The pragmatics of French (non-)prototypical clefts: Influence of the type of question on naturalness and interpretation

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Abstract

This article investigates the interpretative properties of two clefts in French; the well-known *c'est*-cleft and the under-studied *y'a*-cleft. A prevalent assumption is that, when they signal narrow-focus, these two clefts differ with respect to *exhaustivity*; the former specifies a unique referent for the focus variable, but not the latter. Empirical evidence from a forced-choice task suggests that this analysis is going down the right path. Yet, the paper argues for a refined understanding of the conditions of use for these two clefts, positing that *c'est*- and *y'a*-clefts do not occur in the exact same narrow-focus context. Rather, their alternation is linked to the type of question asked—a feature absent from past studies. In a nutshell, I argue that *c'est*-clefts are more naturally found with questions that require a full answer (i.e., Mention-All questions), whereas *y'a*-clefts are more appropriate in contexts where the question allows for a non-maximal answer (i.e. Mention-Some questions). Additionally, when *y'a*-clefts occur as answers to Mention-All questions, they convey an *ignorance* inference, which is much weaker in Mention-Some contexts. Evidence supporting this proposal comes from a second experiment; a rating task whose results also suggest that the type of question asked not only influences naturalness, but also the strength of the inferences respectively associated with the two clefts (exhaustivity and ignorance).

1 Introduction

Language is often described as a game in which a major goal of interlocutors is to exchange information. One common way to do so is via questioning (to obtain information) and answering (to provide information). Within the semantic literature, the answering element of a sentence is typically known as the *focus*—the element that evokes alternatives by virtue of providing the value for the open variable instantiated by a congruent question (Krifka, 2008; Roberts, 1996). But natural languages vary greatly in the strategies used to encode focus. The use of syntactic constructions in French is well-documented.[1] While the past literature has largely concentrated on analyzing the *c'est*-cleft in (1), French speakers also resorts to another cleft; the under-studied *(il) y'a*-cleft illustrated in (2).

(1) C'est Louis qui parle Russe.

    It-is Louis who speaks Russian.

    Lit.: *It's Louis who speaks Russian.*

(2) (Il) y' a Louis qui parle Russe.

    (It) there has Louis who speaks Russia.

    Lit.: *There's Louis who speaks Russian.*

Relevantly for this paper, scholars note that both clefts can felicitously appear in *narrow-focus* contexts (Lambrecht, 2001; Karssenberg & Lahousse, 2018), that is when they answer a wh-question in which the variable for a grammatical argument is open—such as 'Who speaks Russian?' for (1). But this observation poses a problem for accounts that derive the emergence of clefts in purely prosodic terms, such as Hamlaoui (2008) and

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[1] In this paper, I follow Lambrecht (1994) in taking clefts to be bi-clausal sentences that can be unclefted into a mono-clausal equivalent without a change in truth-values, and for which the embedded clause is not a restrictive relative. For more details on the specific features of clefts versus cleft "lookalikes", I refer the reader to DeCat (2007) and Karssenberg (2016), among others.

Féry (2013), since these accounts predict that both structures can come out as optimal candidates. However, there is a consensus on the fact that the two clefts cannot be freely interchanged (Katz, 1997; Lambrecht, 2001; Karssenberg & Lahousse, 2015, 2018). Why? Several scholars argue the reason is semantic: the *c'est*-cleft is exhaustive in that it specifies the unique individual for which the predicate holds, excluding all other focus alternatives. By contrast, the *y'a*-cleft lacks this inference (Léard, 1986; Lambrecht, 2001; Doetjes et al., 2004; Karssenberg & Lahousse, 2018). But distinguishing the two clefts in purely semantic terms appears to be too strict considering recent empirical work, which suggests that *c'est*-clefts are not always exhaustive. In fact, the inference is often cancelable and speakers can accept a cleft even in contexts that clearly violate exhaustivity (Dufter, 2009; Destruel, 2013). As for the *y'a*-cleft, very few studies investigate its pragmatic meaning, especially from an empirical perspective (but see recent work by Karssenberg & Lahousse, 2015). Thus, little is known about the potential inference(s) conveyed by (or absent from) such a structure.

Given this state of affairs, the present paper adds to the scarce literature on *y'a*-clefts by arguing that the alternation between *c'est*-clefts and *y'a*-clefts in narrow-focus contexts is linked to the type of question asked by the questioner—a feature absent from the past literature. While prior work assumes the two clefts can occur in the same narrow-focus context, I argue that this is not exactly the case and seek to provide experimental evidence for a more fine-grained distinction of their conditions of use. In a nutshell, I posit that *y'a*-clefts most naturally occur in contexts where they answer a question that triggers expectations for a non-maximal answer, i.e. a Mention-Some question. Furthermore, if *y'a*-clefts occur as answers to a question that triggers expectations for a maximal answer (i.e. a Mention-All question), a marked interpretation arises: An *ignorance* inference is generally derived such that the responder does not know if a stronger answer holds. On the other hand, *c'est*-clefts are more natural when occurring in Mention-All contexts because of their higher level of exhaustivity. By providing a maximal answer, the responder signals that the question has been fully resolved, thus terminating the line of inquiry (see Velleman et al., 2012 for the English it-cleft).

Quantitative evidence supporting this proposal comes from testing the level of exhaustivity in *c'est*-clefts versus *y'a*-clefts (Section 3) and the influence of the question

on clefts' naturalness, as well as the presence of an *ignorance* inference regarding speaker's knowledge (Section 4). Before turning to the methods and the data, Section 2 presents a brief review of the background literature relevant to the paper, closing with making explicit the research questions and hypotheses tested (subsection 2.4). Section 5 discusses supporting evidence stemming from naturally occurring examples, and wraps up by considering the theoretical implications of the results. Section 6 concludes the paper.

2   Background literature
2.1 Basic properties of French clefts

In the French linguistic literature, most studies have concentrated on analyzing the *c'est*-cleft. Several types of *c'est*-clefts have been identified (see Clech-Darbon et al., 1999; Lambrecht, 2001; Rialland et al., 2002; Doetjes et al., 2004)—among others *c'est*-clefts in which the focus typically contains an anaphoric item and the relative clause contains the "message", but marked as a known fact not as the speaker's assessment.[2] In this paper, I restrict my attention on one specific type of *c'est*-clefts, one that has a focus-background articulation where the clefted element is the focus and the information in the relative clause is presupposed (Lambrecht, 1988; Doetjes et al., 2004).

Focus-background *c'est*-clefts are taken to emerge in contexts where they constitute answers to a congruent, narrow question; e.g. 'Who speaks Russian?' in the case of (1).[3] Using the common terminology found in the past literature, *c'est*-clefts signal narrow-focus (or argument-focus as used by Lambrecht, 1994). Functionally, they are said to be *specificational* (or identificational) in that they provide the (exclusive) value for the focus

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[2] The observation that different types of clefts exist dates back to the seminal work by Prince (1978) in which the author posits two distinct types of it-clefts for English, a 'Stressed Focus' cleft and an 'Informative Presupposition' cleft, the former corresponding to the focus-background clefts analyzed in this paper. See Delin (1992), among others, for similar points.

[3] From here on out, whenever I use "*c'est*-clefts", I refer only to focus-background *c'est*-clefts unless otherwise mentioned. Therefore, the observations and conclusions drawn from the experiments presented here only apply to this type of clefts.

referent (Lambrecht, 1994, 2001). Prosodically, the focus element receives the main accent via a boundary tone at the right-edge of the intonational phrase (IP) created by the matrix clause of the cleft sentence. The post-focal sequence is compressed (i.e. realized with a lowering of register) and a final boundary tone occurs at the end of the sentence (Féry, 2001; Rialland et al., 2002; Doetjes et al., 2004).

In contrast, *y'a*-clefts typically have another articulation. They tend to express focus on the entire sentence—i.e. neither the clefted element nor the information in the embedded clause are presupposed—thus encoding all-focus (or sentence-focus in Lambrecht, 1994). As such, they appear in a context where the question is broader than for *c'est*-clefts, for instance 'What's happening?' or 'What happened?' Functionally, *y'a*-clefts are said to be *presentational*; they are used to "introduce either new entities or new situations into a discourse" (Lambrecht, 2001: 507). Prosodically, no boundary tone appears within the matrix clause; but the sentence ends with one (Doetjes et al., 2004).[4]

Yet, this assumed one-to-one relationship between form and function does not strictly hold. For *c'est*-clefts, Lambrecht (1994), Clech-Darbon et al. (1999), Rialland et al. (2002) all observe that they can also mark focus broadly, as illustrated in example (3) in which the question for the cleft of the form 'It is X who P' in the answer is not congruent to a question derived from the cleft relative, i.e., 'Who P-ed?', but instead answers 'What happened?'.

(3) All focus *c'est*-cleft

   Q: Qu'est-ce qui   s'   est passé?

      What-is-it that REFL.3.sg is   happened?

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[4]   We shall note that English has a similar construction to the French *y'a*-cleft, the 'there'-cleft (Davidse, 2000; Davidse & Kimps, 2016). The question as to whether this construction behaves similarly to its French counterpart with respect to exhaustivity remains (empirically) unresolved. A reviewer notes that a further interesting question concerns whether there is a cline in exhaustivity amongst the different types of there-clefts posited by Davidse & Kimps (2016) (specificational, enumerative, and quantifying). Furthermore, if it turns out that French also uses *y'a*-clefts in these different semantic functions, do these types of *y'a*-clefts also differ in their level of exhaustivity?

'What happened?'

A: C'est le   petit   qui   est tombé dans l'   escalier.

It-is   the small-one who is   fallen   in   the stairs

'*The little one fell down the stairs.*'

LIT.: *It's the little one who fell down the stairs.*

Crucially for this paper, several researchers note that *y'a*-clefts can signal narrow-focus (see Lambrecht & Michaelis, 1998; Léard, 1992; Lambrecht, 2001; Dufter, 2009), which is empirically supported by the results of recent corpus searches in Karssenberg & Lahousse (2015) and Karssenberg (2016), from which (4) is taken.

(4) Argument-focus *y'a*-cleft

Q: Je cherche des modèles de voiture à acheter neuve moins de 10000

euros, où aller?

'*I'm looking for new car models that cost less than 10.000 euros, where*

should I go?'

A: Bonjour. Il y a la Citroën C1 qui est à moins de 10 000 euros.

'*Hello. There's the Citroën C1 that costs less than 10.000 euros.*'

This observation is important because it directly challenges accounts that claim that the formal motivation for using a cleft in French is prosodic (Hamlaoui, 2008; Féry, 2013). Under these accounts, "the occurrence of cleft constructions in a language correlates with the degree of positional freedom of prosodic accents and syntactic constituents in that language" (Lambrecht, 2001: 488). French lacks the plasticity that English has to move prosodic prominence to match the position of the focus element. Rather, French assigns the main accent in a sentence to a specific position: rightward. When the location of the focus element does not align with this position, it creates a syntax-prosody clash that must be resolved. French does so by clefting the focus element: the bi-clausal structure of the cleft generates two intonational phrases, which allows the focus element to appear rightward, where main accent naturally falls. But all these accounts argue that the type of cleft used to resolve the tension between syntactic and prosodic requirements is a *c'est-*

cleft. The problem, however, is that nothing in these accounts prevents the *y'a*-cleft from entering the competition and from coming out as an optimal output as well. Since the argument is that what is needed to resolve the clash is the presence of two IPs, the *c'est*-cleft does not constitute the only option—*y'a*-clefts, especially given that they can felicitously appear in narrow-focus contexts, are an equally good option.

But, as mentioned earlier, *c'est*- and *y'a*-clefts are not fully interchangeable in this particular context. For one thing, there are distributional differences suggesting that *c'est*-clefts are much more common than *y'a*-clefts (see Karssenberg & Lahousse, 2015 who find that the latter occur 25% of the time in narrow-focus contexts). So, the question remains: If both clefts can be found in narrow-focus contexts but do not freely alternate, what constrains their occurrence? Scholars have posited that the answer lies in the semantics of the two structures, and specifically the notion of *exhaustivity* (Lambrecht, 2001; Karssenberg & Lahousse, 2018), which I discuss in the next subsection.

2.2 Exhaustivity inference

The French *c'est*-cleft has been noted to have three standard components: (i) an assertion, which amounts to the proposition asserted in its canonical counterpart; (ii) an existence presupposition, such that $\exists x \, P(x)$; and (iii) an exhaustivity inference, such that x exhausts the set $\{x|P(x)\}$ (see Lambrecht, 1994; Katz, 1997; Clech-Darbon et al., 1999; Lambrecht, 2001; Doetjes et al., 2004). Thus, the meaning of (1), repeated in (5), can be schematized as follows:

(5) (Context: Qui est-ce qui parle Russe?)

C'est [Louis]$_{Focus}$ [qui parle Russe]$_{Background}$

a.   Assertion: Louis speaks Russian.

b.   Presupposition: Someone speaks Russian.

c.   Exhaustivity: No one other than Louis speaks Russian.

For Lambrecht (2001) and Karssenberg & Lahousse (2018) among others, exhaustivity constitutes the core difference between *c'est* and *y'a*-clefts in narrow-focus contexts. In

short, *c'est*-clefts are used to uniquely specify the value of the variable in the presupposed proposition; *y'a*-clefts are not. There is indeed a strong intuition that *y'a*-clefts lack exhaustivity effects, as illustrated by the contrast between (6a) and (6b). When trying to cancel exhaustivity by adding information, the *y'a*-cleft seems much more felicitous than the *c'est*-cleft sentence.[5] The first study in the present paper will seek to experimentally support this intuition.

(6)   a. C'est Louis qui parle Russe, # et puis Jean aussi.
      b. Y'a Louis qui parle Russe, et puis Jean aussi.

Within the past literature on French clefts, little is said as to how exhaustivity arises. It is however heavily disputed in the cross-linguistic literature, with the issue boiling down to establishing whether these effects are semantically encoded or pragmatically derived (e.g. Zimmermann & Onea, 2011; Büring & Križ, 2013; DeVeaugh-Geiss et al., 2015). In French, while many scholars acknowledge the presence of exhaustivity in *c'est*-clefts (e.g. Katz Bourns, 2000; Lambrecht, 2001; DeCat, 2007), only two studies directly address the issue of its nature. These are Clech-Darbon et al. (1999) and Doetjes et al. (2004), who argue for a purely semantic account of the nature of exhaustivity, following the account given by Kiss (1998) for English and Hungarian. Under this approach, exhaustivity is taken to be part of the truth-conditional meaning of *c'est*-clefts, similarly to the exhaustive meaning contributed by exclusive particles like *seul(ement)*/'only'. Crucially, these accounts predict a non-negotiable, robust link between exhaustivity and *c'est*-clefts, and this regardless of contextual manipulations.[6]

An alternative account is found in Destruel (2013), who follows Horn (1981) by adopting a pragmatic view: Exhaustivity is argued to be a generalized conversational implicature (GCI), which is simply added to the literal meaning of the clause from the

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[5] In this paper, I use the # to show infelicity and * to show ungrammaticality.
[6] It is important to note that these predictions also hold for other semantic accounts proposed cross-linguistically, which overall derive exhaustivity in clefts as a presupposition; e.g. Percus (1997); Velleman et al. (2012) and Büring & Križ (2013).

existential presupposition of clefts. This approach also makes clear empirical predictions: Given that GCIs typically arise—maybe even by default—but can in principle be canceled if not supported by the context, exhaustivity in *c'est*-clefts is expected to be context-dependent; that is, the inference is subject to defeasability in contexts that fail to license it.

Recent empirical evidence—both in French and more generally in the cross- linguistic literature—has challenged strict semantic accounts, instead falling in line with the predictions made by pragmatic accounts. Findings overall suggest that the exhaustive inference is in fact not always robust (Onea & Beaver, 2009; Xue & Onea, 2011; Byram-Washburn et al., 2013; DeVeaugh-Geiss et al., 2015). With respect to French, Dufter (2009) and Destruel (2013) provide naturally-occurring examples in which the focus element in *c'est*-clefts occurs along-side expressions that defy restrictive modification, such as additives (see Hedberg, 2013 for a useful discussion of similar examples with English it-clefts). If an exhaustive interpretation was indeed enforced by virtue of clefting, examples such as (7) should not be felicitous.

(7) Depuis l'existence du mouvement, des militantes et militants des CEMEA se sont battu-e-s pour développer des espaces où les gars et les filles puissant se croiser, faire ensemble, mieux se connaître. **C'est entre autre ces espaces mixtes qui** incarnent pour nous un progress […]
 *'Since the existence of the movement, the CEMEA activists fought to develop spaces were guys and gals can meet, do together, and get to know each other better. **It is among other things these spaces that** embody progress in our opinion […]'*

Furthermore, Destruel (2013) shows that the exhaustivity in *c'est*-clefts is easily cancelable. Reporting on results from a forced-choice task where speakers read question-answer pairs and had to select a continuation which supplemented in- formation to the focus element, the author found that speakers were significantly unlikely to select a continuation introduced by 'no', which was taken to signal an overt contradiction between the truth-conditional meaning of the sentence and that of the continuation. This

is however the continuation speakers reliably selected when presented with exclusive sentences, suggesting that clefts and *seul(ement)/'only'* do not behave the same way with respect to their exhaustive effects. In the same vein, Destruel and DeVeaugh-Geiss (under review), reporting on a picture-verification task for which truth-value judgments were collected, found that French speakers accept *c'est*-clefts as accurately describing a picture that violates exhaustivity to a large extent (74% of the time)—much more commonly than English speakers do for the corresponding it-cleft (53% of the time), tested via the exact same design.

To sum up, if *y'a*-clefts are not exhaustive and that, crucially, *c'est*-clefts are not strongly exhaustive (i.e., not truth-conditionally exhaustive, as posited in the prior literature on French), a revised account of the alternation of the two clefts in narrow-focus contexts is warranted—one that is not based on purely semantic terms. In this paper, I start from the idea that the type of question answered is key to understanding when each cleft emerges most naturally in discourse. In short, the two clefts generally do not answer the exact same question, and thus have slightly different pragmatic functions. The next subsection turns to providing background information on questions (and answers) relevant to my hypotheses, which are spelled out in section 2.4.

2.3 Types of questions and answers: Mention-Some and Mention-All

Throughout this paper, I assume, in the spirit of Stalnaker (1978), Roberts (1996, 2004), a model of discourse organized around a series of conversational goals, and the strategies that conversational participants develop to achieve them. The primary goal of discourse is taken to be communal inquiry; that is, the attempt to discover and share information about the world with one's interlocutor. Two moves are typically used to achieve this goal; questions (what Carlson 1983 refers to as *setup* moves) and answers to questions (what Carlson 1983 refers to as *payoff* moves). I further assume that questions get stacked as a partially ordered set, the one on top being the one that is being currently discussed. The notions of questions and answers are therefore intimately connected, and this to ensure discourse congruence. Indeed, it is widely acknowledged that questions impose conditions on the focal structure of their answers, in that the answering element (the focus) must match the open variable instantiated by the wh-word in the question for the

answer to be felicitous or congruent (Rooth 1992). Kadmon (2001) formulates this idea via a constraint on the question-answer relation, termed "The Question-Under-Discussion constraint on Focus" and represented in slightly different terms in (8). Following this constraint, (9a) constitutes a felicitous answer to (8), but (9b) does not.

(8) An utterance B is felicitous only if the focus semantic value of B is identical to the ordinary semantic value of the immediately preceding interrogative sentence.

(9) Question: Who speaks Russian?
      a. [Louis]$_F$ speaks Russian.
      b. Louis speaks [Russian]$_F$

Assuming question-answer congruence, one issue in the literature on interrogatives is debated and has to do with how to best answer a question; i.e. what constitutes an appropriate or possible answer to a *wh*-question? Linked to this issue is the observation that there exist different types of questions. Two are central to the proposal in this paper: *Mention-All* and *Mention-Some* questions (Groenendijk & Stokhof, 1982, 1984; van Rooij & Schulz, 2006; George, 2011; Xiang, 2016a). I will note right away that there also is a lively debate as to whether Mention-All and Mention-Some questions are in fact two different types of questions semantically or whether they are semantically identical but have different pragmatic expectations (Groenendijk & Stokhof, 1982, 1984). Addressing this controversy lies way beyond the scope of this paper and I refer the reader to Xiang (2016a) and Dayal (2016) for detailed discussions. In this paper, I adopt a pragmatic view (van Rooij, 2004), which assumes that the difference between the two questions is rooted in interlocutors' expectations. Since asking a question is a common way for a questioner to get information, the kind of conversational goal he has in mind will determine the type of question he chooses to ask. I now turn to discussing in more details the specificities of each type of question.

    Mention-All (MA henceforth) questions are those associated with the questioner's expectation that the responder should list *the entirety* of the individuals for whom the

predicate holds, giving rise to a partition of logical space; in the words of van Rooij (2004) "the intention of such a question is a set of mutually exclusive propositions thought of as the set of all alternative, complete, exhaustive answers to the question." Thus, the conversational goal of a questioner when asking a MA question is to gain maximal information, and in most daily conversations, a question indeed admits only an exhaustive answer. This is the view advocated in early formal semantic theories of interrogatives, most notably in Groenendijk & Stokhof (1982) who take (strongly) exhaustive answers to be the default status of answers. Consider the following example for illustration:

(10) Question: Who drank at the party?
    a. Peter and Lucy did.
    b. Peter and Lucy did, but John did not.
    c. Only Peter and Lucy did.
    d. #Peter did.\
    e. Peter did .../

To appropriately answer the question in (10), that is, to meet the expectations set by the questioner, the responder must specify every single person who drank at the party. If the domain includes Peter, Lucy and John (and the responder is well-informed and is being cooperative, assuming, for our purpose, that Grice (1975)'s Maxim of Quality cannot be violated), (10a) is the proper way to respond to the question. Furthermore, when a responder utters (10a), the questioner will infer that John did not drink. Thus, the answer in (10a) can be understood as equivalent to the explicit, stronger statement in (10b), or similarly (10c).

But the responder may not always match the questioner's expectations. In fact, there are other ways in which the (s)he can answer. In a context where the responder knows that, in fact, Lucy also drank, uttering (10d)—i.e. with a falling tone indicated by '\'—would be treated as inappropriate since this prosodic marking, at least in English, is taken to signal a complete answer (Xiang, 2016a). This means that the responder's attitude toward the false propositions in the question denotation is also relevant to the truth of the answer, not just his/her attitude toward the true ones. Furthermore, there might be times

when the responder does not have the knowledge to give an exhaustive answer and is only able to provide a partial answer, for instance like that in (10e). In that case, (s)he is expected to signal his/her ignorance (toward the other individuals that hold of P) by flagging the answer in some explicit way, such as using a prosodic rise-fall-rise contour indicated by '.../' (for English), or alternatively with a hedge like *well*, or by making his/her ignorance overt with 'I don't know'. Without such an indication, the responder is taken to have given all the information (s)he possibly can to fully resolve the question—in accordance with the Maxims of Quantity and Relevance. In that sense, (10d) cannot encode a partial answer since it does not carry the proper prosodic mark to signal ignorance. Rather, it has to be interpreted as an exhaustive answer.

In contrast to MA questions, researchers note that other questions can be appropriately answered by only mentioning *some* positive instances of individuals for whom the predicate holds (in line with the view of questions advocated by Hamblin, 1973 and Karttunen, 1977)—notably questions that either include an explicit non-exhaustive mark as in (11a), or those that contain a possibility modal as in (11b). We shall briefly note that the literature is not always explicit in giving features that are specific of Mention-Some questions, yet the presence of a possibility or existential priority modal is the most commonly cited (see Groenendijk & Stokhof, 1984; Dayal, 2016; Xiang, 2016b, and see Xiang & Cremers, to appear, for experimental evidence suggesting that possibility modals indeed play a role in licensing MS readings of 'who'-questions.)

(11) Mention-Some questions

    a.   Who, for example, drank at the party?

         i. Peter did.\

         ii. Peter and Lucy did.\

    b.   Where can I buy Italian newspapers?

         i. At the train station.\

The questions in (11), termed Mention-Some questions (MS henceforth), are associated with the questioner's expectation that the responder will not (need to) specify all relevant entities, but simply give a partial, non-exhaustive answer. In fact, in this

context, listing all possible answers seems counter-productive at best. Considering (11a) and positing again that the domain of true answers includes Peter, Lucy and John, answers such as (11a.i) or (11a.ii), where the responder has only specified some of the individuals, are appropriate. Yet, Van Rooij (2004) notes, following Groenendijk & Stokhof (1984: 532), that not all partial answers are equally satisfactory. Intuitively, answering (11a) with 'Lucy didn't (drink at the party)' would not resolve the question. Rather the author proposes that MS-questions arise specifically in contexts when the questioner has a problem, and that learning one alternative suffices to solve it. Put slightly differently, he claims that the type of question triggered depends on "whether, and what kind of, a *human concern* lies behind the fact that the question was asked."

To answer (11b) appropriately, citing just one place—e.g. at the train station—is also satisfactory. Imagine an Italian tourist is visiting Berlin and wants to read the news from back home. Mentioning any one of the places that sell an Italian newspaper would suffice to fulfill the tourist's inquiry. Importantly in this context, such a partial answer is deemed a *complete* answer to the question since it gives as much information as is expected; i.e. 'some'. Hence, it is essential to note that the completeness of an answer is independent of its maximality, because maximality in MS questions is not part of the expectations set by the type of request formulated.

Finally, another important difference between partial answers to MS questions (e.g. 11a.i, 11b.i) and those to MA questions (e.g. 10e) concerns responder's knowledge: As argued by Xiang (2016a, 2016b), in a MS context, a partial answer does not convey ignorance (or doubt) and thus does not require a special prosodic rise-fall-rise contour, while it does in MA contexts.[7] With respect to French though, it remains an open question whether a similar intonational contour would be used (and required) to convey the same ignorance inference (see for instance Marandin et al., 2003 for a discussion of the meaning of final contours in French.)

To sum up, the differences between MA and MS questions can be summarized as follows:

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[7] We shall note that Xiang (2016b) uses the term *partial* answers to refer only to answers that occur with MA questions. To refer to partial answers given in MS contexts, she uses the term *mention-some* answers. I do not make such a distinction in this paper.

- In MA questions, the questioner expects a maximal answer; in MS questions, the questioner does not.
- A partial answer to a MA question carries an ignorance inference (marked in English via a rise-fall-rise intonational contour); a partial answer to a MS-question does not.

The next subsection turns to discussing how the distinction between MA and MS questions pertains to the alternation between *c'est*-clefts and *y'a*-clefts in narrow-focus contexts, and makes explicit the hypotheses and research questions I empirically examine in sections 3 and 4.

2.4   Hypotheses and research questions

Three crucial points have been discussed so far, which motivate my hypotheses and the experiments presented hereafter. First, both *c'est*- clefts and *y'a*-clefts felicitously signal narrow-focus, yet cannot be interchanged freely in that context. Second, although exhaustivity is often considered the central feature that differentiates the two clefts, recent empirical evidence suggests that *c'est*-clefts may not be as strictly exhaustive as previously acknowledged in the French linguistic literature. This calls for a refined proposal that does not rely on purely semantic terms. The intuition behind my proposal is that a more fine-grained understanding of the use-conditions of the two clefts is needed, and especially with respect to the type of question answered. This prompted the discussion in section 2.3 on the relation between questions and answers, and most relevantly the distinction between two readings for wh-questions: Mention-All and Mention-Some.

The present paper expands on prior work on French clefts by exploiting this distinction to explain the alternation between *c'est* and *y'a*-clefts in narrow-focus contexts. More specifically, the crux of my proposal lies in the influence of interlocutors' discourse goals on the appropriateness of the two clefts, which I test by examining how the type of question answered modulates naturalness ratings for both clefts. After empirically establishing that *y'a*-clefts are indeed non-exhaustive (section 3), I test the hypothesis that these clefts more naturally occur when the questioner does not expect a maximal answer; that is, when a MS-question is raised. *C'est*-clefts, on the contrary, are

most natural when the questioner—using a MA question—sets expectations for a maximal answer. Importantly, I further hypothesize that when the reading of the answer does not align with that of the question, a marked interpretation is conveyed. Thus, when a *y'a*-cleft answers a MA question, it conveys an *ignorance* inference, whereby the responder does not know if other alternatives hold true of the predicate.

In sum, the two experiments I report on in the following sections seek to answer the questions below:

(12)   a. How does the level of exhaustivity in *c'est*-clefts compare to that of *y'a*-clefts?

b. (i) Does the type of the question influence the naturalness of *c'est*-clefts versus *y'a*-clefts in the response?

(ii) Does the type of the question influence the level of speaker's knowledge for each cleft?

3   Experiment 1: Exhaustivity and cancelability

The goal of this experiment is to test for the level of exhaustivity in *y'a*-clefts compared to the *c'est*-cleft, and seek empirical support for the claim that such an inference is absent from the former structure, as posited among others by Lambrecht (1994, 2001) and Doetjes et al. (2004).

3.1   Participants

A total of 24 undergraduates from the University of Toulouse Le Mirail, all native monolingual speakers of French (age between 22 and 30 years old), participated in this task. They all were naive as to the purpose of the study.[8]

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[8] Data for this study represents a subset of the data collected by and reported in Destruel (2013), who only focused on the interpretation of *c'est*-clefts. In this paper, I report on the data for *y'a*-clefts that was left unanalyzed.

3.2 Material & Procedure

The present data on *y'a*-clefts comes from the forced-choice design in Destruel (2013) (adapted to French from the design in Onea & Beaver, 2009). On each trial, participants read a short dialogue in the form of a question–answer (Q–A) pair, followed by three continuations (C), introduced by *oui, et*/'yes, and', *oui, mais*/'yes, but' or *non*/'no', in which the element corresponding to the focus in the preceding answer was replaced, thus adding (potentially conflicting) information to the discourse.

Sentence form—i.e the form of sentence that appeared as the answer in the dialogue—was the factor manipulated and had four levels: the answer appeared as a *c'est*-cleft, a *y'a*-cleft, a canonical clause, or a sentence with the exclusive *seul*/'only', as seen in (13b). The focus element of the sentences analyzed here was always the grammatical subject, which was always triggered by a *qui*/'who'- question, as illustrated in (13a).[9] All target sentences contained an animate subject, a transitive verb and an animate direct object. An illustrative sample containing all experimental conditions is given in (13) (and see Appendix A for a larger sample set).

(13)   a. Q(uestion):

      Qui est-ce qui a accueilli les élèves?

     'Who welcomed the students?'

    b. A(nswers):

      (i)   *C'est*-cleft condition:

          C'est le prof qui a accueilli les élèves.

         'It's the professor who welcomed the students.'

      (ii) *Y'a*-cleft condition:

          Y'a le prof qui a accueilli les élèves.

         'There's the professor who welcomed the students.'

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[9] Note that Destruel (2013) included grammatical function of the focus element as a factor (i.e. subjects versus objects were tested). In this paper, I concentrate on the subset of data for subject focus because *c'est*-clefts are not as common with object focus.

(iii) Canonical condition:

Le prof a accueilli les élèves.

'The professor welcomed the students.'

(iv) Exclusive condition:

Seul le prof a accueilli les élèves.

'Only the professor welcomed the students.'

c. C(ontinuations):

(v) Oui, et le directeur aussi a accueilli les élèves.

'Yes, and the director also welcomed the students.'

(vi) Oui, mais le directeur aussi a accueilli les élèves.

'Yes, but the director also welcomed the students.'

(vii) Non, le directeur aussi a accueilli les élèves.

'No, the director also welcomed the students.'

Participants, who took the test on-line via WebExp (Keller et al., 2009), were instructed to choose the continuation they judged the most natural given the Q-A pair. Each participant judged 4 items per condition, for a total of 16 experimental items, which were pseudo-randomized among 16 fillers. Hence, a total of 96 judgments were collected for each Sentence form.

3.3 Predictions

Participants should select the strongest continuation (i.e. introduced by 'no') if they consider there is an inherent incompatibility between A and C, denoting a clash between the truth-conditional content of A and the information added by C. This should be the case for exclusives since these items assert exhaustivity. Thus, exclusives constitute the control condition. Participants should select the weakest continuation, introduced by 'yes, and', when there is the least amount of (or no) conflict between A and C. This is predicted to occur with canonical sentences, which at best, weakly imply exhaustivity. Participants should choose the 'yes, but' continuation when they do not wish to strictly contradict A,

but nevertheless want to signal pragmatic oddity between the information encoded by the focus in A and the information supplemented in C. This response pattern is expected with *c'est*-clefts. Y'a-clefts, if indeed non-exhaustive, should pattern differently from *c'est*-clefts, and rather be potentially closer to the behavior expected for canonicals.

3.4   Results

Figure 1 reports on proportions (in %) of continuations selected per Sentence form. Visual inspection of the figure reveals, as predicted, that speakers attribute a strong contradiction between A and C with exclusives, as seen by the overwhelming number of 'no' continuations selected (94.8%). This result also suggests that speakers were paying attention to the task and not simply choosing randomly. In all other conditions, 'no' continuations are extremely rare. I take this as an indication that exclusive sentences are the only ones that assert exhaustivity. In the canonical condition, speakers behave the opposite way, selecting the 'yes-and' continuation more reliably than the other two (66.6% versus 32.4% and 1% respectively). Of most interest for this paper, *y'a*-clefts appear to pattern in parallel with canonical sentences, and are the mirror image of the behavior observed with *c'est*-clefts: Speakers choose the weakest continuation to a much larger extent than 'yes-but' (61.4% versus 35.4%), showing that this type of cleft lacks an exhaustive inference, or at least, conveys a much weaker level of exhaustivity than *c'est*-clefts. Yet, let us briefly note again, as reported in Destruel (2013) and Destruel *et al.* (2015), that *c'est*-clefts cannot be viewed as semantically exhaustive since that their behavior differs significantly from that of exclusives. Although an exhaustivity effect is present, the interlocutor is willing to cancel it by adding information addressing this effect.
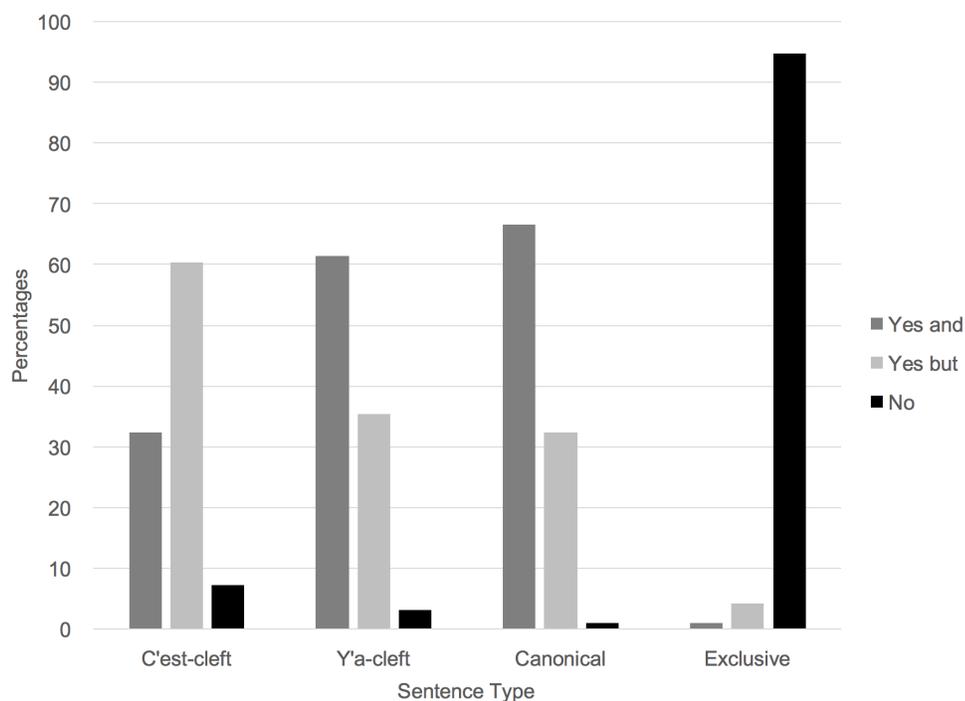
Figure 1   Proportion of continuations chosen (in %) per Sentence form.

To test for the statistical significance of the observed patterns, I used a logistic mixed-effect regression analysis. Considering the four conditions separately, the 'no' continuation was treated quite homogeneously (being almost systematically rejected in the first three conditions, and almost systematically endorsed in the fourth). Thus, I excluded this condition from the analysis. Consequently, the outcome measure was binary and was coded as 0 (Yes-and) and 1 (Yes, but) prior to analysis.

	β	SE	t	p	
C'est- vs. Exclusive	1.28	0.44	11.36	<.001	*
C'est- vs. Canonical	1.64	0.07	9.11	<.001	*
C'est- vs. Y'a-cleft	1.32	0.41	8.35	<.001	*
Y'a-cleft vs. Exclusive	1.12	0.33	10.64	<.001	*
Y'a- vs. Canonical	1.53	0.16	0.27	0.31	

Table 1   Results from *glmer* models for different comparisons between Sentence forms.

I report on pair-wise comparisons concentrating on the subset of data for two Sentence forms at a time. All statistical models were implemented using the *glmer* function of the *lme4* package (Bates et al., 2015) in the R environment (v.3.2.5, GPL-2 | GPL-3; R Core Team 2016). The fixed-effect Sentence form was effect- coded as +1 and -1 for the two sentences investigated within each comparison respectively. Following recommendations in Barr et al. (2013), the maximal random-effect structure was applied, with a random intercept for participants and items, as well as a random-effect slope for the predictor Sentence form. Hereafter, I report on the following comparisons: (i) *c'est*-cleft vs. exclusives; (ii) *c'est*-cleft vs. canonicals; (iii) *c'est*-cleft vs. *y'a*-clefts; (iv) *y'a*-clefts vs. exclusives; and finally (v) *y'a*-clefts vs. canonicals.

Results from the analysis of the proportion of 'yes-and' continuations selected for all five comparisons are given in table 1 (where statistical significance is indicated by a *). There was a highly significant main effect of Sentence form for the first four comparisons, suggesting that the two sentence forms tested within each did differ with respect to each other concerning the continuation selected. Thus, *c'est*-clefts behave differently from exclusives, canonicals and crucially for this paper, from *y'a*-clefts. There was however no main effect of Sentence form for comparison (v), or put slightly differently, no significant difference was found in the response patterns between canonicals and y'a-clefts, which does not allow us to draw conclusions about a similarity between responses to canonicals and *y'a*-clefts in this task.

All in all, the predictions stated in 3.3 are borne out, and results empirically support Lambrecht (2001)'s claim that *y'a*-clefts receive an non-exhaustive interpretation. These results are important because they are the first of their kind, thus providing us with an empirical baseline for the interpretative properties of *y'a*-clefts. But, the methodology used so far cannot inform us about more specific use-conditions for both clefts. Experiment 2 will address this issue by looking at the influence of a specific contextual factor on the occurrence of *c'est* versus *y'a*-clefts: the type of question asked.

4 Experiment 2: Question type and responder's knowledge

The first goal of this experiment is to test whether the type of question affects the naturalness of the two cleft types. In addition, the experiment also aims to tests the presence of an additional inference having to do with speaker's knowledge—i.e. an *ignorance* inference—which is predicted to arise in a context where *y'a*-clefts answer a MA question.

4.1 Participants

A total of 32 undergraduates from the University of Pau, all native monolingual speakers of French (age between 20 and 31 years old), participated in this task. They were all naïve as to the purpose of the study.

4.2 Material and Procedure

The materials consisted of question-answer pairs (see sample set in Appendix B), which were manipulated for two factors: (i) The question type was either a MA question as in (14a) or a MS question as in (14b); and (ii) the Sentence form for the answer element appeared either as a *c'est*-cleft in (15a), or a *y'a*-cleft as illustrated in (15b) (for the MA context). All questions appeared in the form of the wh-word *qui*/'who' followed by the interrogative sequence *est-ce qui*/'is it that', then the predicate and its complement. Given the complexity of the French interrogative system, this interrogative was selected because it is relatively neutral with respect to register, is more commonly used in spoken French than the variant without *est-ce que*, and allows for different syntactic forms in the response (Donaldson, 2016). MS questions were created by always including a characteristic grammatical feature, a possibility modal (as discussed in Dayal, 2016: 74-78).

(14) Questions:

    a.   Qui est-ce qui a cuisiné les haricots?

          Who baked the beans?

b. Qui est-ce qui peut servir de membre sur le comité de dissertation de Paul?

Who can serve on Paul's dissertation committee?

(15) Sentence forms:

c. C'est [Jean]F qui a cuisiné les haricots.

It's John who baked the beans.

d. Y'a [Jean]F qui a cuisiné les haricots.

There's John who baked the beans.

This resulted in a 2 X 2 within-participant design, for which I created 7 lexicalizations per condition (for a total of 28 target items). Like in experiment 1, the subject was the focus in all sentences. The items were counterbalanced and integrated into a questionnaire experiment along with 36 fillers, so that all target items were separated by at least one filler. Four counterbalanced experimental lists were created, so that each participant would only see each target item in one of the conditions.

The experiment was administered through the web using the online survey site Qualtrics. Before starting the experiment, participants read a set of instructions explaining that, on each trial, they would be asked to read a question and rate the naturalness of the answer underneath, on a 7-point Likert scale (with endpoints labeled as *extrêmement naturel*/'extremely natural' and *pas naturel du tout*/'extremely unnatural', and individual points labeled as 1, 2, ... 7). Once they provided this judgment, they were asked to give a second rating concerning the knowledge status of the responder, being asked to answer the question in (16), where P corresponds to the predicate in each item. Participants indicated their judgment on a 7-point Likert scale, with endpoints labeled as 1 = *extrêmement improbable*/'extremely unlikely' and 7 = *extrêmement probable*/'extremely likely'.

(16) Quelle est la probabilité que le répondant **ne sache pas** si d'autres personnes ont P?

'How likely is it that the responder **does not know** *whether other individuals P-ed?'*

4.3 Predictions

Regarding the influence of question type on naturalness ratings, predictions are as follows: because *c'est*-clefts convey exhaustivity more strongly than *y'a*-clefts, they should be more natural as answers to MA questions, which set expectations for a full answer. On the other hand, since *y'a*-clefts lack such an inference, they should be most natural in contexts where the question is less demanding in terms of Quantity, and for which a partial answer is most pertinent (i.e. MS question).

Nevertheless, there is at least one reason why a responder could choose to give a partial answer even when a MA question is asked: he may not know whether other, stronger alternatives also hold true of the predicate. Therefore, predictions regarding (the presence of) an ignorance inference are as follows: participants should rate as the most likely the probability that the responder *does not know if someone else P-ed* in the context where a MA question is answered with a *y'a*-cleft. On the other hand, participants should rate this probability lowest in contexts where a MS question is answered by a *c'est*-cleft.

4.4 Results

I first concentrate on the naturalness ratings for the two clefts, as reported in figure 2. Visual inspection of the graph suggests that speakers judge *y'a*-clefts as much more natural than *c'est*-clefts when found in MS contexts. By contrast, *c'est*-clefts are given a better naturalness score when answering a MA-question ($\mu = 6.9$). Yet, *y'a*-clefts are not inappropriate in such a context ($\mu = 5.68$), being rated well above the neutral threshold.[10]

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[10] A reviewer notes a potential limitation on the generalizability of the results that has to do with *genre*. Because the experiment was presented in written form, the reviewer argues that it could have triggered a formal setting in which *y'a*-clefts may be less natural to begin with, thus putting them at a disadvantage with respect to the ratings compared to *c'est*-clefts. However, to this date, it remains an empirical question whether *c'est*-clefts are indeed much more natural than *y'a*-clefts in highly formal settings. Several scholars in the past literature on French would in fact argue that clefts maybe *only* belong to spoken/colloquial French (see for instance Lambrecht, 1994), and thus both would actually be less natural in a formal setting. There is in fact some evidence that c'est-clefts are not always produced in Standard, formal French, but rather canonical sentences are (Destruel, 2016). Finally, although the experiment was indeed delivered in written form, the question used was an *est-ce que* question, which is acknowledged to be common form in informal French (Donaldson, 2016). To trigger a highly formal setting, it would have been more appropriate
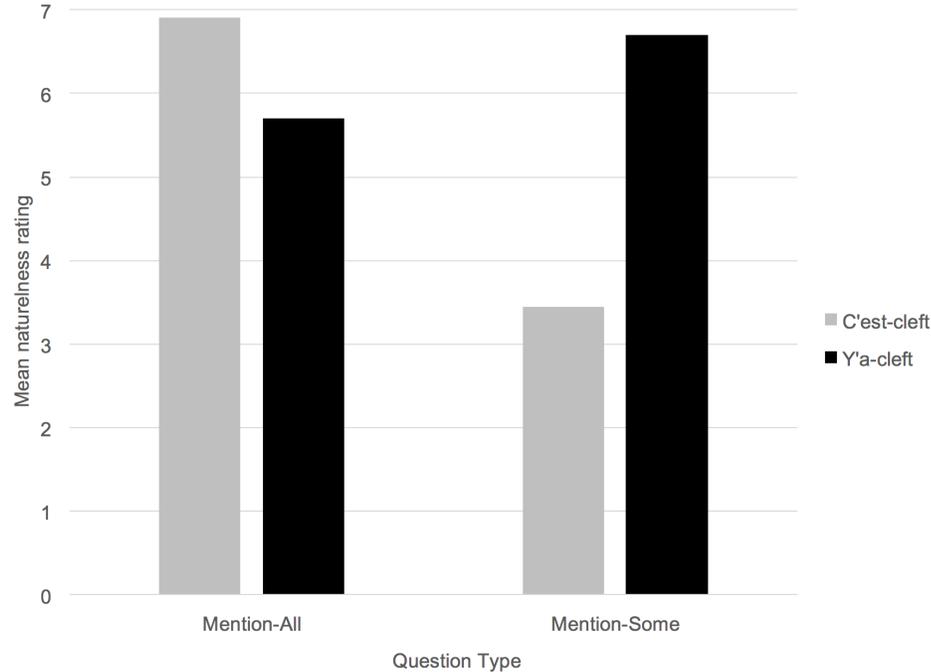
Figure 2 Naturalness ratings for *c'est*- vs. *y'a*-clefts per Question type.

To test for the statistical significance of these patterns, I used linear mixed effects models predicting clefts' naturalness ratings from the fixed effects (i) Question type (effect coded as +1 for MA and -1 for MS) and (ii) Sentence form (effect coded as -1 for *c'est*-clefts and +1 for *y'a*-clefts). The random effects structure included a random intercept for participants and items, as well as a random slope for the two fixed effects and their interaction. I report on estimates, standard errors, and t-values, with any t-value exceeding |1.96| considered statistically significant with *p* < .05.

There was a main effect of each individual factor ($\beta = -1.23$, SE = 0.10, t = -11.92 for Question type, and $\beta = 0.97$, SE = 0.11, t = 9.13 for Sentence form), which is mostly

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to use an inverted question. Thus, at least in principle, the context, although written, did not specifically set-up a formal setting. We should also note that it is too strict to equate the written medium with a formal genre and the spoken medium with an informal genre; there are in fact many instances of informal written speech, and vice versa.

due to the lower ratings of the *c'est*-cleft in the MS context ($\mu = 3.4$). There was also a highly significant interaction between the two factors ($\beta = 4.47$, SE $=0.29$, t$=15.26$), suggesting the participants rated the *y'a*-cleft significantly higher in the MS context than in the MA context, and vice-versa for the *c'est*-cleft. Finally, when comparing the three nested models, the one with the interaction came out as providing the best fit to the data ($\chi^2(16) = 116.2$, p < .001). I now turn to analyzing the results for the ratings concerning responder's knowledge, as illustrated in figure 3.
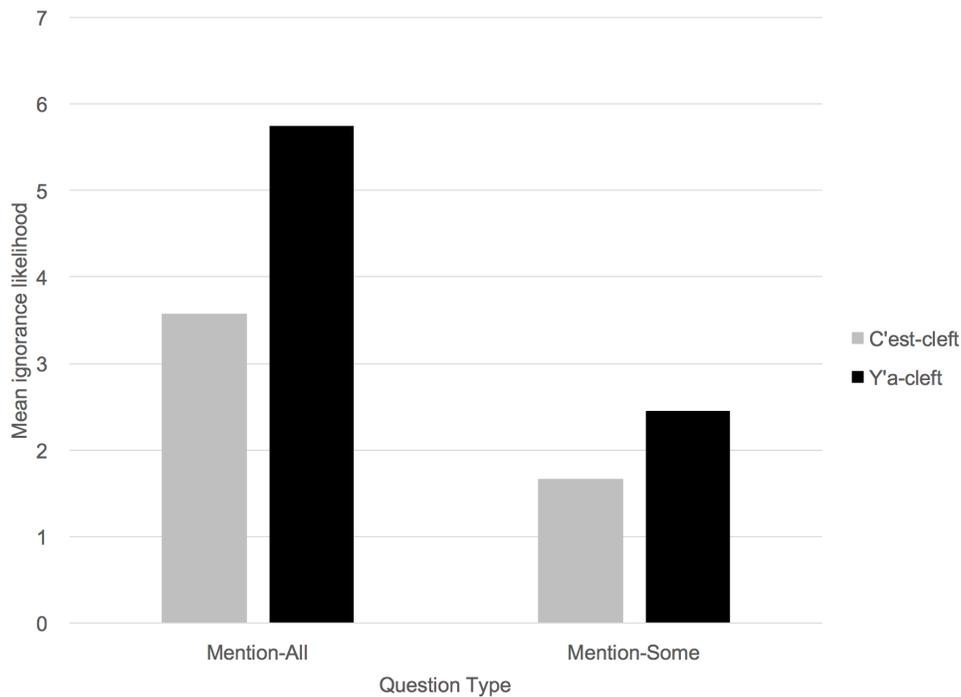

Figure 3   Likelihood ratings for responder's ignorance per Question type and Sentence form.

Results reveal that the context in which participants found it was most likely for the responder to be ignorant about whether other individuals also held true of the predicate is when a *y'a*-cleft appears in the MA context ($\mu = 5.75$). This rating is comparatively higher than when the same cleft is found in the MS context ($\mu = 2.45$). In contrast, the context where participants attributed the lowest level of ignorance to responder's knowledge was when a *c'est*-cleft appeared in a MS context ($\mu = 1.67$). Here, this rating is much higher than when the *c'est*-cleft appears in the other question condition ($\mu = 3.58$).

These patterns suggest that inferences about responder's knowledge vary according to the type of question. They do not seem to be categorical, but rather the *strength* with which they are perceived is variable. This finding is important because it has direct implications for current theories of the meaning of clefts, which I discuss in section 5.

Statistically, I fit a linear mixed effect regression to the data predicting the effect of Question (effect coded as +1 for MA and -1 for MS), Sentence form (effect coded as -1 for *c'est*-clefts and +1 for *y'a*-clefts) and their interaction on the likelihood of responder's ignorance. Results yielded a main effect of Question type (β = –2.61, SE = 0.08, t = – 30.77), suggesting that MS contexts are typically less likely to be associated with an ignorance inference. There was also a main effect of Sentence form (β = 1.48, SE = 0.11, t = 13.45), suggesting that *y'a*-clefts are more likely to be associated with an ignorance inference. Finally, there was a highly significant interaction between the two factors (β = –1.38, SE = 0.15, t = –9.24), and when comparing the three nested models, results suggest that the latter (the one with the interaction) provided the best fit to the data ($\chi^2(16)$ = 102.8, p < .001). Thus, all predictions presented in 4.3 were borne out.

4.5   Summary of results

This section briefly summarizes the main results across the two experiments presented in this study.

Results from experiment 1 speak to the first research question in (12a), suggesting that there is a much greater exhaustivity effect with *c'est*-clefts than with *y'a*-clefts, but that does not make the former construction semantically exhaustive, as they differ greatly from exclusives. *Y'a*-clefts were found to behave on par with canonical sentences, for which additional information can easily be supplied without sounding like a contradiction.

Results from experiment 2 address the other two research questions in (12b). They reveal that the type of question answered influences the naturalness of both clefts: *y'a*-clefts are most natural in a MS context, and *c'est*-clefts are most natural when they answer a MA question. But results also reveal that *y'a*-clefts can still felicitously appear in MA contexts, in which case they come with a marked interpretation, an ignorance inference. Finally, and maybe most interestingly, results suggest that the type of question also influences the strength with which ignorance is conveyed; it is felt much more strongly

in the MA condition than in the MS condition. This suggests that this inference does not simply arise with a probability of 0 or 1, but that its strength may be a matter of degree.

5 General discussion

This paper has argued that a fine-grained understanding of the context of use for French *c'est*- and *y'a*-clefts is needed to fully explain their occurrence in narrow-focus contexts. Specifically, the hypothesis was that their alternation is conditioned by the expectations set by the questioner, and that these expectations are communicated via the type of question that is asked. In the following, I first confront this hypothesis to qualitative data by analyzing some naturally occurring examples. Then in subsection 5.2, I discuss the major theoretical implications of the results.

5.1 Some naturally occurring examples

Examples (17) and (18) are taken from the corpus searches reported in Karssenberg & Lahousse (2018), drawn from the Yahoo-based Contrastive Corpus of Questions and Answers.[11] These examples were selected because they include explicit questions, thus making it easier to evaluate how they can relate to the proposal put forward in this paper.

First, let us look at example (17), repeated from (4).

(17) a. Speaker A: Je recherche des modèles de voiture à acheter neuve moins de 10 000 euros, où aller!?

'*I'm looking for brand new cars to buy for less than 10 000 euros, where can I go?*'

   b. Speaker B: bonjours **il y a la citroen c1 qui** est a moins de 10 000 euros, si tu veux plus d'info je peux te renseigner car je travail chez Citroen.
'*Hi.* **There's the Citroën C1 that** *costs less than 10 000 euros, if you want more information, I can help you since I work for Citroën.*'

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[11] YCCQA is a corpus of informal written French, English, Spanish, and German based on the questions and answers submitted by users of the Yahoo Answers website.

In this example, the conversational goal of the two interlocutors is to resolve the inquiry about places that sell brand new cars for less than 10 000 euros. The reading of the question *Où aller?* is Mention-Some, although the question itself is not explicitly marked as such. Indeed, when uttering (17a), the questioner (speaker A) does not expect the responder (speaker B) to list every single place that has new cars that fit the requested price limit. In fact, there is certainly not at most one true, appropriate answer to this question. Instead, a partial (but relevant) answer will suffice, at least to fulfill the first conversational move set by the questioner. By using a *y'a*-cleft, the responder conveys one option he deems informative and leaves the line of inquiry open to further discussion, here by signaling this move openly by inviting the questioner to ask for more information *si tu veux plus d'info...*/'if you want more information'. If A is satisfied with the response, he can choose to take the answer as fully resolving the question for his purpose, and can close the line of inquiry by accepting the answer and not requesting more information. Crucially, the responder is not the one closing the line of inquiry, the questioner is—once satisfied with the option given by the partial answer. This pragmatic function contrasts with that of *c'est*-clefts, which are taken to terminate a line of inquiry, as argued by Velleman et al. (2012). Finally, this example also illustrates the argument made in van Rooij (2004) about the context under which MS-questions appear; i.e. when there is a particular *human concern* at stake behind the question asked—one where the questioner has an issue to be resolved.

Second, consider example (18).

(18) a. Speaker A: Avec quels logiciels libres et gratuits puis-je lire des fichiers
vidéos encodés en MP4?

'*With which freeware programs can I open video files encoded in MP4 format?*'

b. Speaker B: La meilleure sources de logiciel libre est http://www.frama soft.net. En ce qui concerne la lecture de mp4, **il y a VLC qui** les ouvrent très bien. gratuit et libre bien sûr!

'*The best source for freeware programs is http://www.framasoft.net. As for opening mp4 files,* **there is VLC that** *opens them very well. Free of course!*'

Here as well, the question in (18a) has a Mention-Some reading; it is asked to fulfill a specific goal G1 of the inquirer 'reading .mp4 video files', immediately super-ordinated to the sub-goal G2 of 'finding options for programs to do so.' The partial answer 'VLC' is helpful in resolving the decision problem that the interlocutors face, and can be sufficient and optimal if the questioner finds that it provides the best answer for his purpose. Because the line of inquiry remains open due the use of a *y'a*-cleft, further information can be easily requested and supplied if needed.

5.2 Theoretical implications of the findings

The results from the present studies corroborated previous observations in the French linguistics literature about the difference between *c'est*- and *y'a*-clefts in narrow- focus contexts. In line with Lambrecht (2001), Hamlaoui (2008) and Karssenberg & Lahousse (2018), I provided empirical evidence suggesting that the latter structure was found to be much less exhaustive than the former. But crucially, *c'est*-clefts are not systematically exhaustive. In light of this result, I expanded on prior work in two major ways. First, I hypothesized that the two clefts did not occur in the exact same context, but rather that the type of question being asked would influence the occurrence and naturalness of one cleft over the other. Second, I posited that *y'a*-clefts also conveyed an ignorance inference when found in MA contexts. To go back to formal accounts of clefts, one way to improve on the optimality-theoretic proposals of Hamlaoui (2008) and Féry (2013) would be to control for the 'wh'-context in the input, implementing a constraint that governs the type of question asked.

Linking the data to the literature on questions, results from experiment 2 seem to support Xiang's (2016) claim that the presence of an ignorance inference is crucial in distinguishing between MA and MS questions: There was a significant difference in responder's knowledge when y'a-clefts were found in MA contexts as opposed to MS contexts, with ignorance being indeed (more strongly) conveyed in the former. Whether ignorance in MA contexts is unambiguously prosodically marked in French (as is argued for English) however remains an open question.

The data presented in this paper also has implications for the cross-linguistic literature

on modeling exhaustivity in clefts and strong focus positions. Although experiment 2 tested the probability of speaker's ignorance, low ratings can in fact be understood as participants deriving an exhaustive inference: If participants judge the probability of responder *not knowing* if other individuals *P*-ed as (very) low, this means that to a certain level, they inferred that no one else *P*-ed. In other words, participants have interpreted the target sentence somehow exhaustively. In the case of *c'est*-clefts, the variation in scores between MS and MA contexts suggests that an exhaustive inference is felt more strongly when the cleft answers a question that differed in reading, that is when the expectations of the question were for a partial answer but a *c'est*-cleft was used. Let us note that this result also fits with results from experiment 1, showing that *c'est*-clefts are not truth-conditionally exhaustive. Indeed, if participants associated *c'est*-clefts with semantic exhaustivity, they should understand the responder to have no doubt about the possibility that a stronger answer exists—thus driving the ignorance ratings down with MA-questions, maybe even close to zero.

Maybe the most important finding emerging from these results is that inference strength can vary—here according to the type of question. This finding challenges theories of the meaning of clefts discussed in section 2.2. Indeed, in their current form, all theories, regardless of whether they derive exhaustivity semantically or pragmatically, predict strength invariance: either exhaustivity is derived robustly, or it is derived but subsequently canceled. The fact that it can be derived with varying degrees is not predicted. It is however compatible with results in recent empirical work by Gerőcs et al. (2014). The authors tested whether the reported robustness of preverbal focus in Hungarian could be altered by (i) an explicit, preceding question and (ii) decreased cognitive resources, and found weaker exhaustivity for preverbal focus compared to previous studies when no explicit question was present and time to respond was restricted. Although proposing a new account of clefts' exhaustivity is beyond the scope of this paper, one line of argument that seems potentially productive is to derive exhaustivity from the type of question being answered, with stronger effects being associated with questions that require a maximal answer.

Since ignorance inferences are typically treated as implicatures (Hochstein et al., 2016), the finding on strength variation also has implications for most theories of implicatures.

As discussed in Degen (2015), a common assumption about generalized conversational implicatures is that they constitute a homogeneous class of inferences, whose strength and context-dependence is not variable (Grice 1975, Horn 1984, Levinson 2000). Yet, using corpus-based examples, Degen shows this does not hold for scalar implicatures: Speakers do not systematically infer 'not all' from sentences containing 'some', thus questioning the status of these implicatures as GCIs. The author proposes to account for the derivation of this implicature in probabilistic terms—the crux of the proposal being that it will arise as a matter of degree depending on support received from specific contextual cues (e.g. the use of the partitive form 'some of' and discourse accessibility). Results from experiment 2 in this paper seem compatible with such a probabilistic view since they suggest that inferences associated with French clefts can be modulated systematically from a particular contextual cue, here the type of question asked.

6 Conclusion

The main contribution of this paper is that it adds experimental evidence to the scarce literature on the alternation between French *c'est*-clefts and *y'a*-clefts in narrow-focus contexts. To the best of my knowledge, no such data exist to date. From a theoretical perspective, I contributed a refined account of this alternation, which called on the type of question being asked by the questioner. This factor was explicitly manipulated in an experimental setting, which also constitutes a new advance in the (experimental) literature. Important findings emerged: while *y'a*-clefts are indeed less exhaustive than *c'est*-clefts, they come with an additional ignorance inference. Moreover, the type of question asked by the questioner not only exerts a direct influence on the naturalness of the two clefts, but also on the strength of the inferences they convey—exhaustivity and ignorance. This last point notably calls into question current models of exhaustivity in clefts cross-linguistically (Horn, 1981; Kiss, 1998; Velleman et al., 2012; Büring & Križ, 2013), but appears potentially compatible with recent argument in probabilistic terms in the study of implicatures (Degen, 2015; Degen & Tanenhaus, 2015).

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Appendices

A Sample stimuli for experiment 1

1. Qui est-ce qui a grondé la secrétaire?

   (Seul/ C'est) Le comptable (qui) a grondé la secrétaire.

   Who scolded the secretary?

   (Only/ It's) The accountant (who) scolded the secretary.

2. Qui est-ce qui a attaqué le joueur?

   (Seul/ C'est) Le hooligan (qui) a attaqué le joueur.

   Who attacked the player?

   (Only/ It's) The hooligan (who) attacked the player.

3. Qui est-ce qui a construit la maison?

   (Seul/ C'est) L'ouvrier (qui) a construit la maison.

   Who built the house?

   (Only/ It's) The workman (who) built the house.

B Sample stimuli for experiment 2

B.1 Mention-All questions

1. Qui est-ce qui a cuisiné les haricots?
   Who baked the beans?

2. Qui est-ce qui a invité le directeur?
   Who invited the director?

3. Qui est-ce qui a réparé l'ordinateur?
   Who repaired the computer?

4. Qui est-ce qui a payé l'ouvrier?
   Who paid the workman?

B.2 Mention-Some questions

1. Qui est-ce qui peut servir de membre sur le comité de dissertation de Paul?

   Who can serve as a member on Paul's dissertation committee?

2. Qui est-ce qui peut amener Julie au concert ce soir?

   Who can drive Julie to the concert tonight?

3. Qui est-ce qui peut aider Marc à corriger ses copies?

   Who can help Mark to grade his papers

4. Qui est-ce qui peut acheter des boissons pour le pique-nique ce week-end?

   Who can buy drinks for the picnic this weekend?