

Toward a syntactic classification of French prepositions

Annual Meeting of the Canadian Linguistic Association

June 4-7, 2021

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The problem

Typologies based on morphosyntactic, semantic, and distributional properties

functional, “vides/incolores”	mixed “mixtes”	lexical “pleines”, “colorées”	nominal, selects DP	locutions	adverbial
<i>à</i> ‘at’ <i>de</i> ‘of/from’ <i>en</i> ‘in’	<i>avec</i> ‘with’ <i>dans</i> ‘in’ <i>par</i> ‘by way of’ <i>pour</i> ‘for’ <i>sans</i> ‘without’ <i>sur</i> ‘on’ <i>sous</i> ‘under’	<i>contre</i> ‘against’ <i>parmi</i> ‘among’ <i>vers</i> ‘(somewhere) around’ <i>chez</i> ‘at the house of’	<i>derrière</i> ‘behind’ <i>avant</i> ‘before’ <i>devant</i> ‘in front of’	<i>en face de</i> ‘facing’, <i>au pied de</i> ‘at the foot of’, <i>à côté de</i> ‘beside’	<i>dessus</i> ‘atop’ <i>dessous</i> ‘below’ <i>dedans</i> ‘inside’ <i>dehors</i> ‘outside’

Cadiot 1997, Cervoni, Le Pesant 2012; Mélis 2003; Vager 2008, among others

Question

This paper grew out of a concrete need...

What might be a good practical syntactic formalization of French PPs – descriptive, unifying, predictive?

Proposal: Apply the French facts to the extended PP

- Koopman (2000); Den Dikken (2010); Svenonius (2010, et subseq.), among others

Context: Surprisingly little work on this!

Axial expressions: See Roy (2006), Matushansky & Zwarts (2019), Real-Puigdollers (2019), Ursini & Tse (2021).

Little *p*: L'éveillé, Alexander-Renaud & Saucier (2020)

Orphan prepositions: Troberg (2020)

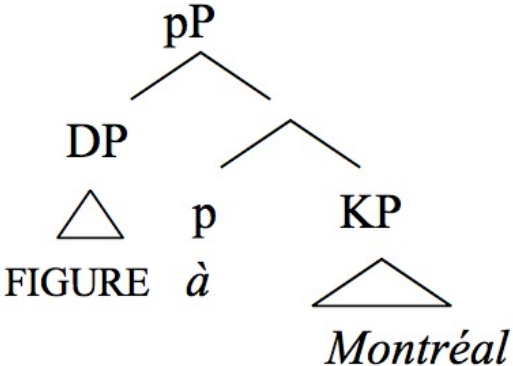
Orientation

- Focus on spatial meanings
 - Exclude possible case-marking contexts; See Zaring (1991) for an good overview of the debate. There is evidence that the dative/indirect object *à* (*je parle à Marie*) may not be a preposition: quantifier stranding; pronominal clitic forms (see Kayne 1975, Jaeggli 1981).
- Distributional facts:
 - word order (preposition stacking; locutional Ps)
 - complementation (preposition stacking)
 - null objects
 - *là-/ci-* cliticization

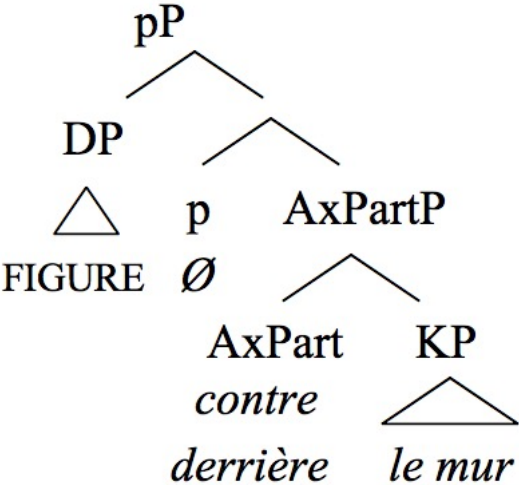
Findings

Categorizer/Light (p): basic topological relations	Axial Part: subpart or property of the region denoted by the object of the P
<p> <i>à</i> 'at' <i>Ø</i> 'at' <i>vers</i> 'in the vicinity' <i>par</i> 'by' </p> <p>localizer</p>	<p> <i>après</i> 'after' <i>entre</i> 'between' <i>contre</i> 'against' <i>avec</i> 'with' <i>chez</i> 'at the house of' </p> <p>lexical Ps</p>
<p> <i>de</i> 'of/from' <i>dès</i> 'from' </p> <p>point of origin</p>	<p> <i>derrière</i> 'behind' <i>avant</i> 'before' </p> <p>nominal Ps</p>
<p> <i>en</i> 'in' <i>dans</i> 'in' </p> <p>inclusion</p>	<p> <i>en <u>face</u> de</i> 'facing' <i>au <u>pied</u> de</i> 'at the foot of' <i>à <u>côté</u> de</i> 'beside' </p> <p>locutions</p>
<p> <i>hors</i> (de) 'out' </p> <p>exclusion</p>	
<p> <i>sur</i> 'on' </p> <p>contact/support</p>	<p> <i>dessus</i> 'atop' <i>dessous</i> 'below' <i>dedans</i> 'inside' <i>dehors</i> 'outside' </p> <p>adverbials</p> <p>...</p>

(1) a. LIGHT
à Montréal
 'in/at Montréal'

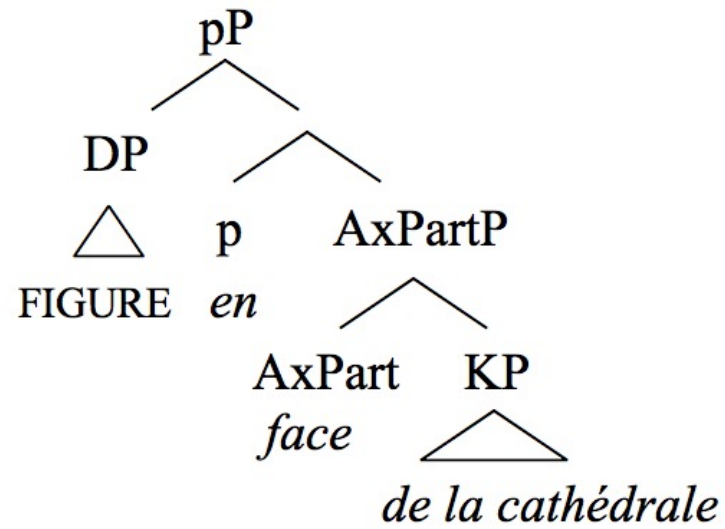


b. LEXICAL
contre/derrière le mur
 'against/behind the wall'



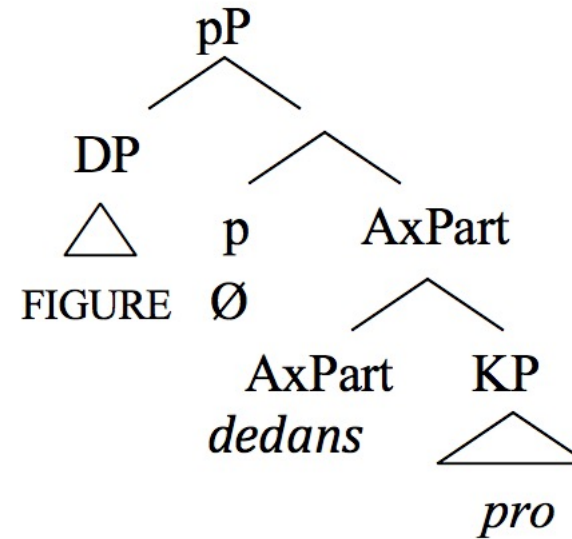
c. LOCUTIONS

en face de la cathédrale
 'facing the cathedral'



d. INDEXICALS

dedans
 'inside'

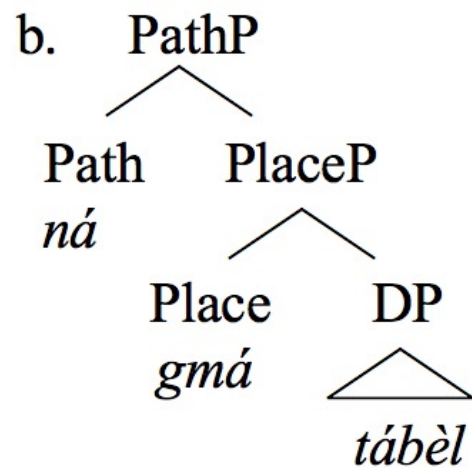


1. The Extended PP

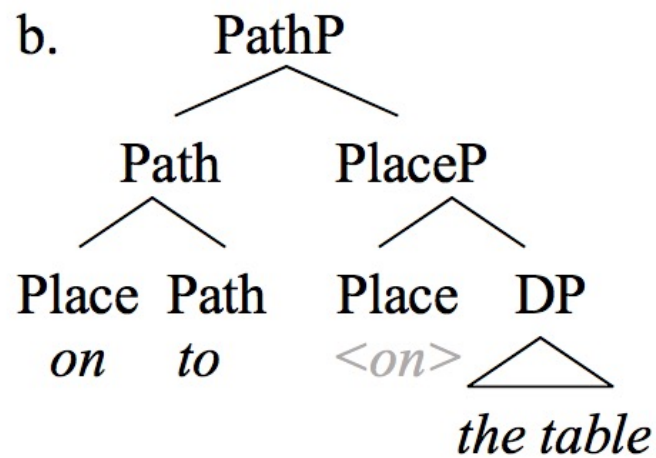
- **Path and Place**
- Prepositional elements appear to be of two basic types: Path (directed motion) and Place (locational meanings).
- Cross-linguistic hierarchy (cf., Van Riemsdijk and Huybregts 2002):
When Path and Place elements co-occur, Path is morphosyntactically outside Place.

(2) a. *ná gmá tábèl*
 to on table
 ‘onto the table’

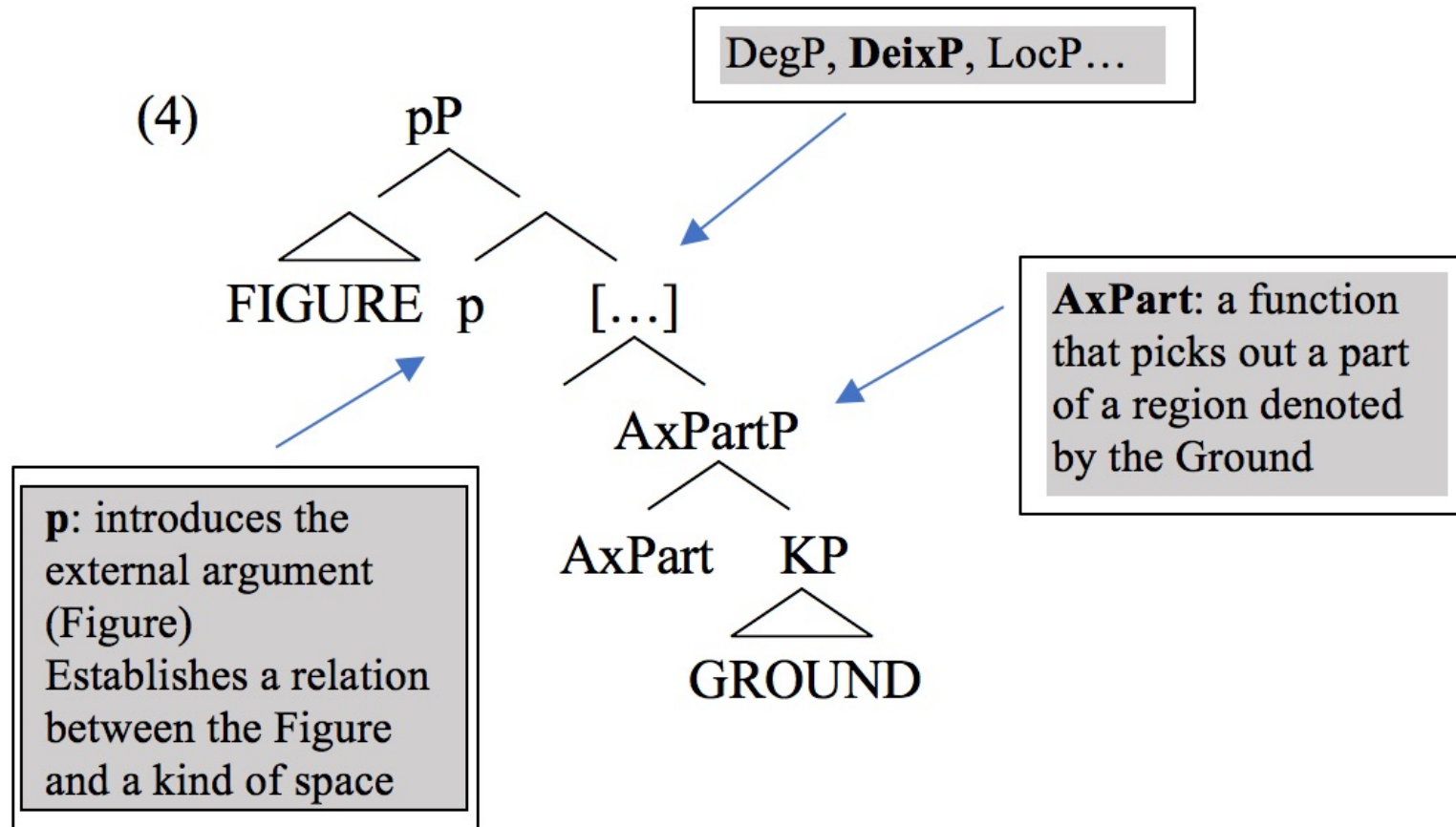
(Zina Kotoko; Holmberg 2002)



(3) a. *onto the table*



PlaceP (Svenonius 2010 et subseq.)



Prepositions would be elements of the extended functional projection of nouns

2. French spatial prepositions

2.1 Path

No prepositional elements are associated with Path.

- Path is strictly a property of verbs (not prepositions) in Modern French .
- All apparent directional readings of Ps are a result of the meaning of the verb. For formal approach to Talmy's typology as it applies to French, see Troberg & Burnett (2017), Troberg (2020), Folli & Harley (2020).

Some common misinterpretations of French Ps as directional:

- *à* means 'to'; *vers* means 'toward'; *de* means 'from', *par* means 'through'

If these were exponents of Path, they couldn't be used in locative contexts... but in fact, they can:

Dynamic/directional context	Stative/locative context
a. <i>Je vais à Montréal.</i> 'I am going to Montreal.'	a'. <i>Je suis à Montréal/au lit</i> 'I am in Montreal/in bed.'
b. <i>En allant vers la gare.</i> 'Going to(ward) the station.'	b'. <i>Nous avons fait le plein vers Kingston.</i> 'We filled up (somewhere) around/near Kingston.'
c. <i>Elle est venue de Montréal.</i> 'She came from Montreal.'	c'. <i>Il tient ce trait de caractère de son père</i> 'He has this character trait belonging to his father.'
d. <i>Passer par la porte.</i> 'Go through the door.'	d'. <i>Être assis par terre.</i> 'To be seated on the ground.'

Table 1: *à, vers, de, par* as basically locative

PlaceP: First cut into three types

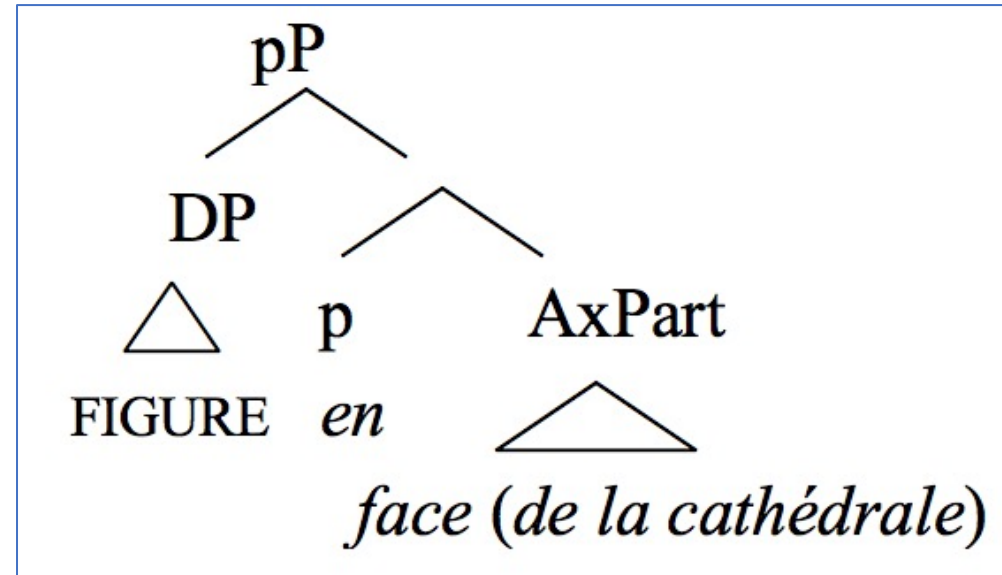
	Light p	Lexical P – no nominal counterpart	Axial term – having a nominal counterpart
	<i>à, de, en, par...</i>	<i>avec, après, entre, sans...</i>	<i>face, côté, pied, derrière, dessus...</i>

Is there syntactic evidence that these three classes (or more) are distinct?

- Word order
- Selectional properties
- Null objects
- *là-/ci-* cliticisation

2.2 Word order: light *p* is left-most element in axial expressions

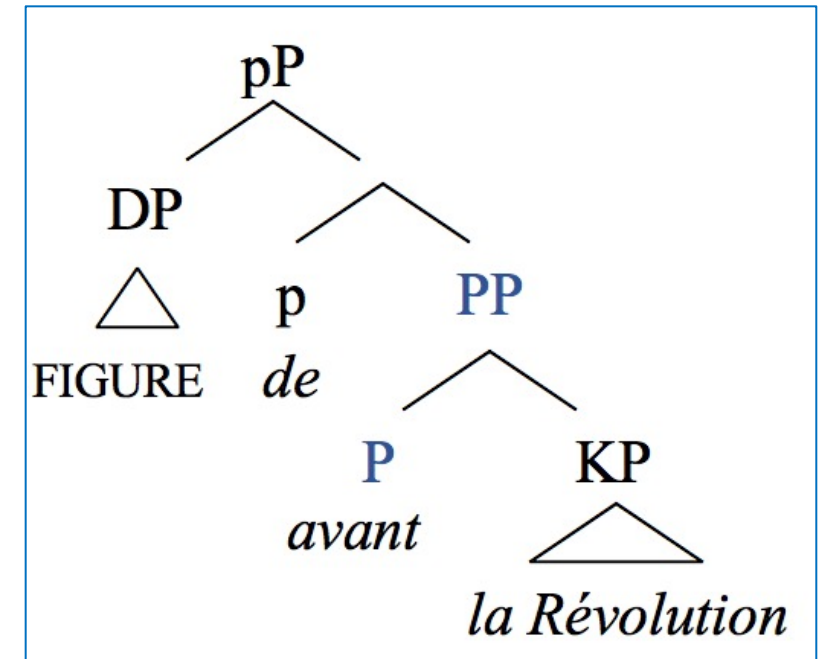
- (5) a. *en* *face* *de*
in face of
'facing'
- b. *à* *côté* *de*
at side of
'beside'
- c. *par* *dessus* *de*
by.way.of top of
'over top of'
- d. *de* *derrière*
from behind



See: Roy (2006); Matushansky & Zwarts (2019);
Real-Puigdollers (2019).

2.3 Selection: light *p* can select a “lexical” preposition

- (6) a. ...*qui date d'avant la Révolution.*
'which dates from before the Revolution.'
- b. *Il téléphonera dès après le repas.*
he will phone from after the meal
'He will phone right after the meal.'
- c. *séparer l'ivraie d'avec le bon grain*
separate the=chaff from=with the good seed
'to separate the wheat from the chaff'
- d. *certains d'entre nous*
certain of=between us
'certain among us/ some of us'



These combinations are compositional

2.4 Selection: light *p* can select light *p*

(7) a. *Il voyageait de par le monde.*

he travelled of by.way.of the world

'He travelled throughout the world.'

b. *passer par en-dessous*

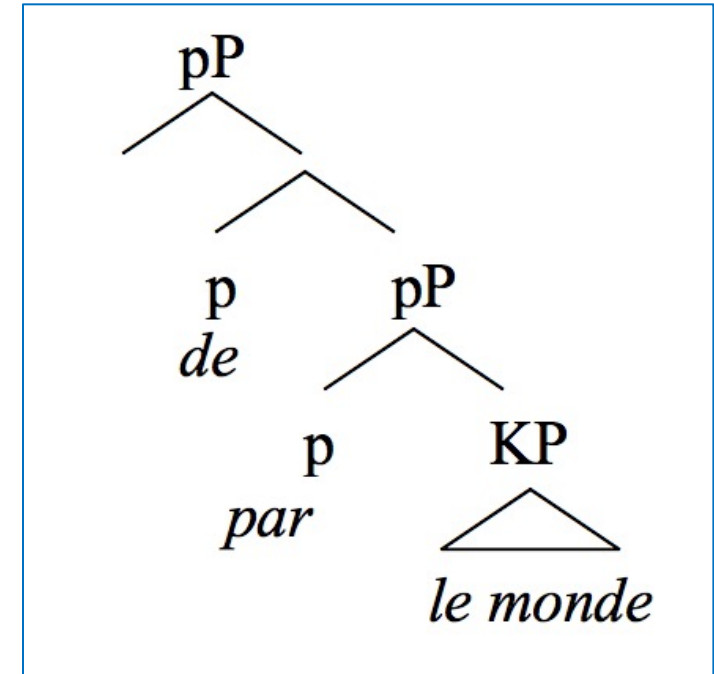
to.pass by.way.of in bottom

'to pass underneath'

c. *Ce sera fait pour dans trois jours.*

this will.be done for in three days

'This will be done for three days from now.'



These combinations are compositional

Summary so far:

	Light	Lexical – no nominal counterpart	Axial – having nominal counterparts
	<i>à, de, dès, en, par, pour</i>	<i>avec, après, entre</i>	<i>face, côté, pied, derrière, dessus...</i>
Word order	left-most element of complex PP	right-most element of complex PP	right-most element of complex PP
Selection	light p, lexical P, axial term, DP	DP (but not axial term)	DP

These properties are strikingly similar
Lexical Ps and axial terms (nominals) occur in complementary distribution
→ **“lexical” Ps are Axial Parts**

2.6 Axial Parts

- Axial parts often have nominal counterparts; many of these terms clearly evolve from full nouns: *face*, *pied*, *côté*, etc.
- They name a subpart of the Ground reference object that presupposes something about the axial structure of the Ground: boundaries, interior space, poles, etc.
- Svenonius (2008) makes the argument that they are functional elements. Roy (2006) does so specifically for French:
 - neutral for number **aux fonds de*
 - restricted determiner use (the definite article): **à un/chaque/aucun fond de*
 - can't be modified: **à grand côté de*

Axial Parts

- Some Axial parts (often bounded) presuppose complex relations (spatial and otherwise) between the Figure and the Ground – and not all AxPart elements need be clearly nominal; Svenonius (2006, 2010), Fabregas (2007), Rooryck & Vanden Wyngaerd (2007)...
- *avec* ‘with’ (concommittance); *contre* (contact/resistance), *entre* (interpolation + bifurcation), *chez* (dwelling place)...
- I thus consider the “lexical” Ps (*avec, sans, contre, etc.*) to be exponents of AxPart.

2.7 Null Ground

Very common with axial expressions.

(8) a. *Ce mur, le phantôme passe facilement **à travers**.*

‘This wall, the ghost easily passes through it.’

b. *Les arbres, Pierre se cache toujours **derrière**.*

‘Trees, Pierre always hides behind them.’

c. *Lorsque je vois un banc, je saute **par-dessus**.*

‘Whenever I see a bench, I jump over it.’

Null Ground: non-nominal axial terms allow this, too.

(9) a. *Cette valise, je voyage toujours **avec**.* (Zribi-Hertz 1984)

‘This suitcase, I always travel with it.’

b. *Lance-la juste **après**!* (Melis 2003)

‘Throw it right after!’

c. *Le mur de Berlin, Max était **contre**.* (Leeman 2001: 246)

‘The Berlin wall, Max was against it.’

For these non-nominal AxParts: null Ground is restricted to particular contexts

Null Ground: light *p* does not allow this.

- (10) a. **Montréal, j'adore aller à.*
'Montreal, I love going to.'
- b. **Montréal, je suis passé par.*
'Montreal, I went by/through.'
- c. **Mon pouvoir, Paul est en.*
'My power, Paul is in.'
- d. **Montréal, je viens de rentrer de.*
'Montreal, I just came back from.'

Categoric ungrammatical
null Ground as a good first
diagnostic for light *p*?

Why does null Ground pattern this way?

Zribi-Hertz (1984) demonstrates that null Grounds are syntactically present; they are null pronouns of the type [-human].

Topicalized objects in French: an obligatory coindexation relation is established:

- (11) [*Cette valise*]_i, *je voyage* *toujours avec pro*_i.
This suitcase I travel always with
‘This suitcase, I always travel with it.’

This relation is identical to verbal objects, where there is clearer evidence of *pro* via the clitic.

- (12) [*Cette valise*]_i, *je l*_i’*ai achetée* *pro*_i *la semaine passée*.
This suitcase I it=AUX bought the week passed
‘This suitcase, I bought it last week.’

Null grounds are not a case of preposition stranding. Unlike English, preposition stranding is prohibited in standardized French (but see Roberge & Rosen (1999) for varieties of North American French that allow P-stranding).

- i. [Which suitcase]_i did Marie travel with *t*_i ?
- ii. *[Quelle valise]_i est-ce que Marie a voyagé avec *t*_i ?

No CNPC:

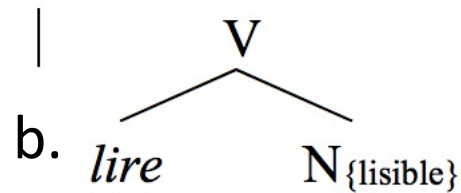
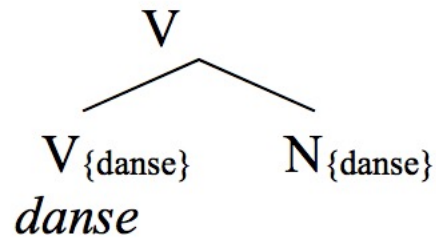
iii. *Ce banc, je déplore le fait que Marie refuse de sauter par-dessus.*

No Wh-island constraint

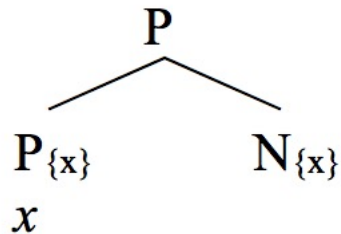
iv. *Ce banc, savez-vous qui doit sauter par-dessus?*

- Roberge (2012) integrates the licensing of null prepositional objects into the general discussion of the licensing of null verbal objects.
- Hale and Keyser (2002, p. 92): for unergatives, the relation between the verb and its complement is one of classificatory licensing whereby “the verb identifies the complement to some sufficient extent”. Cummins & Roberge (2005) extend this to all verbs.

(13) a.

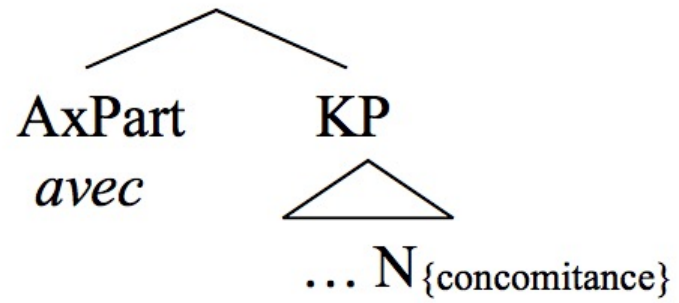


(14) a.

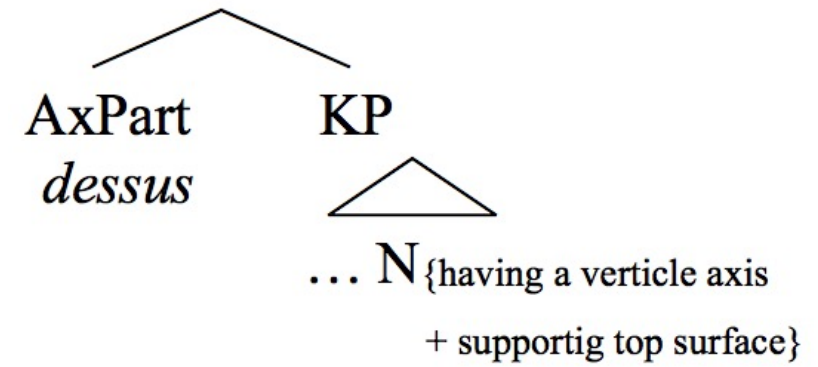


French prepositions would license their null objects in the same way.

(15) a.



b.



What about heads that do not have rich lexical content?

- Verbs: Hale & Keyser (2002) suggest that light verbs do not license null (cognate) objects due to an insufficient amount of lexical content (*do, give, have, make, take, put...*)

- (16) a. **Marie a fait*.
b. **Marie a mis*.

- Prepositions: Roberge, in turn, suggests that this holds for the so-called « weak » prepositions (*à, de, en*). There isn't enough lexical content to establish reference for the null object.

2.8 Là-/ci- cliticisation

Permitted with (some) AxPart elements:

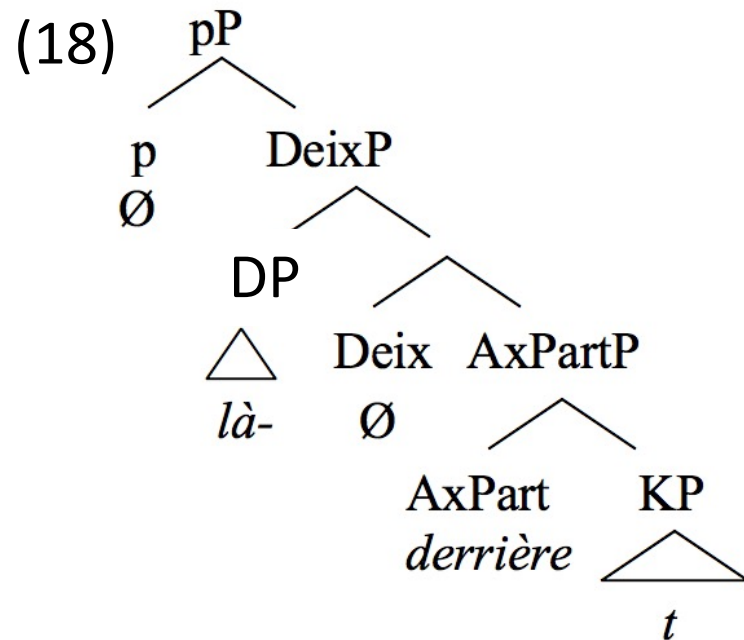
- *ci-après* 'here after'
- *là-contre* 'there against'
- *là-derrière* 'there behind'
- *ci-dessous* 'here below'
- *là-dedans* 'there inside'

But never permitted with light *p* elements

- **là-par*
- **là-de*
- **ci-en*
- **ci-en-dessous* 'here underneath'
- **là-sur*

là- merges below *p*
but above AxPart.

Svenonius's DeixisP, which encodes proximal and distal information, appears to be a good candidate for the position of the clitic.



Authier (2016) proposes that *là* is simply the object pronoun (clitic) of the prepositional element. He points to its nominal status.

Can head a relative clause:

(i) *J'irai là où tu iras.*

'I will go (there) where you will go'

(Sportiche 1990)

Incompatible with some P modifiers (Rooryck 1996: 251, n13):

(ii) *Elle a atterri en plein dans un buisson épineux/*là.*

'She landed smack dab in a prickly bush/there.'

Alternates with NP complements of some Ps

(iii) *Il est sorti par la fenêtre/là.*

'He left through the window/there.'

2.9 *dessus* ‘above/on top’, *dessous* ‘underneath’, *dedans* ‘inside’

We see them in axial expressions:

- *Au dessus de la table* ‘on top of the table’
- *En dessous de la table* ‘underneath the table’

But when used alone, they are generally always indexical, and they usually do not take an overt complement.

(19) a. *Mets-le dedans* (*?le sac). ‘Put it inside (*?the bag).’

b. *Mets-le là-dedans* (*le sac). ‘Put it there inside (*the bag).’

(20) a. *Mets-le dans* *(le sac). ‘Put it inside the bag.’

They are not adverbs.

These forms pattern as prepositions with a null ground.

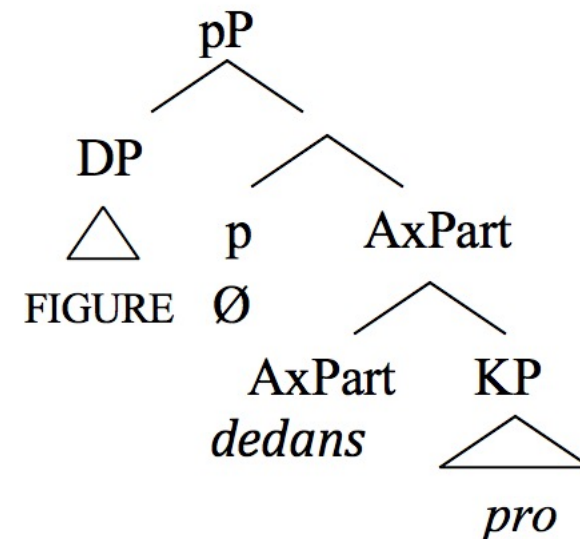
(24) [*Ton cahier*]_i, *Pierre a renversé du lait dessus* *pro*_i.

‘Your notebook, Pierre spilled milk on it.’

Used without an overt *p*, *dessus*, *dessous*, *dedans* appear to only select (null) pronominal forms, not full DPs.

This is an unusual property.

Dedans was transitive in Medieval French, and so its function overlapped considerably with "dans". The principal difference between them was that *dans* was never used intransitively. These near doublets became functionally distinct early on so that *dedans* was rarely used in transitive contexts. It could be that this situation gave rise to *dedans* being acquired as a lexical item with a radically restricted selectional requirement: only *pro*. In other words, the frequency effect becomes a lexical property. The same would apply for *dessus*, *dessous*, *dehors*.



These lexical items are monomorphemic.

→ *Là-* cliticisation: *là* attaches to AxPart elements but not p.

(25) a. *là-derrière* **là-sur/en/de*

 b. *là-dessous* **là-en-dessous*

→ If these elements were stacked p's, there would be no explanation as to why the complex requires a null Ground when none of *de*, *sous*, *dans*, and *sur* allow a null Ground.

→ Sävborg (1941) documents the reanalysis of these *de-* forms (and others) from Late Latin, during the pre-textual period; see also Rainsford (2019a,b).

This differs from analysable *de-* and *a-* complex prepositions in Spanish (*debajo/abajo*, *detras/atras*, etc.); see Fabregas (2007) and Romeu (2014).

3. Conclusion

	Light p	Axial Part
	<i>à, de, dès, en, par (dans, sur, hors (de), vers, via, pour)</i>	<i>avec, après, entre, face, côté, pied, derrière, dessus...</i>
Meaning	basic topological meanings: localisation; point of origin; containment;	part or property of the region denoted by the Ground
Word order	left-most element of complex PP	right-most element of complex PP
Selection	pP, AxPartP, DP	DP
Null Ground	X	✓
là-/ci- cliticisation	X	✓

An extended PP along with a theory of null objects offers a fruitful way to describe and unify various kinds of French prepositions and to account for some of their distinct properties. Many avenues for more finer-grained analyses for French and for (micr)comparative work on Romance languages.

Some avenues to pursue

- Other simple prepositions: ***dans*** (containment), ***hors (de)*** (exclusion), ***parmi*** (interpolation + composite), ***sous*** (under), ***sur*** (contact/support), ***vers*** (localiser), ***via*** (route)
 - None of these allow null objects or *là-/ci-* cliticisation.
 - Are they all exponents of light *p*?
 - If we adopt Svenonius (2010, 2012), ***sous***, being projective, would have to lexicalize both *p* a lower functional head like Loc/Proj.
- Among the AxPart elements, identify the bounded/projective prepositions and evidence of lexicalization of Deg/Loc. What is the exact nature of Measure phrases?
- *dehors* ‘outside’ – existential and definite readings for the object?
 - *là-dehors* ‘out there’ – this suggests that *dehors* is underlyingly transitive.

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