle.

   b  ?Marie, j'étais venu avec.
      Marie, I had come with (PRONOUN)

(53)a  ?Cette valise, j'étais venu avec elle.

   b  Cette valise, j'étais venu avec.
      This suitcase, I had come with (PRONOUN)

The above data come in support of the idea, found here and there in linguistic literature, that strong pronominal forms in French tend to bear the feature +human. Thus consider the following examples, borrowed from Ruwet (1969):

(54)a  J'aime Justine; et je n'aimerai jamais qu'elle.
      I love Justine and shall never love anyone but PRONOUN

   b  ?J'ai acheté le Petit Livre; Rouge et je ne lis plus que lui.
      I bought the Little Red Book and I no longer read anything
      else but PRONOUN

   c  ?Ernestine a acheté une minijupe; et elle ne porte plus qu'elle.
      Ernestine bought a miniskirt and wears nothing but PRONOUN
These and previous data indicate that some gaps in French may serve as a partial remedy to the lack of non-human, strong, definite pronouns. It may be noted, incidentally, that Iberic Spanish and Brasilian Portuguese, where strong personal pronouns are open to both human and non-human interpretations, do not exhibit OP structures in the following examples:

(55) Spanish/French/Brasilian: Orphan Ps

<table>
<thead>
<tr>
<th>Spanish</th>
<th>French</th>
<th>Brasilian Portuguese</th>
</tr>
</thead>
<tbody>
<tr>
<td>El muro, el fantasma paso a través de el OK</td>
<td>?Le mur, le fantôme est passé à travers lui</td>
<td>0 muro, o fantasma passou através dele</td>
</tr>
<tr>
<td></td>
<td>*El muro, el fantasma paso a través OK</td>
<td>Le mur, le fantôme est passé à travers</td>
</tr>
<tr>
<td>Mi sombrero, vine con/sin el OK</td>
<td>?Mon chapeau, je suis venu avec/ sans lui</td>
<td>Meu chapéu, eu vim com/sem ele</td>
</tr>
<tr>
<td></td>
<td>*Mi sombrero, vine con/sin OK</td>
<td>Mon chapeau, je suis venu avec/sans</td>
</tr>
<tr>
<td>El muro, Pedro estaba apoyado contra el OK</td>
<td>?Le mur, Pierre était appuyé contre lui</td>
<td>0 muro, Pedro estava apoiado contra ele</td>
</tr>
<tr>
<td></td>
<td>*El muro, Pedro estaba apoyado contra OK</td>
<td>Le mur, Pierre était appuyé contre</td>
</tr>
<tr>
<td>Spanish</td>
<td>French</td>
<td>Brasilian Portuguese</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>&quot;Estas dos planchas, OK&quot;</td>
<td>&quot;Ces deux planches, une pièce est restée&quot;</td>
<td>&quot;Estas duas pranchas, uma peça ficou imprensada entre elas&quot;</td>
</tr>
<tr>
<td>una pieza se cedo entre ellas</td>
<td>&quot;Ces deux planches, une pièce est restée coïncée entre elles&quot;</td>
<td>&quot;uma peça ficou imprensada entre elas&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spanish</th>
<th>French</th>
<th>Brasilian Portuguese</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;La temperatura, uno OK&quot;</td>
<td>&quot;La température, on s'habille selon elle&quot;</td>
<td>&quot;A temperatura, a gente se veste segundo&quot;</td>
</tr>
<tr>
<td>se viste según ella</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

English glosses:

1. the wall, the ghost went through (PRONOUN)
2. my hat, I came with/without (PRONOUN)
3. the wall, P. was lying against (PRONOUN)
4. those two boards, a coin got stuck between (PRONOUN)
5. the temperature, one dresses on account of (PRONOUN)
On the other hand, some examples in Spanish and Brasilian, do look superficially similar to French OP constructions:

**Spanish**

(56)a El puente, hay que pasar por en cima de él.
b El puente, hay que pasar por en cima.
The bridge, one must pass over (PRONOUN)

(57)a La facultad, el metro esta cerca de ella.
b La facultad, el metro esta cerca.
The university, the underground is near (PRONOUN)

(58)a El césped, los niños corrian al rededor de él.
b El césped, los niños corrian al rededor.
The lawn, the children were running around (PRONOUN)

(59)a La casa, Pedro estaba delante de ella.
b La casa, Pedro estaba delante.
The house, Pedro was in front (of PRONOUN)

**Brasilian Portuguese**

(60)a A ponte, é preciso passar por cima dela.
b A ponte, é preciso passar por cima.
The bridge, one must pass over (PRONOUN)

(61)a A prefeitura, eu moro (bem) perto dela.
b A prefeitura, eu moro (bem) perto.
The town hall, I live (quite) close (to PRONOUN)

(62)a A grama, os meninos rodavam em volta dela.
b A grama, os meninos rodavam em volta.
The lawn, the children were running around (PRONOUN)

(63)a A casa, o cachorro deve ficar fora dela.
b A casa, o cachorro deve ficar fora.
The house, the dog must stay out (of PRONOUN)
In these examples, however, the gap/pronoun contrast involves style, rather than interpretation; thus (64) with a human gap appears no more semantically deviant than (61b, 62b) in Brasillian Portuguese:

(64)a  Pedro, a pedra passou bem perto (dele).
Pedro, the stone passed quite close (to PRONOUN)

b  Pedro, os meninos rodavam em volta (dele).
Pedro, the children were running around (PRONOUN).

In all the pairs of sentences given above for Spanish and Portuguese, the gap simply appears more colloquial than the full pronoun.

Returning to French, it must also be emphasized that the occurrence of non-human gaps is not restricted to strong-pronoun contexts. Ruwet (1969) noted, for instance, that the constraint imposing human interpretation of null pronominals seems to extend to possessive determiners in such cases as (65):

(65)a  Comme la porte de Marie, était fermée, je suis entré
     Since Marie's door was locked, I came in
     par sa fenêtre
     through POSS window

b ?Comme la porte de la maison, était fermée, je suis entré
     Since the door of the house was locked, I came in
     par sa fenêtre.
     through POSS window.

c  Comme la porte de la maison était fermée, je suis entré
     Since the door of the house was locked, I came in
     par la fenêtre.
     through the window.

The above data seem to indicate that French (or at least, "standard French") recourses to gaps in some contexts (e.g., OP constructions), to
make up for the lack of a non-human, non-clitic element in its definite-pronoun system. This leads us to conclude that the OP-gap, a meaningful linguistic unit, does not come down to an instance of 'ellipsis', involving mere reduction of redundancy—as in (19), (20), or (56-64).

4.7 OP-Gaps and the Binding Theory

I shall now proceed to show that the null argument of French OP structures, behaves just like a pronominal with respect to the Binding Theory, i.e., essentially abides by principle (66):

(66) A pronominal is free in its minimal binding category.

We shall see that whenever an OP-gap is excluded from a context allowing a full pronoun to occur, the restriction is independent from principle (66), and simply involves the human/non-human contrast mentioned in section 4.6.

First consider the sharp contrast between (67a) and (67b):

(67a) Pierre put the napkin in front of/behind/on PRONoun

b *Pierre put the napkin in front of/behind/on PRONoun

The well-formedness of examples (68), formally similar to those in (67), indicates that the deviance of (67b) is not due to particular binding conditions, and suggests that the contrast between (67) and (68) may simply derive from the fact that the subject NP (the antecedent of the gap) is human in one case, non-human in the other:

(68a) La table avait des tabourets tout autour Δi
the table had stools all around

b La serviette, avait des taches dessus Δi
the napkin had stains on

c La maison avait un jardin derrière Δi et une cour devant Δi
the house had a garden behind and a yard in front

Similar remarks apply to examples (69)-(70):
(69a) Pierre, a ordonné à Marie de tirer sur lui

Pierre ordered Marie to shoot on PRONOUN

b *Pierre, a ordonné à Marie de tirer dessus Δ₁

(70a) (Telle qu'elle est placée) la cible, permet à Marie

thus placed the target enables Marie
de tirer dessus Δ₁
to shoot on

b Ce curieux télescope incite les passants à regarder dedans Δ₁
this funny telescope incites passers-by to look in
de vous bagarrer avec Δ₁
to fight with

As shown by examples (70), the ill-formedness of (69b) does not derive from
a violation of principle (66), but from the fact that the gap demands a
non-human antecedent.

It should be noted however that the restriction imposing a non-human
interpretation for OP-gaps, operates more strongly in (67b) and (69b), than
it does in (45a, b, c), (49b), or (71b):

(71a) La soeur de Pierre, est partie avec lui

left with (PRONOUN)

b ?La soeur de Pierre, est partie avec Δ₁

relies on (PRONOUN)

The sister of P, left with (PRONOUN)

(72a) ?Les boutons de l'anorak, vont bien avec lui

sont posés sur lui

(72a) The buttons of the anorak, fit well with him

are placed on him
Les boutons de l'anorak, \(_i\) vont bien avec \(\Delta_i\),

sont posés dessus \(\Delta_i\),

The buttons of the parka, \(_i\) go well with (PRONOUN\(_i\))

are lying on (PRONOUN\(_i\))

In other words, the restriction seems to operate more strongly whenever the antecedent of the gap occurs in an argument position within the same sentence (as in 67b, 69b) than when it occurs in a non-argument position within the same sentence (as in 49b, 71b, or 89b below), or in a distinct sentence (as in 48).

Lastly, example (73) illustrates a class of French constructions (described in Zribi-Hertz (1980)), where principle (66) seems violated:

\[
\begin{align*}
(73) & \quad \text{Pierre}_i \text{ a bavé sur lui}_i \\
& \quad \text{Pierre}_i \text{ dribbled on him}_i
\end{align*}
\]

Such sentences apparently contain a strong, non-anaphoric, pronoun, bound within its minimal S. On the other hand, we do not have such OP sentences as (74):

\[
(74) \quad *\text{Pierre}_i \text{ a bavé dessus } \Delta_i
\]

as predicted by the non-humanness restriction on OP-gaps. Neither do there seem to exist any grammatical OP sentences of the form: \(\text{NP}_i \text{-hum}\) \(V(X)\) \(\text{P}_\Delta\). As a matter of fact, apparent violations of principle (66) (e.g., 73) consistently involve, to my knowledge, a human antecedent \(\text{NP}\). One more open question.

4.8 Resumptive Gaps

I shall finally show that OP-gaps may serve as definite, non-human, pronouns, in resumptive relative clauses.

As emphasized by many authors (e.g., Frei (1929), Guiraud (1966), Lefebvre and Fournier (1978), Cannings (1978)), French, like many other languages, uses--and has been using for some eight centuries, see Guiraud (1966)—two distinct relativization strategies, one of which illustrated in (75) and taken as 'standard', the other illustrated in (76) and taken as 'popular' (Guiraud, Cannings) or 'vernacular' (Bouchard (1982)), whatever the exact meaning of these labels:
| (75)a   | Voici le courrier, qui est arrivé ce matin. |
|        | here is the mail which arrived this morning |
| b      | Voici le courrier, que Marie a apporté. |
|        | here is the mail which Marie brought |
| c      | Voici l'homme, à qui Marie a parlé. |
|        | here is the man to whom Marie talked |
| d      | Voici la maison, à laquelle Marie pense encore. |
|        | here is the house of which Marie is still thinking |
| e      | Voici une maison, dont Marie rêve encore. |
|        | here is a house of which Marie is still dreaming |
| f      | Voici un homme, devant lequel Marie est intimidée. |
|        | here is a man in front of whom Marie feels shy |

| (76)a   | Voici le courrier, qu(e) il est arrivé ce matin. |
|        | here is the mail that it arrived this morning |
| b      | Voici le courrier, que Marie a apporté. |
|        | here is the mail that Marie brought |
| c      | Voici l'homme, que Marie a parlé. |
|        | here is the man that Marie talked to him |
| d      | Voici la maison, que Marie y pense encore. |
|        | here is the house that Marie is still thinking of it |
| e      | Voici une maison, que Marie en rêve encore. |
|        | here is a house that Marie is still dreaming of it |
| f      | Voici un homme, que Marie est intimidée devant lui. |
|        | here is a man that Marie feels shy in front of him |
These two relativization systems may be succinctly described as follows: the SF schema involves the rule \textit{WH}-Movement, which moves a \textit{WH}-phrase into the embedded COMP, leaving a \textit{WH}-trace (\textit{ec}) in its basic position within the relative clause. In the PF system, the relative clause is headed by the invariant complementizer \textit{que}, but contains a resumptive pronoun coindexed with the relativized NP. Note that the 'substandard' English relativization procedure mentioned in Chomsky (1982) and illustrated in (77) (Chomsky's examples) is partially similar to the PF system:

\textbf{(77)a} the man who \textsubscript{1} John saw him \textsubscript{1} \\
\textbf{b} the man who \textsubscript{1} they think that if Mary marries him \textsubscript{1}, then everyone will be happy

The English examples (77) differ structurally from the French examples in (76) in that (77) involves both a resumptive pronoun within the relative clause, as well as a \textit{WH}-phrase in the embedded COMP; in the sentences in (76), the resumptive pronoun is not associated with a \textit{WH}-COMP. Such examples as (78) would thus supply closer structural equivalents for (76):

\textbf{(78)a} the man \textsubscript{1} that John saw him \textsubscript{1} \\
\textbf{b} the man \textsubscript{1} that they think that if Mary marries him \textsubscript{1}, then everyone will be happy

As emphasized in linguistic literature, the resumptive pronoun of (76)-(78) does not abide by the Subjacency and \textit{WH}-Island conditions, typically applying to \textit{WH}-phrases, of:

\textbf{French (examples from Cannings (1978))}

\textbf{SF (79)a} \textemdash \textsubscript{celui \textsubscript{1} qu'\textsubscript{1} il était plus grand que \textsubscript{ec \textsubscript{1}}; the one that he was taller than

\textbf{PF} \textsubscript{b} \textsubscript{celui \textsubscript{1} qu'\textsubscript{1} il était plus grand que \textsubscript{lui \textsubscript{1}}; the one that he was taller than him

\textbf{SF (80)a} \textemdash \textsubscript{l'homme \textsubscript{1} que, tu vas épouser celle qui a abandonné \textsubscript{ec \textsubscript{1}}; the man that you will marry the girl who let down

\textbf{PF} \textsubscript{b} \textsubscript{l'homme \textsubscript{1} que tu vas épouser celle qui \textsubscript{1} \textsubscript{a abandonné; the man that you will marry the girl who let him down

\textbf{SF (81)a} \textemdash \textsubscript{celui \textsubscript{1} dans le jardin de qui \textsubscript{1} c'est \textsubscript{ec \textsubscript{1}} qu'il y a des statues the man in the garden of whom it is that there are statues
28 - Zribi-Hertz

(81) (Cont.)

PF (81)b celui\textsubscript{i} que c'est dans son\textsubscript{i} jardin qu'il y a des statues
the man that it is in his garden that there are statues

SF (82)a *Voici l'homme\textsubscript{i} dont\textsubscript{i} tu admets le fait
here is the man of whom you admit the fact
que je connais la soeur \textsubscript{ec}\textsubscript{i}
that I know the sister

PF b Voici l'homme\textsubscript{i} que tu admets le fait que je connais sa\textsubscript{i} soeur
here is the man that you admit the fact that I know his sister

SF (83)a *Voici l'homme\textsubscript{i} que je me demande qui peut bien aimer \textsubscript{ec}\textsubscript{i}
here is the man whom I wonder who might love

PF b Voici l'homme\textsubscript{i} que je me demande qui peut bien \textsubscript{1}\textsubscript{i}'aimer
here is the man that I wonder who might love him

English (examples from Chomsky (1982))

(84)a *the man\textsubscript{i} whom\textsubscript{i} they think that if Mary marries \textsubscript{ec}\textsubscript{i}
then everyone will be happy (STANDARD)

b the man\textsubscript{i} whom\textsubscript{i} they think that if Mary marries him\textsubscript{i}, then everyone
will be happy (SUBSTANDARD)

(85)a *this man\textsubscript{i} whom\textsubscript{i} everybody admits the fact that Mary saw \textsubscript{ec}\textsubscript{i}
(STANDARD)

b the man\textsubscript{i} whom\textsubscript{i} everybody admits the fact that Mary saw him\textsubscript{i}
(SUBSTANDARD)

These contrasts suggest that the resumptive pronoun of such examples must not be analyzed as the optional instantiation of a \textit{WH}-trace, but is to be regarded as a basic pronominal, taking part in a relativization strategy that does not involve syntactic \textit{WH}-Movement.
Now returning to French, consider the relativization of a preposition NP in each of the two systems described above:

**WH-RELATIVES (SF)**

(86)a Voici l'homme, devant qui, Marie est passée eci,
   b Voici l'homme, devant lequel, Marie est passée eci,
   here is the man, in front of WH-PRONOUN, Marie passed

(87)a ?Voici la maison, devant qui, Marie est passée eci,
   b Voici la maison, devant laquelle, Marie est passée eci,
   c *Voici la maison, devant quoi, Marie est passée eci,
   here is the house, in front of WH-PRONOUN, Marie passed

(88)a Voici ce, devant quoi, Marie est passée eci,
   b *Voici ce, devant lequel, Marie est passée eci,
   here is that, in front of WH-PRONOUN, Marie passed

**Resumptive Relatives (PF)**

(89)a Voici l'homme, que Marie est passée devant lui,  
   b ?Voici l'homme, que Marie est passée devant Δ, 
   here is the man that Marie passed in front (PRONOUN)

(90)a ?Voici la maison, que Marie est passée devant elle, 
   b Voici la maison, que Marie est passée devant Δ, 
   here is the house that Marie passed in front (PRONOUN)

(91)a *Voici ce, que Marie est passée devant lui,  
   b Voici ce, que Marie est passée devant Δ, 
   here is that COMP Marie passed in front (PRONOUN)

The SF system has two separate sets of relative pronouns: (1°) qui, quoi; (2°) lequel, laquelle, lesquel(le)s. The elements of the first set are respectively +human (gui) and -gender, or 'neutral' (quoi), this accounting for the judgments associated with (86a), (87a, c), (88a). The elements of the lequel set, are always +gender (hence the ungrammaticality of 88b), but they are unspecified as to the feature +human (hence the acceptability of both 86b and 87b).
The resumptive pronoun of (89a) contrasts, in PF, with a gap (e.g., 90b, 91b) bearing the feature -human, as is generally the case in OP constructions. The distribution of the features +gender, +human, accounts for the difference in style perceived between (92a) and (92b):

(92a) Cette maison, Pierre est passée devant \( \Delta \).
this house  Pierre passed  in front

b Voici la maison, que Pierre est passée devant \( \Delta \).
here is the house that Pierre passed in front

The OP of (92b) clearly belongs to the PF system, while the OP of (92a) belongs to standard French. In topicalized structures such as (92b), no full pronominal is actually available for the desired (non-human) interpretation; in relative clauses, however, SF does have a \( WH\)-element (lequel) open to non-human interpretation, so that (92b) contrasts with its standard variant (87b).

Consider at last examples (93) and (94), illustrating the general contrast opposing English (a P-Stranding language which disallows OPs) and French (an OP language which disallows P-Stranding):

English

(93)a This is the bed, which. Mary slept on \( ec \).  (STANDARD)

b This is the bed, on which, Mary slept \( ec \). (STANDARD)

c This is the man, that Mary slept on him.  (SUBSTANDARD)

French

(94)a Voici le lit, que Marie a dormi dessus \( \Delta \).  (PF)

b Voici le lit, sur lequel, Marie a dormi \( ec \).  (SF)

c Voici l'homme, que Marie a dormi sur lui.  (PF)

The (b) \( WH\)-strategy) and (c) (full resumptive pronoun) examples of both paradigms may be regarded as symmetrical, but such is not the case of the (a) examples, as immediately suggested by the difference in style, or dialect. In (93a), the \( ec \) identifies as a \( WH\)-trace, this making the relative clause a stranded-P structure, similar to those in examples (4); (94a) exhibits the properties of an OP structure, with a pronoun-like gap similar to that of examples (2), (3), and so forth.

5. Conclusion

Bearing in mind the above set of data, let us now examine how OP constructions are to be analyzed in a GB framework. Returning to the
triple alternative outlined in Section 3, we seem to have sufficient evidence to discard ESH in favor of NPH.

Evidence against ESH-2, according to which OP constructions would contain no gap at all in S-structure has been supplied (see Section 4.5) by the behavior of OPs in topicalized sentences.

Assuming, then, that OPs govern a gap in S-structure, it remains to be shown that this gap is an 'empty category' (NPH) rather than an 'elliptical gap' (ESH-1) of the kind illustrated in (19) and (20). Properties of elliptical gaps (such as those in Gapping, Conjunction Reduction, Comparative Reduction, Null Complement Anaphora, VP Deletion constructions) need to be investigated in some detail (see Zribi-Hertz, forthcoming), but I shall assume, for my present purpose, the two following generalizations:

(1°) Elliptical gaps (as opposed to 'empty categories': pro, PRO, trace) may always be filled by (repeated) lexical material, the full/null contrast being one of style, rather than interpretation or grammaticalness.

(2°) Elliptical-gap positions (as opposed to pronoun positions, as a whole) are not submitted to Disjoint Reference.

Assuming this, it clearly follows from the properties of OP constructions that OP gaps are instances of an Empty (nominal) Category, rather than elliptical gaps, since they contrast semantically with full pronouns, and are globally submitted to DR as are pronominals (as most clearly shown in Section 4.7). We must therefore conclude that OP gaps are to be regarded as instances of pro, the null, pronominal, non-anaphoric nominal defined within Chomsky's Empty Category typology.

This conclusion in turn suggests that the definitions of pro offered in Chomsky (1982), and (for instance) in Mohanan (1983), must be loosened to allow the occurrence of this empty nominal in non-subject syntactic positions, including non-nuclear ones.
I wish to thank Milton do Nascimento and Pilar Fradejas, for helping me collect the Spanish and Brazilian-Portuguese data.
NOTES

1. OP constructions are briefly mentioned in Kayne (1980) and Kayne (1983), where the author discusses (among other things) various properties of English and French prepositions.

2. This term is borrowed from Postal (1970), who thus refers to stranded prepositions. The 'orphan' metaphor seems to me more accurate in reference to the French constructions at issue here, the derivation of which is assumed to involve no movement (therefore no 'stranding').

3. The term 'topicalized' is to be taken in a broad sense, covering both topicalized (e.g., (I)) and 'left-dislocated' (e.g., (II)) structures:

   (I) This book, I read
   (II) This book, I read it

The remarks presented in this paper actually suggest that schema (I) may be dominant in English, while schema (II) is more common in French. Thus example (III) (the French analogue of English 40b) is certainly less natural than (IV), its left-dislocated counterpart:

   (III) Ce livre, je regarde rarement (mais celui-là, je lis tout le temps)
   (IV) Ce livre, je le regarde rarement (mais celui-là, je le lis
tout le temps)

4. This formulation is borrowed from Chomsky (1977, and subsequent work).

5. Assuming that violation of selectional restrictions does not result in ungrammaticalness, but in semantically marked sentences, I have replaced here Ruwet's stars by mere question marks.

6. A distinction should be made here between STRONG (i.e., non-clitic) and EMPHATIC pronouns. While various languages, including Spanish, Brazilian, and English, have strong, non-human pronouns, many languages seem to exclude non-human pronouns from emphatic contexts. Thus the English (strong, non-human) pronoun it, does not occur in such emphatic contexts as (V) and (VI):

   (V) a I love Justine and shall never love anyone but HER.
      b I bought the Little Red Book and shall never read anything
      but IT.

   (VI)a HE left, but SHE stayed.
      b HE left, but IT stayed.
Similar restrictions may be shown to apply in very different languages, e.g., Swahili--this suggesting that some universal principle of discourse may be at stake. In this paper, OP-gaps are contrasted with STRONG pronouns, emphatic uses left aside.

7. These forms are marginally tolerated in colloquial Brasilian.

8. For the sake of simplicity, the trace of the clitic has been ignored in this (and the following) example(s).
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