In this paper, we shall discuss the status of a class of French à-infinitives, sometimes referred to as modal reduced relatives, with respect to both their attributive and predicative uses. In particular, we shall contrast their behaviour in several raising contexts with that of ordinary finite and infinitival relatives, and conclude that a reduced relative analysis fails to capture the boundedness of the dependency between the antecedent noun and the “relativised” complement in the attributive use, and, more importantly, fails to account for their predicative uses. Instead, we shall argue that such à-infinitives are infinitival passives, as witnessed not only by object promotion (Giurgea & Soare, 2007), but also by demotion of the logical subject to an optional par-phrase. Moreover, embedding under subject-to-object raising verbs like avoir ‘have’ and donner ‘give’ shows that both the surface subject and the logical subject must be accessible externally, thereby underlining the analysis as full passives. In the formal analysis, which is carried out with Head-driven Phrase Structure Grammar, we shall build on a previous proposal by Haider (1984) for German, where both the derived surface subject and the logical subject (=designated argument) are externally accessible. We show how this move accounts for the full range of raising constructions, while at the same time limiting true relatives to mostly attributive function.

1 Passive à-infinitives: reduced relatives?

Passive à-infinitives in French appear in a wide variety of contexts: they can be used attributively (1), predicatively (2), and they act as complements in the tough-construction (5). In all three of these examples, it is the direct object of the lexical verb in the à-infinitive that corresponds to the antecedent noun or to the subject that is predicated on.

Possibly owing to the attributive use, its superficial similarity to infinitival relatives (3a), and a somewhat relaxed locality (see §1.3) this construction has sometimes been analysed as a reduced relative (cf. e.g. Abeillé et al., 1998). However, as we will show in the next subsections, French à-infinitival passives follow a distribution pattern that is clearly distinct from that of any type of French relatives.

1.1 Attributive vs. predicative uses

The first property that sets the à-infinitival passive apart from the French relative system is its predicative use, illustrated in (2). Neither infinitival relatives (3) nor finite relatives (4) can be used predicatively.

Secondly, à-infinitival passives (5), but not infinitival relatives (6) appear as the complement of a certain class of adjectives in tough-constructions:

1.2 Object predication

A fourth and last use of the à-infinitive is the object predication construction exemplified below.
This construction is distinct from the attributive use in (1): the \( \dot{\phi} \)-infinitive can stay in situ when the NP that is semantically understood as its missing object is pronominalised (8a), something that attributes cannot normally do in French (8b). The main predicate is also limited to a specific class, including *avoir* ‘have’, but also *donner/laisser* ‘give/let’ (9).

(8) a. *Tu les as à lire.  
   2SG 3PL.ACC have to read.

   b. *Je les ai lus intéressants.  
   1SG 3PL.ACC have read interesting

The main challenge provided by this use of the \( \dot{\phi} \)-infinitival (11) or finite relatives in *que* (12) are allowed; the exception is that some predicates do allow a relative clause introduced by *qui* (13), a construction known as pseudo-relative or predicative relative (see §1.4).

(11) *Cet endroit, je l’ai où aller.

(12) *Ce livre, je l’ai que je dois lire.

(13) Ces enfants, je les vois qui jouent.  
   these children 1 3PL.ACC see qui play 
   ‘These children, I see them playing.’

The main challenge provided by this use of the \( \dot{\phi} \)-infinitival passive is that not only should the downstairs logical object be exposed outside of the construction, but the logical subject as well: in (7), the agent of *lire* ‘read’ is understood to be the second person singular pronominal *tu*, and in (9) it is the third person plural *leur*.

Any analysis will therefore need to expose pointers to both core arguments of an \( \dot{\phi} \)-infinitive to be accessed by the upstairs verbs. The downstairs logical object will be realised as an upstairs NP complement, while the downstairs logical subject can be controlled by some argument of the upstairs verb: *avoir* ‘have’ exerts subject control, while *donner* ‘give’ exerts control by the indirect object.

### 1.3 Locality

French \( \dot{\phi} \)-infinitives of the type discussed here are bounded rather than unbounded dependencies (Kayne, 1974, 1975; Abeillé et al., 1998), in contrast to their English counterparts and to other relatives in French, including infinitival ones as in (3) (Huot, 1981).

(14) *Le travail était facile à essayer de finir.
   the work was easy to try to finish

However, as admitted by Abeillé et al. (1997), the class of (raising) verbs that show this transparency towards their complement’s direct object in these constructions does not fully align with the class of auxiliaries that are said to trigger argument composition: apparently, some speakers of French clearly accept access to the logical object with \( \dot{\phi} \)-infinitives even for auxiliaries that do not trigger argument composition, such as modal *pouvoir/vouloir* ‘can/want’ or aspectual *aller* ‘go’. Most interestingly, this transparency translates from attributive uses to predicative ones, as well as tough-constructions and object-predicative constructions.

Abeillé et al. (1998) have proposed an HPSG account of \( \dot{\phi} \)-infinitives both as modifiers and in tough-constructions. For the latter, they propose that a direct object of the tough predicate’s complement be raised to subject valency, essentially a bounded version of the promotion to subject found in English for accusative gaps (SLASH elements).

Another limitation of the reduced relative analysis of \( \dot{\phi} \)-infinitives is that it fails to recognise the passive-like nature of the construction: in both attributive and predicative uses, the demoted logical subject can be expressed by a *par*-phrase, an option that is unavailable to active verbs.

(19) *une pétition à signer par tous les membres  
   a petition to sign by all the members 
   ‘a petition to be signed by all members’

(20) *Cette pétition est à signer par tous les membres.  
   this petition is to sign by all the members
   ‘This petition is to be signed by all members.’
Finally, the reduced relative analysis leaves entirely open how the logical subject can be controlled in the object predication construction, which is, again, a property not shared by relatives.

1.4 Pseudo-relatives

In their paper on French pseudo-relatives, Koenig & Lambrech (1999) argue convincingly that pseudo-relatives, as illustrated in (13), do not form a constituent with their antecedent noun, but rather that the relative’s subject undergoes raising to object (cf. Kleiber, 1988; Labelle, 1996; Muller, 1995; Willems & Defrancq, 2000).

In order to permit raising of the subject of the relative, they suggest a variant of the subject-head schema for French whereby the corresponding valence requirement of the head may not be saturated upon combination with the subject daughter.

While we concur with the raising analysis, we take issue with the constructional approach: first, the constructional solution offered by Koenig & Lambrech (1999) contradicts HPSG’s Valence Principle (Pollard & Sag, 1994), a move that clearly weakens the theory of subcategorisation in terms of valence cancellation. Second, the constructional solution further begs the question why only subjects of qui-relatives may in fact undergo this valency-preserving rule.

Instead, we build on Abeillé & Godard (2006), who suggest that French qui and que are actually relative complementisers, rather than pronouns, and propose a lexical approach according to which qui, but not que, takes an unsaturated finite VP complement, the subject of which it will raise. This solution is not only in perfect accord with HPSG’s Valence Principle, but it directly derives the fact that raising is lexically conditioned by the choice of complementiser.

2 Analysis

In §1, we have shown that French à-infinitival passives contrast with relatives on a number of properties, casting doubt on an analysis as reduced relatives. Instead, we capitalise on the valence-alternation property largely overlooked by the reduced relative approach and show how this perspective provides for a generalised treatment of the full range of constructions these infinitives figure in.

Attributive and predicative uses (être ‘be’), as well as the use in tough-constructions clearly instantiate a passivisation effect: the external argument always corresponds to the logical direct object of the à-infinitive. Likewise, all these constructions permit in principle the realisation of the demoted logical subject by a par-phrase. Our analysis in terms of à-infinitives as having a predicative use, together with object promotion, directly accounts for their acceptability as complements to subject-to-subject raising verbs other than être ‘be’:

(21) L’introduction me semble à revoir.
the-introduction IP SG.DAT seems to review
‘It seems the introduction must be reviewed.’

Embedding under avoir/donner ‘have/give’ is similar, yet not identical to être/sembler/facile ‘be/seem/easy’: instead of subject-to-subject raising, we observe subject-to-object raising. Additionally, the subject of avoir ‘have’ and the indirect object of donner/laisser ‘give/let’ control the logical subject of the à-infinitive, blocking use of the par-phrase. The combination of raising to object and subject control means that passivisation is effectively undone in the case of avoir ‘have’.

Studying modal passive zu-infinitives in German, Haider (1984) equally notes a passivisation effect and proposes that haben ‘have’ unblocks the logical subject of the zu-infinitives, whereas sein ‘be’ merely raises the derived surface subject of its complement. Crucial for his account is the notion of designated argument (DA), which exposes the logical subject of verbs and makes it accessible for deblocking. Furthermore he uses this property to distinguish verbs as to whether they can form a participial passive. As suggested by Müller (2003), the DA feature can also serve to establish the linking to the logical subject’s role under an adjunct analysis of the by-phrase.

In our formal HPSG analysis, we shall build on Haider’s proposal and incorporate a HEAD feature DA that serves to (i) expose the logical subject of the à-infinitive for purposes of control (avoir/donner ‘have/give’), (ii) provide lexical control for participial passives (cf. (22)), and (iii) regulate the possibility to express the logical subject by way of a par-phrase (cf. (23)): i.e. transitive verbs that have a participial passive and take a par-phrase lexically specify a non-empty DA containing the logical subject, while those that cannot, by contrast, have an empty DA list.

(22) *Ce livre a été eu (par nous).
this book has been had by us
(23) Ce livre est à avoir (‘par tous les membres).
this book is to have by all the members
‘This book is to be owned (by all members).’

As is standard in lexicalist frameworks such as HPSG or LFG (Bresnan, 1982), we shall model
Figure 1: Lexical rule for à-infinitival passives

The passivisation effect by means of a lexical rule operating on the verb’s argument structure: as depicted in Fig. 1, the direct object, i.e. the second argument, is promoted to subject function, and the first argument is put au chômage. In contrast to German, the exponent of the passive à-infinitive is not morphologically integrated into the verb, but rather realised by the complementiser à, an independent word. In order to capture this case of periphrastic exponence, we shall rely on Bonami (2015) who proposes an inside-out mechanism for inflectional periphrasis, a device that is independently called for by analytic tenses in French.

At the top of the à-infinitive we find the complementiser à, which is subcategorised for taking an infinitival VP complement. As detailed in Fig. 2, the complementiser further satisfies the inside-out selection in its complement’s REV-SEL value. Most crucially, à raises the VP’s subject valency onto its own SUBJ list, and similarly inherits its complement’s DA value. The attributive use is then derived by a general type shifting lexical rule that turns the subcategorisation for an NP subject into selection for an N via MOD, cf. Fig. 3. Taking the predicative use as primary, we directly capture that the infinitival passive of a verb like croire ‘believe’, which promotes a CP, not an NP object, can be used all but attributively (24). Besides, such a rule is independently motivated by the fact that e.g. the majority of adjectives and many a preposition share this systematic alternation between predicative and attributive uses, a property which is lexically governed, since we find purely attributive and purely predicative cases as well.

(24) Que Nixon ne soit pas impliqué […] est difficile à croire.

‘Nixon’s not being involved […] is difficult to believe.’ (Ruwet, 1976, glossing and translation ours)

Figure 2: Lexical entry for complementiser à

A very similar entry can be given for tough-adjectives, as shown in Fig. 5. Since tough-adjectives in French only take à-infinitival passives, we restrict the subcategorisation to a predicative CP[à] (standard verbal projections are [PRD –]).

Turning finally to the object predication cases, all we need is to specify a lexical description for a verb like avoir ‘have’, which raises the à-infinitive’s logical object to become its syntactic direct object and whose thematic subject controls the downstairs logical subject, as shown in Fig. 6. Essentially the combination of raising to object and control of the designated argument ends up undoing the passivisation effect. Prior downstairs realisation by a par-phrase is blocked by insisting the DA be not realised.
As for the *par*-phrase, since the logical subject is readily exposed in the DA feature at every level of the *à*-infinitive, it is accessible for a representation as a VP adjunct that identifies it with the index of its NP complement (Fig. 7), providing a unified analysis of such phrases in both infinitival and regular passives.

To close the discussion, we shall briefly examine how pseudo-relatives fit in the picture: as shown in Fig. 8, we treat *qui* not just as a complementiser that selects for a finite VP complement (Abeillé & Godard, 2006) but crucially one that raises the SUBJ valency. Application of the lexical rule in Fig. 3 will straightforwardly derive the attributive variant.

Embedding under a verb like *voir* ‘see’ will access the SUBJ valency of the relative and raise it onto its own COMPS list, as sketched in Fig. 9. Note that this is highly reminiscent of a raising analysis with a VP complement, the only difference being selection for a CP vs. a bare VP.

To conclude, we compared infinitival passives in French to relative constructions and showed that while they overlap in their attributive use, they differ markedly in terms of locality and their distribution in raising contexts. We therefore rejected the reduced relative analysis in favour of an approach as a full-fledged passive construction, evidenced by the realisation of the demoted subject as a *par*-phrase and its control by e.g. *avoire* ‘have’. The pointwise similarity of infinitival passives and pseudo-relatives reduces to subject-to-object rais-
ing.

References


