Non-intrusive questions as a special type of non-canonical questions*

Donka F. Farkas
UC Santa Cruz

Abstract

This paper introduces on the scene a new type of non-canonical question, dubbed *non-intrusive*, exemplified by interrogatives marked by the particle *oare* in Romanian. It does so by providing an account of the distribution and interpretation of this particle using an updated version of the context components in Farkas and Bruce (2010), and an elaboration of the general assumptions in Farkas and Roelofsen (2017). The intuition the account captures is that by marking an interrogative with *oare*, the speaker signals that she does not assume that the issue she raises will be resolved in a future state of the conversation. It is further argued that non-intrusive questions are empirically close to but not identical with *conjectural questions*, discussed most recently in Eckardt (2018), and therefore have to be recognized as a separate category. The predictions and theoretical implications of the account are discussed relative to a general typology of canonical and non-canonical questions.

1 Introduction

This paper addresses an empirical question, and aims to place the proposed answer within a larger theoretical context. The empirical issue is to capture the distribution and subtle interpretation effects of the Romanian particle *oare*. As an independent morpheme, *oare* occurs, optionally, in polar and constituent interrogatives, as exemplified in (1):

(1) a. (*Oare*) ce a spus Amalia?
oare what has said Amalia
'What did Amalia say, I wonder.'
b. (*Oare*) e acasă Amalia?
oare is home Amalia
'Is Amalia home, (I wonder).'[1]

According to Giurgea (2018), the most commonly assumed historical origin of *oare* is Latin **uolet* 'wants'. The morpheme *oare* is used elsewhere in the language in combination with wh-pronouns resulting in indefinite pronouns, as exemplified in (2):

(2) *oare*cine
oare.who
someone

*I am grateful to Sabine Iatridou, Floris Roelofsen, Nadine Theiler, two anonymous referees, as well as to Maria Aloni, the editor of this paper, for insightful comments and suggestions. The content of this paper overlaps with material presented in talks at Stanford, University of Bucharest, Princeton, University of Amsterdam, Konstanz, UCSC, Sensus 1, at University of Massachusetts, Amherst, and the 2021 Winter LSA meeting. I am grateful to the audiences of these talks for helpful questions and discussion.

[1]As will become clear below, there is no single way of translating *oare* marked interrogatives in English; the translation by *I wonder* is a loose approximation.

Previous work relevant to the topic is Hill (2002), concerned with the syntax of *oare*, Farkas and Bruce (2010), which mentions it briefly and suggests an account which will be fleshed out below, Ivan (2013), which suggests, informally, that *oare* is associated with uncertainty, and Giurgea (2018), whose aim is primarily descriptive but which suggests that *oare* signals that the speaker assumes the addressee does not know the answer to the question.

The account to be proposed in this paper brings onto the scene a type of non-canonical question dubbed here *non-intrusive*, which has so far attracted very little attention. In a nutshell, non-intrusive questions are characterized below as questions that are non-canonical in virtue of the fact that the speaker signals that she does not assume that the addressee will resolve the issue raised by the question.

The more general goal the paper pursues is to situate this type of speech act within the larger landscape of the typology of canonical and non-canonical questions. It will be argued that the properties of canonical questions should be treated as default assumptions that follow from the semantics of interrogatives and their effects on context structure. Non-canonical questions, of which non-intrusive questions are an example, are questions that depart from these assumptions.

Before proceeding further, a terminological clarification is in order. I will use the term *interrogative* to refer to a particular clause type that contrasts with *declarative*, *imperative* and *exclamative* clause types. I will assume that a sentence form is interrogative iff it involves an interrogative operator at its highest level.[2]

The term *question* will be used to refer to a speech act, namely the act of uttering an interrogative sentence, in contrast with *assertion*, *directive* or *exclamation*, terms used to refer to the act of uttering a declarative, imperative or exclamative sentence respectively.

The road map for the rest of the paper is as follows. In order to frame the account of *oare* interrogatives as marked forms used to ask a specific kind of non-canonical question, Section 2 provides a brief introduction to the distinction between canonical and non-canonical question acts, as well as the marked and unmarked forms used to perform them. Section 3 gives the empirical data and generalizations concerning the particle *oare* in Romanian. Section 4 summarizes and elaborates on those aspects of the proposals in Farkas and Bruce (2010) and Farkas and Roelofsen (2017) concerning context structure and conventional discourse effects that are relevant for current purposes. Section 5 gives the proposed account of the facts given in Section 3 within the framework given in Section 4. Section 6 returns to the topic of Section 2 by exploring the implications and predictions of the framework and proposal developed in previous sections for a general approach to canonical and non-canonical questions, and Section 7 concludes.

2 Canonical and non-canonical questions

With respect to question acts, it is commonly assumed, at least since Searle (1969), that there is a distinction between what Dayal (2019) calls canonical and non-canonical questions. The former

[2]In English, whether a sentence counts as declarative or interrogative correlates with word order properties. This correlation is not necessarily perfect, however: rising declaratives, exemplified in (i),

(i) Susan is coming with us?

have declarative word order. Whether they are in fact declarative or interrogative in the terminology defined above depends on how one treats the contribution of the special intonation contour associated with them. In the accounts of Gunlogson (2001), Rudin (2018) and Westera (2017), rising declaratives are treated as special declarative forms, while in the accounts of Farkas and Roelofsen (2017) and Jeong (2018) they are treated as special interrogative forms whose interrogativity is contributed by the intonation contour. Choosing between these alternatives is not relevant to the issues discussed in this paper.

are characterized as 'information seeking' acts whereby an ignorant speaker requests an addressee she assumes to be knowledgeable to inform her of the true answer to the question she raises. An example is given in (3):

(3) *Context: Joey to his mother, while doing his geography homework:*
What is the capital of Morocco?

The view to be defended here is that the characteristic properties of canonical question acts are to be treated as the default contextual assumptions in (4):

(4) *Default assumptions accompanying question acts*
   a. *Speaker ignorance*: The speaker's epistemic state is neutral relative to the possible resolutions of the issue she raises.
   b. *Addressee competence*: The speaker assumes that the addressee knows the information that settles the issue she raises.
   c. *Addressee compliance*: The speaker assumes that the addressee will provide this information in the immediate future of the conversation as a result of the speaker's speech act.
   d. *Issue resolution goal*: It is assumed that the main aim the speaker pursues when raising an issue is to have it resolved in the immediate future of the conversation.

We return to the theoretical status of the assumptions in (4), and the way they can be overridden in Section 6.

Above, the terms 'speaker' and 'addressee' refer to participants who play a double role. 'Speaker' refers to the participant who is the author of the speech act as well as the questioner, and 'Addressee' refers to the participant being addressed, as well as the responder, i.e., the participant who is assumed to react to the question. The pairing of speaker/questioner and addressee/responder is the default one but we will see below that this default can be overridden. The assumptions in (4) target the roles of 'questioner' and 'responder': it is the questioner who is assumed to be ignorant of the true answer, and the responder who is assumed to be able to provide it to her. We will continue to use 'speaker' and 'addressee' for convenience except when discussing cases in which the default pairing is overridden in 5.3.1 below.

Note that *Addressee compliance* entails *Addressee competence* but not the other way around: an addressee cannot be assumed to provide information she lacks, but a knowledgeable addressee may still choose not to provide the requested information. Next, note that the fact that the speaker wishes to get the information she lacks follows from the way *Addressee compliance* has been formulated. If one performs an act meant to bring about a particular state of affairs, it is natural to assume that one wishes that state of affairs to obtain. Moreover, note that given *Addressee compliance*, a cooperative and competent addressee should respond by providing the true answer to the question raised. Finally, note that it follows from this characterization of canonical questions that the participant who is assumed to provide the requested information is the addressee.

We can now define canonical questions as in (5):

(5) *Canonical questions*
A question act is canonical iff the default assumptions in (4) hold.

Not all question acts are canonical, of course. Searle gives as an example a type of question often referred to as 'quiz' question, exemplified in (6):

(6) *Context: Joey's geography teacher asks Joey in class:*
What is the capital of Morocco?

Given the circumstances of the utterance, all four assumptions in (4) are suspended in (6). In this case the speaker is assumed to be knowledgeable, and her main aim in asking the question is assumed to be to establish whether her addressee is knowledgeable as well.

In Searle's approach, such questions have different felicity conditions from information seeking questions. In the view to be defended here, 'quiz' questions are not canonical in that the contextual assumptions against which they are raised differ from (4) and override them. Whether a question is interpreted as information seeking or as a 'quiz' question depends on assumptions the discourse participants make concerning the context they are in, and the reasons that drive the speaker to utter the interrogative sentence.

With respect to interrogative forms, I take it to be non-controversial that languages may exhibit unmarked interrogative sentences, as well as marked ones. In English, the former are exemplified by the constituent interrogative in (3) and (6), as well as in the polar interrogative in (7-a), while the latter is exemplified by the tag interrogative in (7-b):

(7) a. Is Susan coming with us?
b. Susan is coming with us, isn't she?

Unmarked interrogative forms can be used to ask both canonical and non-canonical questions, as exemplified in (3) and (6). At least some marked interrogative forms, such as the tag interrogative in (7-b), on the other hand, can only be used to ask special types of non-canonical questions. Tag interrogatives, for instance, can only be used to ask what is known as a *biased question*, whereby the speaker signals some type of bias in favor of one particular resolution, which in this case is the semantic content of the declarative part of the sentence. As such, biased questions weaken the *Speaker ignorance* assumption characterizing canonical questions. We return to the status of the assumptions in (4) and the ways in which they can be overridden, as well as to a more detailed characterization of 'quiz' questions and biased questions in Section 6 below.

It will be argued here that *oare* interrogatives in Romanian are like tag questions in English in that they are marked forms that can only be used to ask a non-canonical question. They are unlike tag questions, however, in that the role of *oare* is to signal that the question act is non-intrusive, rather than to signal the presence of bias. In the account to be given below, the effect of using a non-intrusive question marker is to weaken the *Addressee compliance* assumption in (4) above.

The theoretical implications of the specific account to be proposed, discussed in Section 6, concern the relation between interrogative forms and the nature of the speech acts they are used to perform. In the view to be defended here, the properties of canonical questions are default contextual assumptions that follow from the semantic content of unmarked interrogatives and the way they affect their input context. These assumptions can be overridden in special contexts. This explains why unmarked forms can be used to ask both canonical questions but also some non-canonical ones. It will also be argued that languages may employ special formal markers whose role is to add special discourse effects that override or weaken default assumptions, resulting in marked interrogative forms that can only be used to ask special types of non-canonical questions.

3 Empirical properties of the particle *oare*

This section surveys the relevant data by first briefly introducing the sentence types in Romanian and then turning to the basic properties of the morpheme *oare*.

Sentence types in Romanian The difference between declaratives and polar interrogatives in Romanian is signaled primarily by intonation, falling in declaratives, and rising in interrogatives.[3] Orthographically, declaratives end in a full stop and interrogatives in a question mark:

(8) a. Amalia e acasă.
Amalia is home
'Amalia is home.'
b. Amalia e acasă?
Amalia is home
'Is Amalia home?'

In constituent interrogatives, the interrogative pronoun is fronted and followed immediately by the verbal complex, resulting in an obligatorily post-verbal subject:

(9) Ce a spus Amalia?
what has said Amalia
'What did Amalia say?'

In imperative sentences, illustrated in (10), the verb must precede all non-focused constituents, and a special imperative inflection is used on the verb, glossed by 'Imp' below:

(10) Deschide geamul!
open.Imp window.the
'Open the window!'

The primary mark of exclamatives, illustrated in (11), is a fronted relative pronoun:

(11) Ce zi frumoasă e!
what day beautiful is
'What a beautiful day it is!'

Restriction on *oare* to interrogatives As illustrated already in (1), *oare* can occur in both constituent and polar interrogatives, and its presence is optional. In (12) we see that *oare* can occur in disjunctive questions:[4]

(12) (*Oare*) Amalia a plecat azi sau ieri?
(**oare**) Amalia has left today or yesterday
'Did Amalia leave today or yesterday, I wonder.'

This question presupposes that one of the alternatives presented is true, independently of whether *oare* is present or not.

As shown in (13), *oare* is ungrammatical in declaratives, imperatives and exclamatives:

(13) a. **Oare* Amalia e acasă.
oare Amalia is home.
'Amalia is home, I wonder.'
b. **Oare* deschide geamul!
oare open.Imp window.the

[3]Word order in Romanian is relatively free. In both examples in (8), the subject, *Amalia*, could occur sentence finally. The interpretive differences between various possible word orders are irrelevant for present purposes.

[4]I am grateful to an anonymous referee for bringing up such examples.

*Open the window, I wonder.

c. **Oare* ce zi frumoasă e!
oare what day beautiful is
'What a beautiful day, I wonder.'

The generalization to be drawn from these facts is given in (14):

(14) *Sentence type restriction*
Oare is restricted to (polar or constituent) interrogatives.

Bare *oare* Hill (2002) and Giurgea (2018) note a further use of *oare* as a 'bare' particle, exemplified in (15):

(15) A: E prea devreme.
is too early
'It is too early.'
B: *Oare.*
oare
'I wonder.'

In this case, B's utterance signals that she does not accept the truth of the sentence A asserted but does not contradict it either.[5]

The generalization that characterizes this use of *oare* is given in (16):

(16) *Bare use*
The particle *oare* by itself can be used as a reaction to a preceding assertion to signal that the speaker does not accept the truth of the asserted sentence.

Contribution of *oare* First, note that *oare* cannot be argued to be a marker of bias. Its presence does not have the effect of signaling the speaker's preference (epistemic or otherwise) for one of the resolutions of the question. Thus, the examples in (1) above are felicitous in contexts in which the speaker is assumed to have no information or preference whatsoever concerning the true answer. This is shown in (17), where the speaker asserts her complete ignorance before asking the *oare*-question:

(17) Habar n-am. *Oare* unde e Ana?
incling not-have. **oare** where is Ana
'I have no clue. Where is Ana, I wonder.'

Next, note that *oare* cannot be treated as being simply an optional interrogative marker. Under that hypothesis we would expect *oare*-marked interrogatives to have the same distribution and interpretation as their *oare*-less counterpart. That this prediction is not correct is shown by the fact that *oare*-marked interrogatives are infelicitous in certain contexts in which their version without *oare* is impeccable. Thus, the use of *oare* in an 'interrogation' question, as exemplified in (18) and (19), is infelicitous:

[5] Hill (2002) and Giurgea (2018) note that bare *oare* can be pronounced either with a non-interrogative intonational contour (a fall on the first syllable and a low boundary tone) or with an interrogative intonation (low nuclear tone on the first syllable and a high boundary tone). According to Giurgea and Hill, the interrogative contour is associated with uncertainty relative to the veracity of the previous assertion, while the non-interrogative one is associated with doubt. We will not account for this distinction here.

(18) *Context: Policeman to driver he stopped:*

#*Oare* cu ce viteză ai mers?
oare with what speed have.II gone
'What was your speed, I wonder.'

(19) *Context: Teacher to student:*

#*Oare* ce ai avut pentru azi?
oare what have.II had for today
'What is your lesson for today, I wonder.'

In the contexts illustrated above, the speaker assumes that the addressee will provide the true answer to the question if she knows it. This assumption is incompatible with the presence of *oare*.

In (20) we illustrate a situation in which an *oare*-marked interrogative is preferred to its *oare*-less counterpart:

(20) *Context: There is a knock on the door in the middle of the night. Maria says to Paul:*

?(*Oare*) cine e la ora asta?
oare who is at hour this
'Who could it be at this hour?'

The question mark above signals that the version of this question without *oare* is less natural than the one with it. In the context in (20) the *Addressee competence* assumption is suspended. As we will see in 5.3.2, the presence of *oare* in (20) is not obligatory in such cases; there are other interrogative forms in Romanian that can be used to signal that the speaker does not expect the addressee to know the answer to the question being asked. We come back to the special status of the *Addressee competence assumption* in 6.2 below.

The fact that the absence of the *Addressee competence* assumption is not a necessary condition for *oare* to be licensed is shown in (21), which is a rhetorical question asked with the aim of drawing the addressee's attention to the obvious answer provided by the context.

(21) Nici nu-şi spuse numele, dar mai era *oare* nevoie?
not-even not-Refl.Dat. told name.the.Dat but still was **oare** need?
'She didn't even say her name, but was that still necessary?' (Gib Mihăescu, *Donna Alba*, Giurgea's (5), p. 4)

We come back to contexts that license or block *oare* interrogatives in subsection 5.3 below.

Syntactic position The syntactic position of *oare* is not fixed, as shown in (22).[6]

(22) a. *Oare* cine îl va ajuta pe Petru?
oare who him will help Acc. Petru
'Who will help Peter, I wonder.'

b. Cine îl va ajuta pe Petru *oare*?
who him will help Acc. Petru **oare**
'Who will help Peter, I wonder.'

c. Cine îl va ajuta *oare* pe Petru?
who him will help **oare** Acc. Petru
'Who will help Peter, I wonder.'

[6]See Hill (2002) for the claim that *oare* is a complementizer.

d. Cine *oare* îl va ajuta pe Petru?
who **oare** him will help Acc. Petru
'Who will help Peter, I wonder.'

Whether there are subtle interpretive differences triggered by the syntactic position of *oare* is an issue I leave open in this paper. I also leave open the question of precisely where on the left periphery *oare* occurs.

The account of the contribution of *oare* that will be defended in Section 5 aims to explain the sentence type restriction in (14), its use as a bare particle, characterized in (16), as well as the precise conditions under which it can and cannot be used, a sampling of which has been given in (18) - (20).

4 Theoretical framework

The account to be presented in the next section is based on the view of the semantics and conventional discourse effects of declaratives and interrogatives in Farkas and Roelofsen (2017). This section summarizes, and in some cases refines, those aspects of these proposals that are relevant to current concerns.

4.1 Basic semantic assumptions

In line with both Hamblin and Inquisitive Semantics, I assume that declaratives and interrogatives denote the same type of entity, differentiated only by its inner structure. The discussion below is given within the general framework of Inquisitive Semantics in Ciardelli *et al.* (2019).

The terminology adopted here is the following. A *proposition* (or state) is a set of worlds. The denotation of both declarative and interrogative sentences, i.e., CPs, is a downward closed set of propositions I, called an *issue*.[7] Since downward closure is not relevant for current concerns, it will be ignored below. The maximal propositions (states) in I are called the *alternatives* in I. The *informative content* of an issue I, written as info(I), is $\cup I$, the union of the propositions in I.

In the case of declarative sentences I contains a unique alternative while in the case of interrogatives it contains more than one alternative. The informative content of a typical declarative sentence does not cover the whole logical space provided by the context, while that of an interrogative does. The denotation of declaratives is said to be *non-inquisitive*, and that of interrogatives is said to be *non-informative*. Following Roelofsen and Farkas (2015), I assume that interrogative sentences involve an INT operator, whose effect is to render the denotation of the sentence non-informative; declarative sentences involve a DEC operator, whose effect is to render the denotation of the sentence non-inquisitive.

Finally, I follow Roelofsen and Farkas (2015) and references therein in assuming that the n-place property denoted by the overt element of a sentence is made prominent, i.e., is *highlighted*. Declaratives and polar interrogatives highlight a state (a 0-place property), namely the alternative denoted by their sentence radical; constituent interrogatives highlight an n-place property, where $n \geqslant 1$. Highlighted states are marked in bold face below.

The denotations of simple declaratives, polar interrogatives and constituent interrogatives are exemplified in (23) - (25).

(23) a. Mona arrived.
b. {{**w: Mona arrived in w**}}

[7] A set of propositions I is downward closed iff for every $p \in I$, if $p' \subset p$, $p' \in I$.

(24) a. Did Mona arrive?
b. {{ **w: Mona arrived in w**}, {w: Mona did not arrive in w}}

(25) a. Who arrived?
b. {{w: only Mona arrived in w}, {w: only Gail arrived in w}, {w: Mona and Gail arrived in w}}[8]

In (25), the highlighted property is $\lambda x.$ *x arrived*.

We turn next to the other two analytical components the discussion rests on, namely context structure and the effects different sentence types have on the input context structure relative to which they are uttered.

4.2 Context structure

Below I focus on those context structure components that are relevant to characterizing the type of questions we are interested in here. To simplify, I will assume that the conversation is a dialogue between two participants.

Building on Farkas and Bruce (2010) and the long tradition that work is rooted in, I assume that a context structure c has at least the following components: (i) a set of discourse participants *Part*; (ii) for every discourse participant $X \in Part$, DC_X is a set of states, called the *discourse commitments of* X; (iii) a set of issues, called the Table differentiated by salience, and (iv) a set of future discourse commitments, DC_X, called the projected set (ps), where the value of X is contextually fixed, by default, to the addressee. Below I briefly characterize each of these components.

Discourse commitments For each discourse participant X, DC_X is the set of propositions X has publicly committed to in the course of the current conversation.[9] If $p \in \mathrm{DC}_X$, X is publicly committed to $w_a \in p$ for the purposes of the conversation, where w_a is the world in which the conversation takes place. It follows that any DC_X has to be consistent, i.e., $\cap\mathrm{DC}_X \neq \emptyset$. For every DC_X, X will be referred to as the *commitment anchor* of the propositions in DC_X. The Stalnakerean common ground (cg) is the set of states that appear on the discourse commitments of all participants augmented by background assumptions; the context set (cs) is $\cap$cg. By default, speakers are assumed to be sincere and therefore their public commitments are supposed to be supported by private beliefs.

The Table The Table consists of a set of active issues awaiting resolution, differentiated by salience.[10] An issue I on the Table is resolved relative to a context state c iff there is a $p \in I$ such that p is an element of cg_c. One way of achieving this is to have p on DC_X for every $X \in Part$.

Following Farkas and Bruce (2010), I assume that a conversation is in a stable state iff the Table is empty, i.e., there are no open issues awaiting resolution. The canonical way of removing an issue from the Table is to resolve it. Some non-canonical ways are to agree to disagree or to agree not to pursue the issue further.

[8] I assume that the relevant contextual alternatives are reduced to {Mona, Gail}. Whether an exhaustive or non-exhaustive interpretation is intended is immaterial for present purposes. Also left open here is the status of the 'negative' alternative, i.e., the set of worlds in which nobody arrived.

[9] The use of discourse commitments in modeling discourse goes back at least to Hamblin (1971); Gunlogson (2001) and Gunlogson (2008) treat discourse commitments as the essential components of discourse structure.

[10] In Farkas and Bruce (2010), the issues on the Table were assumed to form a stack. This assumption is not relevant for current purposes. Note also that the issues on the Table have to involve more complex structures in order to capture relations between them, as discussed, for instance, in Büring (2003). These matters are ignored here since they are not relevant to present concerns.

The projected set (ps) To capture the Stalnakerean notion of conversational moves as proposals to update the common ground, I follow Farkas and Bruce (2010) in assuming that a conversational move steers the conversation towards particular future states that form the *projected set* (ps). In Farkas and Bruce (2010), the ps was assumed to be the set of context sets one arrives at once the issues on the Table are resolved.

Meriçli (2016) argues that this view is not fine-grained enough when it comes to capturing properties of evidential constructions. He suggests that instead of projecting directly those context sets that would be reached if each alternative in the issue on the Table were to be accepted by all participants, one should project the first step that leads to such a context state, namely future addressee commitments. In this view, the ps is that set of addressee commitment lists in which the addressee commits to each alternative in the issue on the Table. Thus, under Meriçli's proposal, the ps is a set of projected DC_{Ad}. For each alternative $p \in I$, the ps contains an element $\mathrm{DC}_{Ad} \cup \{p\}$, where DC_{Ad} is the input addressee discourse commitment list. This is a first step in the process of accepting p as the resolution of I, where *Sp* and *Ad* refer to the speaker in a conversational move and the participant the speaker addresses, respectively.[11] The next step in resolving I in favor of p is for the speaker to commit to p as well.

I follow here Meriçli (2016) with a slight change, namely, I assume that the anchor of the discourse commitment lists in the ps is a free variable X whose value is contextually determined, and fixed to Ad by default. Furthermore, I assume that the members of the ps must be of the form $\mathrm{DC}_X \cup \{Y\}$, where Y is a subset of info(I). This captures the fact that the members of the ps are at least as informative as the current DC_{Sp}. This is a natural constraint given that the speaker cannot project a default future state of the conversation where she retracts a commitment.

In this view, a discourse move projects a set of discourse commitment lists anchored, by default, to the addressee. A discourse commitment list L is said to be *compliant with* a projected discourse commitment list L' iff L contains at least as much information as L', i.e., iff $\cap L \subseteq \cap L'$. A subsequent discourse move by a participant X will be said to be compliant with the preceding discourse move iff it results in DC_X being compliant with one of the elements of the ps in the input context of the move.

For each alternative $p \in I$, there is a member of the ps in which the commitment anchor commits to p. This alternative becomes an element of the cg, and therefore I is resolved in its favor, iff the other participants in the discourse commit to p as well. Note that in this view, the elements of the ps are determined by the issues on the Table, modulo the anchor of the commitment set. Farkas and Bruce (2010) note, however, that this is only so in default cases. They mention *oare* marked interrogatives precisely to note that this default can be overridden, a view I adopt here.

Figure 1 gives a visual representation of the basic context structure components discussed above.

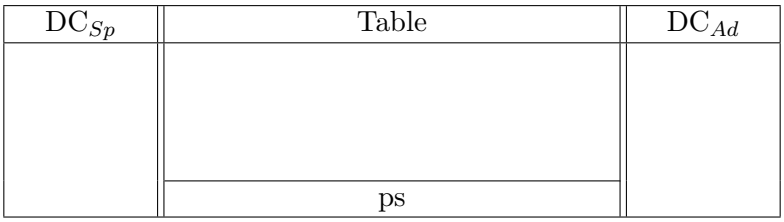


Fig. 1: Basic context structure

[11] See Malamud and Stephenson (2015) for a view in which what is projected is whole context structures.

4.3 Conventional discourse effects

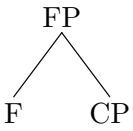
Conventional discourse effects (CDE) characterize the way a sentence affects the input context structure relative to which it is uttered – see Gunlogson (2001), Gunlogson (2008), Condoravdi and Lauer (2012a), Condoravdi and Lauer (2012b), Farkas and Roelofsen (2017). Following Farkas and Roelofsen (2017), I distinguish between basic and special CDE, briefly discussed below.

4.3.1 Basic CDE

Basic CDE are determined solely by the issue denoted by the sentence. Here I define them formally as functions of the form $\lambda I.\lambda c.c[I]$, where c is the input context relative to which the sentence is uttered, I is the issue denoted by the sentence, and $c[I]$ is the input context updated by I. Functions from the input context to updates of that context will be referred to as *context change potential* functions, or CCP for short. The basic CDE of a sentence, then, is a function from I, the issue denoted by the sentence, to a CCP that updates the input context with I.

If we assume a simple configurational approach in which CCPs are present in the syntax, the basic CDE of a sentence is the interpretation of F, the head of FP, in a structure like that in (26), where the propositional argument is provided by the interpretation of the CP.

(26)



$[\![\text{CP}]\!] = I$
$[\![\text{F}]\!] = \lambda I.\lambda c.c[I]$
$[\![\text{FP}]\!] = \lambda c.c[I]$

$[\![\text{CP}]\!]$ is non-inquisitive in the case of declaratives, and non-informative in the case of interrogatives. The denotation of the FP is a CCP from the input context to that context updated by the issue denoted by the CP.

We turn now to giving the basic CDE of declarative and interrogative CPs.

The basic CDE of a delcarative or interrogative sentence Following Farkas and Roelofsen (2017), but under current assumptions, the basic CDE of declaratives and interrogatives are specified in (27), where I is the issue denoted by the CP, and the subscripts i and o stand for 'input' and 'output' respectively. For simplicity, I assume that the Table of the input context is empty.

(27) Basic CDE: updating c_i with I

1.$\text{Table}_o = \text{Table}_i \cup \{I\}$

2.$\text{ps}_o = \text{ps}_i \oplus I$

3.$\text{DC}_{Sp,o} = \text{DC}_{Sp,i} \cup \{\text{info}(I)\}$

The first effect adds the issue expressed by the sentence to the Table. As a consequence, the move steers the conversation towards future states in which this issue is resolved, since removing issues from the Table is one of the main engines driving conversation, and resolving an issue is the default way of removing it.

The second effect is tightly connected to the first. It specifies all the possible first steps a participant X can take towards reaching a discourse state in which I is resolved, and therefore canonically removed from the Table: for each $p \in I$ the ps contains a future $\text{DC}_{X,o} = \text{DC}_{X,i} \cup \{p\}$.[12] This operation is abbreviated by $\oplus$. As mentioned above, I assume that by default, the value of X is fixed to the addressee. These are the immediate conversation moves the speaker's act projects.

The third effect is also tightly connected to the first. It adds info(I) to the speaker's discourse commitments, thereby committing the speaker to w_a being an element of some alternative in I. This amounts to the speaker being committed to there being a resolution of the issue she has just placed on the Table. This is a natural assumption, given that her act projects states in which the issue is resolved. We can thus see the second and third effects in (27) as natural consequences of the first because in default cases, the second and third changes above follow from the first. We will see below that special CDE can override defaults and trigger additions to the ps.

The basic CDE in (27) apply to both interrogatives and declaratives. As argued in Farkas and Roelofsen (2017), the differences between the discourse effects of these two sentence types follow from their semantic content alone, thus rendering separate *Assertion* and *Question* speech act operators superfluous. This is so because, under present assumptions, uttering a declarative sentence involves placing a singleton issue on the Table, in which case the CDE dictate that the speaker commits to the unique alternative in this issue, and projects that her interlocutor commits to it as well. Uttering an interrogative involves placing a non-singleton issue on the Table, and in that case the CDE involve a trivial speaker commitment relative to the input context, and the projection of typically multiple future discourse continuations.

Under these assumptions, updating an input context c with I amounts to changing c as dictated by (27). This is made clear below, where we give the basic CDE of both sentence types.

The basic CDE of a declarative sentence In the case of a declarative sentence, the effects in (27) commit the speaker to the unique alternative $p \in I$, the issue expressed by the sentence. In order to arrive at a context state in which I is resolved, the addressee has to commit to p as well. This effect is encoded in the ps, under the default value for the commitment anchor.[13] If the addressee does in fact commit to p in a future move, p becomes a member of the cg and therefore I is resolved, and taken off the Table in the canonical way.

To exemplify, we consider the effects of a speaker uttering the declarative sentence in (28-a), which expresses the singleton issue in (28-b):

(28) a. Amalia is home.
b. $I = \{\{\textbf{w: Amalia is home}\}\}$

Under the assumption that the Table of the input context is empty, and the participant discourse commitments are empty as well, uttering (28-a) has the effects in (29), given visually in Figure 2, where $p = \{\text{w: Amalia is home in w}\}$.

(29) CDE of uttering *Amalia is home*

[12] If the result of this addition is inconsistent, it is discarded. This is relevant to rhetorical questions, which will be discussed below.

[13] Note that choosing the addressee as default value for the commitment anchor in the ps in the case of declaratives is the only possible choice since the first discourse effect already commits the speaker to p, and therefore choosing the speaker as the value for the commitment anchor in the ps would be redundant. Another possible choice as value for the commitment anchor could be the conversational community, i.e., the group made up of the speaker and the addressee. Choosing this value, however, amounts to choosing the default value since the speaker is already committed to p.

1.Table$_o$ = Table$_i \cup \{I\}$
2.ps$_o$ = $\{\text{DC}_{Ad,i} \cup \{p\}\}$
3.DC$_{Sp,o}$ = DC$_{Sp,i} \cup \{\text{info}(I)\}$

DC$_{Sp}$	Table	DC$_{Ad}$
info(I)=p	$\{\boldsymbol{p}\}$	
	ps: $\{\text{DC}_{Ad} \cup \{p\}\}$	

Fig 2: Context state after Sp has uttered (28-a)

In this view, then, the effects of uttering a declarative sentence, i.e., performing an assertion, are to raise the issue the sentence expresses, to commit the speaker to the unique alternative in this issue, and to project a future state in which the addressee shares this commitment, and therefore the issue is resolved. A compliant response by the addressee is one whereby she does in fact commit to p.

As discussed in Farkas and Bruce (2010), the projected state is a canonical future which is not always reached. In the aftermath of an assertion, the least marked addressee reaction is the projected one, which may remain implicit. The most marked reaction is for the addressee to contradict the speaker and commit to $\neg p$ thereby triggering what Farkas and Bruce call a 'conversational crisis'. Reactions that fall in between these extremes are requests for further information or evidence that the addressee may need in order to decide whether to accept p or not. The only canonical way of removing I from the Table, however, once the speaker has made her assertion, is for the addressee to end up committing to p as well.

The basic CDE of an interrogative sentence In the case of an interrogative sentence, the basic CDE applied to the denotation of an interrogative commit the speaker to info(I) and project all possible resolutions of I. In the case of these sentences, however, commitment to info(I) is contextually trivial, unlike in the case of declaratives. And also in contrast with declaratives, there are, typically, several ways in which the issue can be resolved.

To illustrate, (31) gives the basic CDE of uttering the polar interrogative in (30-a) determined by (27), where the commitment anchor in the ps is fixed to its default value.

(30) a. Is Amalia home?
b. $I = \{\boldsymbol{p}, \overline{p}\}$

(31) CDE of uttering *Is Amalia home?*
1.Table$_o$ = Table$_i \cup \{I\}$
2.ps$_o$ = $\{\text{DC}_{Ad,i} \cup \{p\}, \text{DC}_{Ad,i} \cup \{\overline{p}\}\}$
3.DC$_{Sp,o}$ =DC$_{Sp,i} \cup \{\text{info}(I)\}$

These effects are summarized in Figure 3 below.

Note that since I is inquisitive and non-informative, if one abstracts away from presuppositions, info(I) = W, and therefore the commitment added to DC$_{Sp}$ is trivial. Going into the details of how

DC_{Sp}	Table	DC_{Ad}
info(I)=W	$\{\boldsymbol{p}, \bar{p}\}$	
	ps: $\{DC_{Ad} \cup \{p\}, DC_{Ad} \cup \{\bar{p}\}\}$	

Fig 3: Context structure after Sp has uttered (30-a)

to treat presuppositions in the discourse model adopted here is beyond the scope of this paper. I will only note here that under the classical view of presuppositions, in which they are constraints on the input cg, updating a context structure c with a sentence S that presupposes π requires π to be an element of the cg of c, or be accommodatable therein. This condition must be met in the case of interrogative sentences as well, and therefore the speaker who utters an interrogative commits to its informative content as restricted by the presuppositions of the sentence she utters. The speaker commitment triggered by the utterance of an interrogative will therefore be always trivial relative to an input context that meets its presuppositions. In the current set-up, in which the semantic content of sentences affects participant discourse commitments rather than the cg directly, a natural change is to require the presuppositions of a sentence to be met by the discourse commitments of the participant whose commitments are affected. This means that if a sentence S denoting an issue I presupposes π, if $p \in I$, $DC_x \cup \{p\}$ is defined iff $\pi \in DC_x$.

According to the CDE in (27) both constituent and polar interrogatives register a contextually trivial speaker commitment, and steer the conversation towards a typically non-singleton set of future conversational states in which the issue they raise is resolved. In Section 6 we will discuss how the basic CDE of interrogative sentences connect to the default contextual assumptions that characterize canonical questions given above in (4).

In the aftermath of a speaker having uttered an interrogative, the addressee may react by resolving the issue in one of the projected ways, and once the speaker accepts the resolution the addressee proposes, the issue is resolved and removed from the Table in a canonical way. Thus, compliant discourse moves by the addressee involve her committing to one of the alternatives in I and thereby rendering her discourse commitment list compliant with one of the members of the ps. Asking a question, then, puts the addressee in a position in which she has to resolve the issue if the discourse is to proceed in a canonical way.[14]

There are a variety of other felicitous ways of reacting to an interrogative, besides the projected ones, such as confessing to one's inability to resolve the issue, requesting further information or even refusing to engage with the issue altogether. In the setup proposed here, the elements of the ps do not define felicitous responses; they define those responses that lead to the removal of the issue that the speaker has placed on the Table in a canonical way.

Under these assumptions, an assertion is defined as the act of uttering a declarative sentence, i.e., a sentence denoting a singleton issue, and a question is defined as the act of uttering an interrogative sentence, i.e., a sentence denoting a non-singleton issue. An important difference between assertions and questions is that the latter but not the former put the addressee 'on the spot'. Compliant responses by the addressee in the case of questions typically involve her going

[14]See Truckenbrodt (2004) for a view in which this is captured by assuming that interrogatives generally involve an order for the addressee to contribute the answer to the question. Sauerland and Yatsushiro (2017) implement this by assuming that interrogatives involve a syntactically present imperative operator whose effect is to place the addressee under the obligation to answer the question.

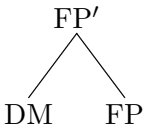
beyond what the move commits the speaker to, and therefore such moves risk rejection.[15] This is not so in the case of assertions, which project the addressee sharing the speaker's commitment. This difference will be relevant to our discussion of non-intrusive questions below.

4.3.2 Special CDE

Following Farkas and Roelofsen (2017), I assume that there are special, marked sentence forms that trigger additional, special CDE. Here, I call a morpheme that triggers such additional, special, effects a discourse effect-marker, or DM for short. The special CDE triggered by a DM are added to the basic ones in a monotonic fashion.[16]

Formally, the denotation of the DMs of interest here are functions from CCPs to CCPs, which trigger additional changes determined by the particular DM involved. In a simplified configurational view, they occur as the DM node in (32):

(32)



The denotation of DM nodes in such structures are functions of the form in (33):

(33) *The denotation of* DM
$[\![\text{DM}]\!] = \lambda\text{CCP}.\lambda c.\text{DM}(\text{CCP}(c))$

Here DM stands for the particular context change triggered by the DM involved.

Applying (33) to $\lambda c.c[I]$, the denotation of the FP in (32), yields the CCP in (34):

(34) *The denotation of* FP′
$\lambda c.\text{DM}(c[I])$

The denotation of FP′ then, is a CCP from the input context c to a particular modification of $c[I]$. The modification involved depends on the particular DM used in the sentence.[17]

Note that special CDE can be recursive, a property needed to account for languages that have stacked DMs, as found, for instance, in Japanese (see Hirayama (2018) and references therein). Note also that if we take the denotation of the FP to be the illocutionary force of a sentence, special CDE modify the illocutionary force of the sentence in which they occur (see Faller (2002), Murray (2010) among others).

In the sense used here, the effect of DMs involves modifying the effect the sentence has on the input context relative to which it is uttered. In Farkas and Roelofsen (2017), for instance, tag interrogatives are analyzed as marked interrogative sentence forms. The special CDE they add to the basic CDE of the interrogative, is to enter the unique highlighted alternative in the issue they place on the Table to a special list of possibilities associated to discourse participants called 'evidenced possibilities', resulting in a biased question, i.e., a question that weakens the *Speaker ignorance* assumption.[18]

[15] Rhetorical questions, as will be discussed below, do not have this effect.

[16] Discourse markers may also contribute presuppositions concerning properties of the input context or may override default value settings of contextual parameters.

[17] I am grateful to Maria Aloni for generous help with the formal aspect of the account.

[18] We come back to biased questions in Section 6 below.

If this line of analysis is on the right track we expect to find other special discourse effects that affect other components of the input context structure, and which weaken or override other default assumptions associated with canonical questions. The account of *oare* to be developed in the next section treats it as just such a de-marker.

To conclude, I will recall here the points where the assumptions laid out above depart or go beyond the approach in Farkas and Bruce (2010) and Farkas and Roelofsen (2017). First, with respect to the ps, I follow here Meriçli (2016) rather than Farkas and Bruce (2010) in assuming that its members are projected commitment lists rather than projected context sets. This will be important in our account of *oare* marked interrogatives to be presented in the next section. I depart, however, from Meriçli (2016) in assuming that the value of the commitment anchor of the discourse commitment lists in the ps is contextually established, and fixed to the addressee only by default. This will be relevant to the discussion of self-addressed and conversational community addressed questions in Section 6.

With respect to Farkas and Roelofsen (2017), the above discussion is more precise in the way it characterizes basic and special CDE without, however, departing substantially from the proposals presented there. The gain in precision is useful in defining the role of DMs, of which the particle *oare* is an example.

5 *Oare* as a non-intrusive question marker

5.1 Proposal

The first suggestion concerning the contribution of *oare* in interrogatives is to be found in Farkas and Bruce (2010). This section develops that suggestion into a full-fledged account under the assumptions above, and supports it by investigating its predictions concerning the empirical generalizations given in Section 3. In doing so, it shows that the framework used here can lead to an explanatory account.

Farkas and Bruce (2010) suggests that the use of *oare* blunts the force of the question by signaling that 'settling the issue is not necessarily a projected conversational future, and therefore that answering the question is optional' (p. 12). To capture this intuition, they propose that the ps of *oare* questions contains, besides context sets in which the issue is resolved, a context set identical to the current context set, in which it is not.[19] This suggestion cannot be adopted as is under current assumptions, which require the elements of the ps to be additions to elements in the input ps.

The proposal I develop and defend here is to treat *oare* as a DM whose special effect is to add to the ps a new member, namely $\mathrm{DC}_X \cup \{\mathrm{info}(I)\}$, (where the default value of X is Ad). This is the minimal possible addition, whereby X shares the speaker's commitment that I can be resolved. The result is to render compliant a future move that does not go beyond the speaker's commitment, and to project a future conversational state where the issue the sentence places on the Table is removed without being resolved for either participant.

In the case of interrogative sentences whose presuppositions are met in the input context this addition is trivial. In cases in which presupposition accommodation is needed, accommodation will have to occur in all projected states. This is one instance in which the current proposal differs from the earlier one, in which the addition to the ps triggered by *oare* involved no change.

According to this proposal, the effect of *oare* in interrogatives is to avoid putting the addressee on

[19] Under this proposal, just like under the account to be developed below, the elements of the ps are determined by the issues on the Table only in default cases. Special markers can trigger additional changes.

the spot by projecting a compliant response in which the addressee shares the speaker's commitment rather than go beyond it. Compliant moves after a question marked by *oare* include not only moves that resolve the issue but also moves that do not.

The morpheme *oare* then is a DM whose denotation is given in (35):

(35) $[\![\text{oare}]\!] = \lambda\text{CCP}.\lambda c.\textsc{oare}(\text{CCP}(c))$

When applied to its sister FP, the particular modification of $c[I]$ triggered by this particle is given in (36):

(36) $\textsc{oare}(c[I]) = c'$ s.t. $\text{ps}_{c'} = \text{ps}_{c[I]} \cup \{\text{DC}_{X,c[I]} \cup \{\text{info}(I)\}\}$

By default, the value of X is Ad.

To exemplify, consider (37), the *oare*-marked equivalent of (30-a):

(37) *Oare* Amalia e acasă?
oare Amalia is home
Is Amalia home, I wonder.

I assume that at the level of the CP, this sentence denotes the non-informative issue $I = \{\boldsymbol{p}, \bar{p}\}$, where p is the set of worlds in which Amalia is home.

The denotation of FP, $[\![\text{FP}]\!]$, is a function from the input context c to $c[I]$. The context state $c[I$ is the input context c updated by I, i.e., the context state in Figure 3. This context state is the argument of OARE, and once FP′ applies to c the output context state is given in Figure 4 below.

DC_{Sp}	Table	DC_{Ad}
info(I)	$\{\boldsymbol{p}, \bar{p}\}$	
	ps:$\{\text{DC}_{Ad} \cup \{p\}, \text{DC}_{Ad} \cup \{\bar{p}\}, \text{DC}_{Ad} \cup \{\text{info}(I)\}\}$	

Fig. 4: Context structure after Sp has uttered (37)

Above, we have exemplified the effect of *oare* with a polar question. The results for constituent questions are parallel to what we have for polar questions.

The account captures the initial intuition that using *oare* blunts the 'putting the addressee on the spot' effect of questions, and thus contributes the non-intrusive effect. By adding $\text{DC}_{Ad} \cup \{\text{info}(I)\}$ to the ps, a conversational future in which the addressee does not go beyond the speaker's commitment relative to Amalia's whereabouts becomes compliant with the speaker's move. Thus, the futures that the speaker's move steers the conversation toward include not only futures in which the issue she raised is resolved, but also a future in which the issue is removed from the Table although it remains unresolved for both participants.

The question acts performed by uttering *oare*-marked interrogatives are non-canonical in the sense that the contribution of *oare* weakens the *Addressee compliance* assumption of canonical questions. In canonical questions, *Addressee compliance* entails the addressee resolving the issue the speaker's move has placed on the Table. Uttering a *oare*-marked interrogative widens the compliant future states adding one in which the addressee does not resolve this issue.

Based on the account of *oare* just presented, I suggest that the inventory of non-canonical questions should be enlarged to include what I call here *non-intrusive* questions, defined in (38):

(38) *Non-intrusive questions*
A question is non-intrusive iff the ps of its output context state includes $DC_X \cup \{info(I)\}$, where I is the issue placed on the Table by the question.

Under current assumptions, non-intrusive questions have to involve a de-marker since there is no other way in which $DC_X \cup \{info(I)\}$ can be added to the ps. Marking a question as non-intrusive has the effect of 'softening' the question, or making it more polite because the de-marker adds a compliant response that does not resolve the issue raised.

It appears that Romanian is not unique in having a de-marker whose effect is to render the question non-intrusive. The Hungarian particle *vajon* closely parallels Romanian *oare*; the distribution and interpretation of Turkish *acaba*, Greek *araye*, and Japanese *kana* also appear close to *oare* though more research is needed to determine how close these parallelisms are.

5.2 Predictions

We turn now to the question of how the account proposed above explains the data presented in Section 3, as well as further empirical observations.

Restriction of *oare* to interrogatives In Section 3 we saw that *oare* can occur in both polar and constituent interrogatives but cannot occur in declaratives, imperatives or exclamatives. The account of *oare* as an intrusive question marker proposed above captures these distributional restrictions.

First, given the interpretation of *oare* and that of polar and constituent questions, the account correctly predicts that *oare* can occur in both types of interrogatives. In both cases, its contribution is to add the possibility of a compliant response that does not go beyond what the speaker commits to when asking the question. This effect is not sensitive to the parameter that differentiates polar and constituent questions, namely highlighting. We will see in Section 6 that biased questions have a different profile.

Note also that the fact that *oare* can occur in disjunctive questions exemplified in (12) is also explained. The speaker in such sentences is correctly predicted to be committed to the presupposition that one of the alternatives she presents is true, and raises the issue of which alternative is the true one. The account presented here predicts that *oare* can occur in such questions. Its effect is to add a compliant response in which the issue is not resolved. All compliant responses, however, are correctly predicted to share the presupposition of the question.

As noted in Biezma and Rawlins (2012) and discussed more recently in Beltrama *et al.* (2020), disjunctive questions can have a 'cornering effect', whereby the speaker signals that she expects the addressee to settle the issue in the immediate future of the conversation. Non-intrusive questions have the opposite effect since they mark as compliant a response that does not settle the issue. Our account predicts that interrogatives marked by *oare* cannot occur in 'cornering' disjunctive questions. That this prediction is correct is shown in (39), where the cornering effect is explicitly imposed by the second sentence.

(39) (**Oare*) Amalia a plecat azi sau ieri? Da sau ba?
(**oare** Amalia has left today or yesterday? Yes or no?
'Did Amalia leave today or yesterday? Yes or no?'

The non-occurrence of *oare* in declarative sentences is due, in the present account, to the fact that the issue that is expressed by a declarative contains a unique alternative, call it p, and therefore info(I) = p. As discussed above, the basic CDE of a declarative sentence commit the speaker to this unique alternative and project a state in which the addressee commits to this alternative as well. Since info(I) = p, adding *oare* to a declarative will always result in a redundant change. The non-occurrence of *oare* in declaratives is explained by the fact that speakers would never have any reason to use it in such sentences.

Under the natural assumption that the semantic content of imperatives and exclamatives is non-inquisitive, and that the basic CDE of these sentences commit the speaker to info(I) and project commitment to this informative content, the account also predicts that *oare* will not occur in these sentence forms either. Adding *oare* will always result in a redundant change in their case as well.

Note that the account of interrogatives along the lines of Sauerland and Yatsushiro (2017), which posits an imperative operator that places the addressee under the obligation to answer the question, would have difficulty explaining why *oare* cannot occur in imperatives in Romanian. This is so because in Romanian, just like in English, it is possible to give the addressee the option not to comply with an imperative, as exemplified in (40):

(40) Dacă vrei, deschide geamul.
if want.II open.Imp window.the
'Open the window if you want.'

An imperative marked with *oare* would be predicted to have the same effect, and therefore the non-occurrence of *oare* in imperatives remains a mystery.

Bare *oare* We turn now to an account of bare *oare* responses mentioned in (15), repeated below as (41).

(41) A: Este prea devreme.
is too early
'It is too early.'
B: *Oare.*
oare
'Is it?'

Note first that with respect to its distribution, bare *oare* responses are felicitous only as reactions to an immediately preceding declarative sentence. Turning A's utterance in (41) into an interrogative renders B's reaction infelicitous, as shown in (42):

(42) A: E prea devreme?
is too early
'Is it too early?'
B: #*Oare.*
oare
'Is it?'

Next, recall from the generalization in (16) that the use of a bare *oare* response, just as its English translation in (42), signals that the speaker does not accept the truth of the previous assertion.

I assume here that there is an anaphoric link between the bare particle and the unique proposition p in the issue on top of the Table in the input context. I will refer to this proposition as the 'antecedent' of bare *oare*. Recall also that, as mentioned in footnote 5, Hill (2002) and Giurgea

(2018) further note that a rising intonation on the bare particle is associated with the speaker expressing uncertainty with respect to the truth of the antecedent, while a falling intonation on the particle is associated with expressing doubt with respect to this proposition. Finally, note that an equivalent and felicitous alternative to bare *oare* in (42) is the full polar interrogative in (43):

(43) B: *Oare* este (prea devreme)?
oare is (too early)
'Is it (to early)?'

To sum up, a bare *oare* response signals that its speaker does not commit to the truth of the antecedent but does not reject it as false either. This is interpreted as the speaker expressing uncertainty or doubt concerning the truth of the antecedent.

To account for these facts, I suggest that bare *oare* is a response particle similar to polarity particles of the *yes* and *no* type. It presupposes a unique salient issue I on the Table of its input context, which functions as its antecedent, and is interpreted as a *oare*-marked polar interrogative whose semantic content is $\{p, \overline{p}\}$, where p is the antecedent. This can be implemented by assuming that bare *oare* is a polar interrogative with an elided prejacent identical to p. Alternatively, one can analyze bare *oare* as a polar interrogative propositional anaphor whose interpretation is identical to a polar interrogative whose prejacent is p. The former approach is similar to the treatment of bare polar particles in English in Roelofsen and Farkas (2015); the latter approach is similar to the treatment of bare polar particles in Krifka (2013).

The choice between these two alternatives is not consequential for the interpretation of bare *oare* utterances. Under both assumptions, given the account of this particle developed above, the ps in the context structure that results after B's utterance in (41) includes the three compliant responses in (44):

(44) $\mathrm{DC}_A \cup \{p\}$, $\mathrm{DC}_A \cup \{\overline{p}\}$, $\mathrm{DC}_A \cup \{p \cup \overline{p}\}$

The fact that B's reaction in (41) and (43) is interpreted as expressing uncertainty or doubt relative to the truth of p is pragmatically derived as follows. A has just asserted p and therefore has projected a future state in which B shares this commitment. If B's epistemic state were such as to allow her to commit to p she would do so, giving a compliant response. But instead of doing that, B neither accepts nor rejects p, but rather, raises the non-intrusive question whether p. Such a conversational move makes sense only if B has some reason not to accept p, despite her interlocutor's commitment to it, but not enough reason to downright contradict it. This is consistent with being uncertain about the truth of p or actually doubting it, which is exactly how the bare particle response is interpreted. Uncertainty signals that B's epistemic state is consistent with both p and $\overline{p}$, while doubt signals a preference for $\overline{p}$, a difference that is encoded in the intonation contour of the response.

In the next subsection we turn to how the account given above explains the type of contexts that are compatible with *oare*-marked interrogatives and those which are not. In the process, we expand on the data presented in Section 3 and compare non-intrusive questions to two close relatives, namely self-addressed questions and conjectural questions.

5.3 Licensing and blocking contexts for *oare* questions

The account proposed above predicts that non-intrusive questions are not felicitous in contexts in which it is assumed that the point of raising the issue is precisely to have the addressee resolve it if she is in a position to do so. This explains why *oare*-interrogatives are infelicitous in 'interrogation'

questions exemplified in (18) and (19) above, repeated below.

(45) *Context: Policeman to driver he stopped:*
#*Oare* cu ce viteză ai mers?
oare with what speed have.II gone
'What was your speed, I wonder.'

(46) *Context: Teacher to student:*
#*Oare* ce ai avut pentru azi?
oare what have.IIsg had for today
'What is your lesson for today, I wonder.'

In both these contexts, the speaker is assumed to expect the addressee to provide the answer. Marking the question with *oare* clashes with these assumptions because the effect of the marker is to signal as compliant a future conversational move that does not resolve the issue. This effect is triggered by the presence of *oare* and thus cannot be overridden by context. On the other hand, the contexts in (45) and (46) impose the assumption that the addressee will attempt to resolve the question asked, hence the infelicity of *oare*.

5.3.1 Non-intrusive questions vs. self-addressed questions

Above, we have assumed that the 'Responder', i.e., the commitment anchor of the elements in the ps is, by default, the addressee. This default can, however, be contextually overridden, as shown in contexts of public speaking, for instance, where the commitment anchor is the speaker rather than the addressee:

(47) *Context: Political candidate speaking on television:*
Why should you trust me? Because I have devoted all my life to public service.

The question in (47) is addressed to the television audience, as shown by the referent of the pronoun *you*. At the same time, the participant who is assumed to respond to the question is not the audience but rather, the speaker. Here, then, the audience is in the role of addressee and the speaker plays a double role: that of questioner and responder. The term 'self-addressed questions' is used here to characterize question acts where the speaker is assumed to be the responder. In the current setup, in such cases, the contextually fixed value of the commitment anchor of the members of the ps is the speaker, rather than its default value, the addressee.

The Romanian equivalent of (47) is felicitous with or without *oare*, as shown in (48):

(48) *Context: Political candidate speaking on television:*
(*Oare*) de ce să aveţi încredere în mine? Pentru că mi-am
(**oare** of what Subj. have.II.Pl trust in me? Because that me.Dative-have
dedicat viaţa publicului.
dedicated life.the public.Dative
'Why should you trust me? Because I have dedicated my life to the public.'

In (49) we see another example showing that *oare* may occur in self-addressed questions:

(49) *Context: At a conference, where the organizer is introducing the keynote speaker:*
(*Oare*) invitatul nostru mai are nevoie de vreo introducere? Bineînţeles că nu.
(**oare**) guest.the our still has need of an introduction? Obviously that not

'Does our speaker still need an introduction? Of course not.'

The proposed account explains the occurrence of *oare* in (49) under the assumption that in such examples, the speaker raises the issue in order to make her addressee ponder it, but it is again clear to both the speaker and her addressee that the speaker will go on to provide the answer that she assumes the audience has reached as well.

Note that the fact that *oare* may occur in self-addressed questions shows that this marker cannot be treated as signaling speaker ignorance. Treating *oare* as a marker of speaker ignorance would not explain its infelicity in 'interrogation' or 'cornering' questions.

We have seen above that the occurrence of *oare* is compatible with self-addressed questions. What we show next is that it cannot be treated as a marker of such a question, i.e., as a marker that enforces speaker anchoring of the elements in the ps. First, note that self-addressed questions do not require the presence of *oare*: the version of (49) without *oare* above is felicitous. Second, note that *oare* is felicitous in examples such as (50), which cannot be interpreted as self-addressed because they make explicit the assumption that it is the addressee and not the speaker who is expected to answer the question.

(50) Paul, ce crezi, *oare* e gata supa?
Paul, what believe.II **oare** is ready soup.the
'Paul, what do you think, is the soup ready?'

To such a question, it is felicitous for Paul to respond as in (51):

(51) De ce mă întrebi pe mine?
of why me ask.II Acc. me
'Why are you asking me?'

This response supports the claim that the question in (50) is addressed to Paul. This is so because the verb *a întreba* 'to ask', just like its English equivalent, refers to a questioning speech act where the questioner is the referent of the subject of the verb, and the anchor of the elements of the ps is the referent of its direct object. This explains why the self-addressed question in (47) could not be reported by (52):

(52) #The candidate asked the public why they should trust him.

The same is true of the Romanian equivalent of (52) given in (53):

(53) #Candidatul a întrebat publicul de ce să aibă încredere în el.
candidate.the has asked public.def of why Subj. have trust in him
'The candidate asked the public why they should trust him.'

We conclude, then, that *oare* questions may, but do not have to be, self-addressed. They differ in this respect from interrogatives pre-posed to *I wonder*, which have to be interpreted as self-addressed, as shown in (54):

(54) *Paul, what do you think, is the soup ready, I wonder.

I conclude that the characterization of *oare*-marked interrogatives as non-intrusive questions correctly predicts that they are felicitous in self-addressed questions. It also predicts, correctly, that *oare*-marked questions do not have to be self-addressed.

5.3.2 Non-intrusive questions vs. conjectural questions

In Section 3 we claimed that *oare* questions, though felicitous in contexts in which the speaker signals that she does not assume *Addressee competence*, do not require such contexts. We discuss this claim in more detail here by contrasting non-intrusive questions with a type of non-canonical question known as *conjectural*. We will see below that *oare*-marked questions and conjectural questions though close, are not identical.

Conjectural questions have been discussed in the literature in connection with German verb final questions with or without the particle *wohl* in Lohnstein (2007), Truckenbrodt (2006a), Eckardt (2018) as well as in connection with questions involving inferential evidential markers in Littell *et al.* (2010), Bhadra (2020), among many others.

My starting point here is the empirical characterization of conjectural questions in Eckardt (2018). Eckardt argues that verb final questions marked by *wohl*, exemplified in (55), are conjectural questions:

(55) Wo *wohl* der Schlüssel ist?
Where **wohl** the key is
'Where might the key be, I wonder.'

She characterizes these questions as having the pragmatic profile in (56):

(56) *Conjectural questions*
- a. they do not request an answer
- b. the addressee can remain silent without violating the rules of discourse
- c. they invite speculation based on pooled knowledge
- d. the speaker does not expect the addressee to know the answer
- e. but if the addressee happens to know, answering is a licit reaction (see Eckardt (2018), p. 20)

Note that the property in (56-d) amounts to suspending *Addressee Competence*. Once this assumption is suspended, it follows that the speaker does not expect the addressee to resolve the issue, which connects to the properties in (56-a) and (56-b). The property in (56-c) entails (56-d) since the speaker would not invite pooled speculation were she assuming *Addressee Competence* but (56-d) does not entail (56-c), and therefore it is in principle possible to have a non-canonical question marked for (56-d) but which lacks (56-c).

In the current setup, the property in (56-c) amounts to fixing the referent of the commitment anchor in ps to the group formed by the participants in the conversation, i.e., the speaker + addressee. Such questions are referred to here as 'conversational community addressed'. Note also that question forms that entail (56-d) necessarily involve an epistemic component: by using an interrogative form that entails (56-d), the speaker signals a non-default assumption about the epistemic state of the addressee. It is therefore not surprising, as Eckardt suggests, that in many languages that have conjectural question markers, these markers have an epistemic or evidential flavor. The issue of how one treats the contribution of such a marker is beyond the scope of this paper. We only note that the analysis of non-intrusive questions presented here is compatible with the account of conjectural questions in Eckardt (2018).

Let us now contrast the distribution of non-intrusive questions exemplified by *oare* marked interrogatives in Romanian with conjectural questions exemplified by verb final *wohl* questions in German. Recall that under the present account, *oare* marks the weakening of the *Addressee compliance* assumption by adding a compliant state in which the issue raised is not resolved, while

conjectural questions signal that the speaker does not assume *Addressee competence*, i.e., she does not assume that the addressee's epistemic state allows her to resolve the issue the speaker wishes to raise. As mentioned in Section 2, a speaker may wish to weaken the *Addressee compliance* assumption either because she cannot assume *Addressee competence* or because she judges a non-intrusive question to be more appropriate for rhetorical or other reasons.

Under these assumptions, the present account of non-intrusive questions predicts that the contexts in which they are felicitous is a strict superset of the contexts that allow conjectural questions. The properties in (56) are compatible with non-intrusive questions, which is what is responsible for the overlap. But non-intrusive questions do not impose the requirements in (56-c) and (56-d), and therefore non-intrusive questions, unlike conjectural questions, are predicted to be felicitous in contexts that do not meet them. These predictions are illustrated below with *oare*-marked interrogatives in Romanian.

In (20) above, repeated below as (57), the context meets the requirements in (56), and *oare* is felicitous:

(57) *Context: There is a knock on the door in the middle of the night. Maria says to Paul:*
Oare cine e la ora asta?
oare who is at hour.the this
'Who could it be at this hour?'

In this context, there is no reason why Maria should assume that Paul knows the answer to her question, and therefore there is no expectation that the addressee will resolve the issue, and the question can well be interpreted as an invitation to speculate together concerning the identity of the unexpected visitor based on pooled knowledge.

As noted in Section 3, in this context, the *oare*-less counterpart of (57), repeated below in (58), is less natural than (57), if the addressee is Paul:

(58) ?Cine e la ora asta?
who is at hour.the this
'Who is it at this hour?'

This is so, I suggest, because in contexts such as these, in which the addressee is presupposed not to know the answer, an unmarked question is somewhat unnatural because in the given context, the addressee is not able to give an answer that is compliant with the question without *oare*.

Note that marking an interrogative with *oare* is not the only way to ask a felicitous question in a context in which *Addressee Competence* is violated. A common interrogative form used in such situations in Romanian is one where the morphological form of the main verb is a non-temporal future form, called 'presumptive future' in Romanian grammar, glossed as PF below. The marker *oare* may optionally occur in such questions, as exemplified in (59):

(59) *Context: There is a knock on the door in the middle of the night. Maria says to Paul:*
(*Oare*) cine o fi?
oare who PF be
'Who could it be, (I wonder).'

The non-temporal use of the future here results in a modal interpretation according to which the speaker is asking her addressee to give her best guess as to who might be at the door.[20] Because

[20]For work on this non-temporal use of the future tense in Romanian, as well as in other Romance languages, see Fălăuş (2014), Fălăuş and Laca (2014), Frana and Menéndez-Benito (2019), Giannakidou and Mari (2018), Ippolito

of the presence of the presumptive future, *Addressee competence* with respect to the issue of who is at the door is suspended, and therefore the question is also appropriate with or without *oare*.

Another form in which the question in (59) could be asked is to use an epistemic possibility modal followed by the subjunctive form of the main verb. Again, as expected, *oare* may also be used, though its presence is not obligatory:

(60) *Context: There is a knock on the door. Maria says to Paul:*
(*Oare*) cine poate să fie?
(**oare**) who can Subj be
'Who could it be (I wonder)?'

In the questions in (60) and (59) the speaker signals that she does not assume that the addressee knows the answer to the prejacent of the presumptive future or the modal respectively. The account of *oare* as a non-intrusive question marker correctly predicts the possibility of its use in these examples.

In languages that do not have non-intrusive markers or a modal equivalent to the presumptive future, such as English, various forms of epistemic modals are used in such a situation. Thus, in the context of the unexpected knock on the door, the question in (61-a) is more natural than the question in (61-b)

(61) a. Who could it be at this hour?
b. Who is it at this hour?

The interrogative in (61-a) does not involve a de-marker but a modal whose semantic contribution makes the question project a modalized response. The addressee is not asked to resolve the issue of who is at the door but rather, to speculate on who the person *could* be.

Another context that meets the requirements in (56), and in which *oare* interrogatives are appropriate is given in (62):

(62) *Context: mathematician to a colleague with whom she is working:*
Oare ecuaţia asta are o soluţie?
oare equation.the this has a solution
'Does this equation have a solution, I wonder?'

This question is naturally interpreted as setting the immediate common goal to collaborating on finding out the true answer to the question. As such, it is interpreted as a conversational community addressed question, and *Addressee competence* is suspended. Marking the interrogative with *oare* is appropriate because this context does not presuppose that the issue will be resolved.

So far, we have seen that *oare*-questions can be used in situations that also license conjectural questions. This means that these questions can be used in situations in which the speaker does not assume that the responder is able to resolve the issue. Such situations are compatible with the effect *oare* triggers under the current proposal.

We turn next to showing that *oare* cannot be analyzed as marking that the question is conjectural in Eckardt's sense by showing that interrogatives marked by this particle *can* be used in contexts that do not meet (56-d) and (56-c).[21]

and Farkas (pear), Irimia (2010), Mihoc *et al.* (2019), Eckardt and Beltrama (2019) among others.

[21] Giurgea (2018), whose main aim is descriptive, does, in fact, suggest that *oare* signals that the speaker assumes that the addressee does not know the answer to the question. The examples in (63) - (65) below challenge this account.

First, note that there are contexts in which *oare*-marked interrogatives are appropriate even though the addressee is supposed to know the answer, in violation of (56-d) above. Furthermore, the speaker is not seen as inviting the addressee to join her in speculating on what the answer might be, in violation of (56-c) above. One such case is the question in (21), repeated in (63):

(63) Nici nu-şi spuse numele, dar mai era *oare* nevoie?
not-even not-Refl.Dat. told name.the.Dat but still was **oare** need?
'She didn't even say her name, but was that still necessary?'

Here, both speaker and addressee are assumed to know the answer to the question.

Another case is provided by self-addressed questions where the speaker, i.e., the responder, is assumed to know the answer, which she in fact provides, as in (49), repeated in (64):

(64) *Context: At a conference, where the organizer is introducing the keynote speaker:*
Oare invitatul nostru mai are nevoie de vreo introducere? Bineînţeles că nu.
oare guest.the our still has need of an introduction? Obviously that not
'Does our speaker still need an introduction? Of course not.'

In this example the elements of the ps are anchored to the speaker rather than the addressee. In this case then, the responder is not assumed to be ignorant, and the question cannot be interpreted as conjectural in Eckardt's sense.

Both (63) and (64) are rhetorical questions in that the speaker assumes that the context provides the answer. She nevertheless raises the issue so as to have the public ponder it and reach the obvious answer that she proceeds to give herself in (64).

Another type of context in which *oare*-interrogatives are felicitous despite the fact that neither the requirement in (56-d) nor that in (56-c) is met is provided by situations in which the content of the question is pragmatically incompatible with assuming that the addressee would not know the answer to it. Such contexts are illustrated in (65) below. (Example (65-b) was overheard in Bucharest, Romania. The speaker was on the phone.)

(65) a. Paul, *oare* te mai gândeşti la mine?
Paul, **oare** you still think.II at me
'Paul, are you still thinking of me, I wonder.'
b. *Oare* unde eşti?
oare were are.II
'Where are you, I wonder.'

There is no reason for the speaker here to assume that her addressee does not know his own thoughts or his location, and there is no reason to interpret her question as an invitation to speculate together on what the true answer may be. These questions therefore are not conjectural in Eckardt's sense.[22]

Why would the speaker use a non-intrusive question in such a situation, thus providing the addressee with the possibility of being compliant without providing the answer he has and which the speaker wishes to know? I suggest that by her use of a non-intrusive question, the speaker in these examples tactfully signals that she is aware the addressee might have reasons not to provide the answer to her question despite the fact that he knows it.

Note that the account of non-intrusive questions proposed here does not involve an epistemic component, and therefore there is no reason to expect non-intrusive question markers to be con-

[22] Eckardt (2018) explicitly notes that verb-final questions marked by *wohl* (or *mag*) in German are 'restricted to situations where the speaker expects that the addressee does not know the answer' (p. 22).

nected to epistemic or evidential morphemes. Note also that it may well be that the best account of non-intrusive question markers such as *oare* treats them as contributing special CDE, as proposed here, while the best account of conjectural question markers such as *wohl*, treats them as contributing to the semantic interpretation of the CP, as Eckardt (2018) suggests. Finally, as we have seen, there is no reason why a language cannot be like Romanian in having both a way of marking a question as conjectural, using a special type of modal marker, and a different way of marking it as non-intrusive.

The discussion above leads to the conclusion that while non-intrusive questions of the type exemplified by *oare* interrogatives in Romanian are close to conjectural questions exemplified by verb-final interrogatives involving *wohl* in German, the two types of questions differ empirically, and therefore should be distinguished analytically.

We briefly address now the question of what strategies languages and their speakers use in case they lack a non-intrusive question marker, as is the case, for instance, in English.[23] Speakers may avoid putting the addressee on the spot by using a 'slifted' construction with *I wonder*, as in many of the translations above. In such cases, the speaker signals her desire to know the answer to the question, without, however, addressing the question directly to the addressee. As we have seen above, in cases where *Addressee competence* cannot be assumed, speakers can use a modalized interrogative, which invites the addressee to speculate on what the answer might be. In case the question meets the conditions of a conjectural question and the language has a formal means of marking such a question, as in German, one expects that form to be used.

To sum up, we have seen above that the current proposal accounts for the empirical generalizations that characterize the distribution and interpretation of the particle *oare*. In this proposal, *oare* is a de-marker whose effect is to add a compliant response whereby the responder shares the speaker's commitment. Questions thus marked have been dubbed non-intrusive because their special status involves suspending the assumption that the addressee is to provide information not already known to the speaker. By asking a non-intrusive question, the speaker expresses her wish to resolve the issue she raises, while at the same time signaling that she does not assume that the responder will, in fact, resolve it.

5.4 Open issues

Syntactic position The syntactic position of *oare* is an aspect of the data that we have not addressed. Given our account of the interpretation of *oare* as an FP modifier, one would expect it to occur at the left (or right) edge of the sentence. As exemplified in (22-d) above, repeated in (66), *oare* can also occur at various syntactic junctures sentence internally, without any obvious effect on interpretation.

(66) a. *Oare* cine îl va ajuta pe Petru?
oare who him will help Acc. Petru
'Who will help Peter, I wonder.'

b. Cine îl va ajuta pe Petru *oare*?
who him will help Acc. Petru**oare**
'Who will help Peter, I wonder.'

c. Cine îl va ajuta *oare* pe Petru?
who him will help **oare** Acc. Petru
'Who will help Peter, I wonder.'

[23] I am grateful to an anonymous reviewer for raising this issue.

d. Cine *oare* îl va ajuta pe Petru?
who **oare** him will help Acc. Petru
'Who will help Peter, I wonder.'

What the best account of the syntactic distribution of *oare* is is left for future research. The answer to this question rests on larger issues concerning one's assumption about sentence structure and its connection with word-order variation, as well as assumptions about the morpho-syntactic status of *oare* and how to best account for the possibility of it having a 'long distance' effect on the FP layer. Our focus here has been the interpretation of *oare*-interrogatives, and in this respect, the variants in (66) share the properties of *oare* questions discussed above.

Embedding An issue that has gone unmentioned so far concerns the embedding potential of *oare*-marked interrogatives. The empirical picture is complex. The first generalization is that *oare*-marked interrogatives embed less freely than their *oare*-less counterparts. This is exemplified in (67):

(67) Paul nu a aflat dacă (**oare*) Rodica a plecat.
Paul not has discovered if (***oare**) Rodica has left.
'Paul did not find out whether Rodica left.'

The ban against embedding *oare* interrogatives is not total, however. Verbs that report an interrogative speech act, whether public or private, such as *a (se) întreba* 'to ask (oneself)', *a se gândi* 'to think/poner', allow *oare* complements:

(68) a. Paul s-a întrebat dacă (*oare*) Rodica l-a căutat.
Paul himself-has asked whether (**oare**) Rodica him-has searched
'Paul asked himself whether Rodica looked for him.'
b. Paul a întrebat dacă (*oare*) Rodica l-a căutat.
Paul has asked whether (**oare**) Rodica him-has searched
'Paul asked whether Rodica looked for him.'
c. Te gândeşti dacă (*oare*) mai ai sentimente pentru Paul.
you think if (**oare**) still have.II feelings for Paul
'You are wondering whether you still have feelings for Paul.'

The syntactic distribution of *oare* in embedded clauses parallels that of root clauses. As in all embedded indicative clauses in Romanian, nothing can precede the complementizer, which in this case is *dacă* 'if'.

There are two issues that arise at this point. The first is accounting for the contrast between (68) and (67) above. Under the present account of *oare* as a function from contexts to contexts, the problem concerns the conditions under which a predicate allows such a complement clause. This problem is connected to the larger issues of root phenomena in complement clauses in general, and root interrogative forms in complement clauses in particular. For discussion, see Hooper and Thompson (1973), Karttunen (1974), Dayal and Grimshaw (2009), McCloskey (2006), Anand and Hacquard (2008) among many others.

The second issue raised by the embedding data is how to reconcile the interpretation of *oare* as an FP modifier with its obligatorily post-complementiser syntactic position in embedded clauses. This issue connects with the problem of reconciling the position of *oare* with its interpretation in matrix clauses and addressing it raises syntactic concerns that are beyond the scope of this paper.

Subtypes of non-intrusive questions As mentioned above, languages other than Romanian exhibit potential non-intrusive question markers. An issue that arises, and which is left open for now, is what the limits of variation are with respect to varieties of non-intrusive questions. Under the general approach pursued here further subtypes of non-intrusive questions could involve restrictions on the anchor in the ps. Thus, it would not be surprising to find a language with a de-marker similar to *oare* but which further restricts the question to be self-addressed, or addressed to the conversation community. Interrogatives thus marked would not be felicitous in examples corresponding to (50). Another possible additional condition over and above the addition to the ps that makes a question non-intrusive could be reinforcing speaker ignorance. Such a condition would result in infelicity in self-addressed questions, such as (64) and (63) above. Future cross-linguistic research will, hopefully, shed light on the cross-linguistic typology of non-intrusive questions.

In the next section we take a step back from non-intrusive questions and look at the larger view on question acts and interrogative forms that emerges from the approach taken above.

6 Theoretical implications

The aim of this section is to deepen and enlarge the discussion in Section 2 by exploring the theoretical implications of the approach in Section 4 and the analysis of non-intrusive questions in Section 5 with respect to canonical and non-canonical questions, and the form of the interrogatives used to ask them.

6.1 Canonical questions and the basic CDE of interrogatives

In this subsection we clarify the status of the default contextual assumptions characterizing canonical questions, given in (4) above, repeated in (69) below, by showing that they follow from the basic CDE of interrogative sentences discussed in subsection 4.3.1 above.

(69) *Default assumptions accompanying question acts*

a. *Speaker ignorance*: The speaker's epistemic state is neutral relative to the possible resolutions of the issue she raises.

b. *Addressee competence*: The speaker assumes that the addressee knows the information that settles the issue she raises.

c. *Addressee compliance*: The speaker assumes that the addressee will provide this information in the immediate future of the conversation as a result of the speaker's speech act.

d. *Issue resolution goal*: It is assumed that the main aim the speaker pursues when raising an issue is to have it resolved in the immediate future of the conversation.

Recall that the basic CDE of interrogative sentences is to place a non-informative, i.e., non-singleton, issue I on the Table. As a result, the speaker registers a contextually trivial commitment to info(I), and projects a set of future discourse states in which the responder, a conversational participant whose identity is contextually determined, commits to those alternatives in I that yield consistent results. By default, the responder, i.e., the commitment anchor of the members in the ps, is the addressee. The projected context states are the first step towards resolving I, which is the canonical way of removing I from the Table. Thus, the act of placing an issue on the Table steers the conversation towards a state in which the issue is resolved, as a result of the speech act. Assuming that the speaker acts rationally and sincerely, it follows that at least one of her aims in performing. her speech act is to in fact resolve I since that is the state her act steers the

conversation toward. The *Issue resolution goal* assumption takes this goal to be the primary aim of the speaker's act. The default situation is the simplest one: the primary motivation of the speaker is to reach the discourse state that her speech act projects.

Turning now to *Speaker ignorance*, note that if the speaker's sole aim is to reach a conversational state in which I is resolved, if she were in an epistemic state that allowed her to resolve I, asserting the alternative in I that she takes to be true would be a more efficient way of reaching this goal than raising the issue. Thus, given the *Issue resolution goal* and the semantics of interrogatives, *Speaker ignorance* follows. It also follows that the default value of the commitment anchor in the ps does not include the speaker, and therefore it must be the addressee. Note also that *Speaker ignorance* entails that the issue she raises is not settled in the input context, since if the issue were settled in the input context, *Speaker ignorance* would be violated, and given the *Issue resolution goal*, her speech act would be redundant.

Next, note that *Addressee competence* also follows from the basic CDE of interrogatives. The speaker projects future states in which the responder, whose default value is the addressee, resolves I. Were the speaker not to assume that reaching such a state is possible, her speech act would be gratuitous. This is so, of course, only under the *Issue resolution goal* assumption.[24]

Note that *Addressee competence* is a risky assumption to make. It involves the speaker making an assumption about the epistemic state of her addressee, an assumption that involves the addressee having information that is not provided by the context. Being mistaken in this assumption may lead to both the speaker and the addressee losing face.

Finally, *Addressee compliance* follows as well. By her speech act, the speaker projects futures in which the addressee resolves the issue. Were the speaker not to assume that the addressee will in fact comply, the act of raising the issue would be gratuitous.

Given the assumptions above, we expect assertive speech acts to also fall into canonical and non-canonical versions, with the former being characterized by default contextual assumptions that follow from the semantics of declaratives and their basic CDE. In fact, *Addressee compliance* and the *Issue resolution goal* assumption should carry over to assertions since assertions are like questions in that an issue is placed on the Table.

Since assertions place a singleton issue on the Table, the basic CDE result in the speaker committing to the single alternative in this issue. Given that public commitments are, by default, supported by private beliefs, in canonical assertions the speaker presents herself as being in an epistemic state that supports her commitment, i.e., a default contextual assumption characterizing canonical assertions is *Speaker competence*. Given that in the case of assertions the projected state is one in which the addressee shares the speaker's commitment as a result of the speech act, a natural assumption for the speaker to make is that the addressee was not already committed to the unique alternative in the issue she has placed on the Table. Canonical assertions will thus be characterized by an *Addressee ignorance* assumption. In such assertions, then, a knowledgeable speaker informs an addressee whom she assumes to be ignorant of the truth of the unique alternative in the issue she places on the Table.

Exploring further the distinction between canonical and non-canonical assertions is beyond the scope of the present paper. We only note here that the assumed semantic distinction between declaratives and interrogatives concerning the singleton vs. non-singleton nature of the issue they denote plays a crucial role in accounting for the characteristics of the canonical and non-canonical speech acts they can be used to perform. This distinction is responsible for the differences in their basic CDE, and, as a consequence, the differences in the default assumptions that characterize

[24]Speakers whose aim is to point to the ignorance of their addressee, for instance, may well ask a question in a context that presupposes that the addressee cannot resolve it. Such a question would not be canonical.

assertions and questions.

Returning now to questions, we conclude that under the present approach, the default contextual assumptions characterizing canonical questions follow from the semantics of interrogative sentences and from their basic CDE, whose core component is placing the issue the sentence denotes on the conversational Table. As a result, under this view, enriching the semantic content of interrogatives with an imperative or request operator directed at the addressee or with some other item that entails any of the assumptions in (69) becomes superfluous.[25] Thus, the assumptions in (69) do not have to be stipulated in any component of the grammar; they are default assumptions that follow from the act of placing a non-singleton issue on the Table.

The approach just given leads to the expectation that default contextual assumptions can be overridden, resulting in non-canonical question acts. The next subsection discusses some of the ways in which such departures can be achieved and, in some cases, formally marked.

6.2 How can a question be non-canonical?

This subsection pursues the following two questions: (a) What types of non-canonical questions does the present approach lead us to expect? (b) What is the connection between non-canonical questions and marked interrogative forms? We first look at the predictions the approach makes and then briefly exemplify them.

In the account developed above the value of the commitment anchor is contextually established, and fixed, by default, to the addressee. Note, however, that this value can only be a discourse participant, and therefore the only possible choices are the speaker, the addressee and the conversational community. This setup leads us to expect there to be cases of non-canonical questions arising from situations in which the setting of the commitment anchor in the ps to its default value is overruled. Such questions would have the responder be the speaker or the conversational community. (See Truckenbrodt (2006b) for making the same point, in a different context.)

Another way in which a question act can become non-canonical is by weakening or overruling the default assumptions in (69). This possibility is expected precisely because these assumptions are defaults. We therefore expect non-canonical questions that weaken or overrule any of the assumptions in (69).

With respect to the connection between the form of an interrogative and the canonical or non-canonical question act it is used to perform, our approach makes two predictions. First, it predicts that unmarked interrogative forms, i.e., forms that do not involve a special marker beyond one that marks interrogativity, can be used to ask canonical questions. Such forms simply trigger the basic CDE of interrogatives, which give rise to the default assumptions in (69). The account therefore predicts that there will be no language in which a non-intrusive or a biased question can only be asked with an unmarked interrogative form, while an information seeking question must always be specially marked.

The present approach also predicts that, other things being equal, it will be possible to use unmarked interrogative forms to ask non-canonical questions, in contexts that presuppose departures from the assumptions in (69). The conditions under which these possibilities are realized may depend on the repertory of de-markers specialized for signaling a particular type of non-canonical question in the language, as well as on the particular default assumption that is weakened or overruled in context. The former factor is relevant because the existence of a special form may exercise a blocking effect on the interpretation of the unmarked form. The latter factor is relevant because, as we saw above, not all default assumptions are equal. We will see below that *Addressee competence* in particular, is an assumption that resists being simply overruled by context.

[25] For pertinent discussion, see Truckenbrodt (2006a) and Truckenbrodt (2006b) and references therein.

Finally, our account of non-intrusive questions, based on the assumption of the existence of de-markers, leads us to predict the existence of marked forms that can only be used as particular types of non-canonical questions. This is so because if an interrogative involves a de-marker that triggers particular discourse effects that result in weakening or overriding canonical assumptions, those effects cannot be undone by context, and therefore the context in which the form is used must be compatible with the discourse effects the de-marker triggers.

In the remainder of this section we show how these predictions fare with examples of various types of non-canonical questions in English.

Non-default values for the commitment anchor in the ps We start with two examples showing that the context can overrule the default value for the commitment anchor in the ps, as predicted by our account. The first example is that of the self addressed question in (47) repeated in (70):

(70) *Context: Political candidate during televised speech:*
Why should you trust me? Because I have devoted my whole life to public service.

As discussed above, in this example the addressee is the audience but the responder is assumed to be the speaker. In the present account, this is so because the context overrides the default value of the commitment anchor of the ps, and fixes it to the speaker. Thus, the semantics of the interrogative in (70) involves nothing special, and its CDE are the basic ones. The non-canonical nature of this question is rooted in the properties of the context, which override the default assumption concerning the commitment anchor variable, giving it a non-default value. As a result, in this context, *Speaker ignorance* and *Addressee competence* are suspended as well. The speaker's basic aim in raising the issue and then resolving it is to inform or remind her audience of her lifelong service and point to it as a reason for trusting her. Presumably, she decides to do that via the roundabout way of asking a self-addressed question and then resolving it in order to engage her audience more effectively. Self-addressed questions of this type are common in pedagogical discourse as well.[26]

We have discussed in (62) an example of a question that is interpreted as addressed to the conversational community. A similar example is given in (71):

(71) *Context: Dawn and Frank are collaborating on a paper. Dawn says to Frank, at the beginning of their work session:*
What we should worry about next is the following: What are the predictions our account makes?

Dawn's speech act is addressed to Frank but the context makes clear that she does not expect him to resolve the issue in the immediate future of the conversation. Rather, her expectation is that they will pool their knowledge and reach the resolution together. Dawn's question has the profile of a conjectural question in Eckardt's terminology. As mentioned above, in such questions, the assumption that the responder is able to resolve the issue in the immediate future of the conversation is overruled as well, and therefore *Addressee competence* is suspended.

So far, we have seen that English allows the context to overrule the default value of the commitment anchor in the ps, fixing it to the speaker or the conversational community. Our account predicts this possibility. It does not, however, rule out the existence of special markers signaling such non-default anchoring.

[26] Note that the cases discussed here are different from questions (or assertions) that occur in diaological monologues. The characteristic feature of such monologues is that one and the same individual plays two distinct discourse roles at the same time, that of speaker and addressee.

Overriding or weakening default contextual assumptions Turning now to examples of question acts that involve overriding or weakening default contextual assumptions, let us consider 'quiz' questions again, briefly discussed in Section 2 and exemplified in (6), repeated as (72):

(72) *Context: Joey's geography teacher asks Joey in class:*
What is the capital of Morocco?

In this context, it is clear to both participants in the discourse that the speaker's main goal is to check whether the addressee knows the answer to the question, and therefore the *Issue resolution goal* assumption is overridden. As a result, the context overrides both *Speaker ignorance* and *Addressee competence*. It is also clear in the context that the speaker expects the addressee to provide the answer to the question, if able to do so. This is the reason for the infelicity of non-intrusive questions in such contexts.

A slight variation on quiz questions are questions raised by a speaker who is assumed to be knowledgeable, but whose aim in raising the issue is not to check the competence of the addressee, as in 'quiz' questions, but rather, to have the addressee engage with the question and, hopefully, arrive at the correct answer. I dub such questions 'Socratic' and exemplify them in (73):

(73) *Context: Linguistics teacher practicing the Socratic method, addresses her student, Joey:*
Given what we have said so far, how can one identify the subject of a sentence?

Here the public aim of the knowledgeable speaker is to have her addressee think about the question and arrive at the correct conclusion himself. The *Issue resolution goal* assumption is thus weakened, just as in (72). In this case, the speaker wants the issue to be resolved but her primary aim is to engage her addressee on the road towards its resolution.

Common to (73) and (72) is that the context overrides *Speaker ignorance*. The semantic content and the CDE of these sentences, however, are the same as those of canonical questions. 'Quiz' questions and Socratic questions are differentiated by the assumed reason behind the speaker's raising of the issue. In a 'quiz' context, both participants assume that the speaker's aim is to check the knowledge of the addressee; in a 'Socratic' question, both participants assume that the speaker is helping the addressee to resolve the issue. Note that under the present approach, the existence of these non-canonical questions does not come as a surprise, nor does one need to alter the semantics of the interrogative forms used to ask them.

Another non-canonical question type that involves the contextual overruling of *Speaker ignorance* are rhetorical questions of the 'obvious answer' variety, exemplified in (74). (See Caponigro and Sprouse (2007), Biezma and Rawlins (2017) and references cited therein.)

(74) a. *Context: Emma asks her friend Frieda to make her a sandwich. Frieda responds:*
Am I your mother?
b. *Context: Emma asks her mother who cleaned her room. Her mother responds:*
Who do you think does all the hard work in this house?
c. Who could have imagined an American president not accepting the results of an election?

The issue of how to treat rhetorical questions such as (74-c), whose answer is 'negative' depends on assumptions concerning the connection between negative answers and the denotation of constituent questions, an issue that we leave open here. Constituent questions are taken to either presuppose that the negative answer does not hold, or at least be biased against such an answer. The rhetorical question in (74-c) reverses this bias.

As argued by Caponigro and Sprouse (2007), rhetorical questions have the same semantic and

syntactic properties as ordinary questions. Their special characteristic is that the input context resolves the issue they raise in an obvious way. As a result, *Speaker ignorance* as well as the *Issue resolution goal* assumptions are overruled, and the questioner cannot be interpreted as seeking information.

Under present assumptions, these interrogatives, just like ordinary interrogatives, denote a non-singleton issue and trigger the basic CDE on the input context. The input context, however, is such as to make only one alternative in I compatible with the cg of the input context. As a result, there is only one alternative in I that the responder can commit to while preserving consistency. Given that it is assumed to be obvious which alternative this is, such questions are normally left unanswered. Under this approach, the semantic content and the CDE of rhetorical questions are identical to those of canonical questions. They are special because of a special property of their semantic content in relation to the input context, namely that there is only one alternative in I that the addressee can commit to under consistency, and therefore all but one of the members of the ps that the question projects are discarded.

Next, we briefly discuss the class of interrogatives used to perform what is known in the literature as indirect speech acts, exemplified in (75):

(75) Can you open the window?

The interrogative in (75) involves an ability modal. Its CDE are the basic ones and therefore the utterance functions as an inquiry into the addressee's ability to open the window. The special, non-canonical nature of this speech act is rooted in the fact that the speaker relies on the addressee to perform Gricean reasoning which will lead him to conclude that the *Issue resolution goal* assumption of the speech act is overridden, and thus, to conclude that the speaker's aim in performing her speech act is not to settle the issue raised, or any other issue for that matter, but rather, to get the addressee to open the window, for which his ability to do so is a precondition. In such cases *Speaker ignorance* is overridden: the ability of the addressee to perform the relevant action is taken for granted. This fact is relevant to the Gricean reasoning involved.

In (75), the speaker relies on her addressee to interpret her act as an indirect request. In (76) we exemplify a type of speech act known in the pragmatic literature as an indirect question.

(76) *Context: Amy and Bob are strangers waiting for the bus. Amy says to Bob:*
Do you know when the next bus is supposed to come?

In (76), the semantics and CDE of the interrogative involve nothing special. Amy's utterance nonetheless is interpreted as a non-canonical question because she intends her utterance to be interpreted, via Gricean reasoning, as meant to resolve the issue expressed in the complement clause rather than the issue expressed in the matrix.

Common to indirect requests, indirect questions, 'quiz' questions and rhetorical questions is the fact that the contexts in which they are performed override the *Issue resolution goal* assumption. They differ in what the primary aim of the speech act is assumed to be, as well as in how that aim relates to the semantics of the utterance itself.

The non-canonical nature of the question acts considered so far was due solely to the properties of the contexts in which they were asked. These examples involve ordinary, unmarked interrogatives used in special, extraordinary contexts.[27] They thus exemplify the prediction that languages may use unmarked interrogative forms to ask non-canonical questions. They also exemplify the two

[27] Dehé and Braun (2019) discuss special intonation patterns that may signal rhetorical questions. In as much as interrogatives may be interpreted rhetorically even in their absence, rhetorical questions in English are not necessarily associated with a marked form, though they may be thus marked.

types of non-canonical questions the approach predicts, namely non-canonical questions overruling the default value of the responder, and non-canonical questions overruling default assumptions characterizing canonical questions.

The approach we developed above predicts that languages can have special interrogative forms that trigger special CDE that render the form incompatible with canonical questions. Such forms, therefore, can only be used to ask a non-canonical question. Interrogatives marked with *oare* in Romanian exemplify this case. An example of a marked form that can be used to ask only a non-canonical question in English are tag interrogatives exemplified in (7-b), repeated in (77).

(77) Susan is coming with us, isn't she?

These questions belong to the large and varied class of 'biased' questions, which have received a great deal of attention in the literature. Tag interrogatives have been discussed in Reese (2007), Reese and Asher (2007), Northrup (2014), Malamud and Stephenson (2015), Farkas and Roelofsen (2017), among many others. Other examples of sentence forms that are, arguably, used to ask some form of biased question in English are rising declaratives, exemplified in (78-a) and high negation polar questions, exemplified in (78-b):

(78) a. Susan is coming with us?
b. Isn't Susan coming with us?

Rising declaratives are discussed in Bartels (1999), and Gunlogson (2001), Gunlogson (2008), and, more recently, Farkas and Roelofsen (2017), Westera (2017), Rudin (2018), Rudin (2019), and Jeong (2018); high negation polar questions enjoy a literature too large to even sample here, so I will only mention its pioneer, Ladd (1981), the influential Romero and Han (2004), and the recent study in Goodhue (2018). Ways of encoding bias in polar questions have been studied in van Rooij and Šafářová (2003) and Krifka (2015). Special bias markers in polar questions have been studied cross-linguistically as well, for instance in Japanese – see Sudo (2013), Northrup (2014), Hirayama (2017).

Within the approach defended here, biased questions are non-canonical in that they weaken *Speaker ignorance*: the form signals that there is a particular alternative in I that the speaker's epistemic state favors. Within the large class of biased questions differences are drawn with respect to the source of the bias, as well as its strength. Concerning the former, the bias may be rooted in the speaker's private epistemic state, or in contextual information (available to all participants), or in both, usually with a conflict between the two. With respect to form, bias may be indicated using a specialized sentence form, including special intonation, as in the case of tag interrogatives in English, or using a particular particle, as discussed in Sudo (2013), Northrup (2014), Hirayama (2017) for Japanese, or by deriving bias via the use of negation or negative polarity items, as discussed, for English in works mentioned above. In the account of tag interrogatives proposed in Farkas and Roelofsen (2017) the special form is treated as triggering a special discourse effect, in addition to the basic one, namely that of entering the highlighted alternative in the issue expressed by the sentence on a special set of propositions associated to participants, i.e., propositions the participant commits to having some amount of credence in. Such an account therefore involves enriching the DC component of context structures to include not only an anchor's firm, or categorical commitment list but also a list of propositions the anchor is committed to having some degree of credence in.

The present account makes two predictions with respect to biased questions. First, a biased question asked with a marked interrogative is predicted not to be compatible with expressing a categorical speaker commitment to one particular alternative in I. This is so because the denotation of the interrogative is a non-singleton issue, and therefore it projects several ways in which the

issue can be canonically resolved in the future. If, on the other hand, the speaker also categorically commits to one alternative $p \in I$, the only way to reach a future state in which the issue is resolved is to accept p. Accepting another alternative in I would involve the speaker retracting the categorical commitment she just made, a situation that goes against the nature of the categorical commitment.

The second prediction concerns the difference between polar and constituent interrogatives. Under the suggested account, biased questions involve adding a particular alternative in I to a list of non-categorical commitments. In the case of polar interrogatives, their denotation contains a unique highlighted alternative, and it is this alternative that is the target of bias. Thus, polar interrogatives are predicted to be able to express, in principle, both private and contextual bias. Constituent interrogatives, on the other hand, do not single out a particular alternative in their denotation that could be the target of positive bias.[28] As a result, it is predicted that constituent questions would only be able to express positive bias that is contextually rooted. In contextually rooted bias, the alternative towards which the question is biased is identified by the context, and therefore it does not need to be marked in the semantic content of the interrogative. Verifying this prediction is left for future research.

The proposed account predicts the existence of marked interrogative forms whose effect is to weaken or overrule default assumptions. It does not predict, however, that this is the only type of marking possible. In particular, nothing rules out the existence of a particle that reinforces some default assumption, rendering the interrogative thus marked not useable in contexts where that assumption is not met.

The present account predicts that unmarked forms can be used to ask both canonical and non-canonical questions, and that there can be marked forms usable only as non-canonical questions. It does not, however, make any direct predictions with respect to which non-canonical questions will be marked and which will not. This is so because such predictions depend on a theory of what type of distinctions one expects languages to mark, a question that is well beyond the scope of this paper.

We end this section by returning to the special role of *Addressee competence*. As mentioned above, this is a risky assumption to make. In addition there are situations in which a speaker would want to raise an issue in contexts that do not necessarily warrant it. It is therefore natural to assume that languages will develop strategies for dealing with this problem. Non-intrusive question markers, as well as conjectural question markers, if available, are predicted to be useable in such situations. In contexts where the speaker wishes to raise an issue but wants to signal that she does not necessarily assume that her addressee can resolve it, a frequent strategy is to use an indirect question as exemplified in (76) above. In this case the speaker resorts to an indirect route precisely because the context does not warrant *Addressee competence*.

In contexts in which the speaker assumes that *Addressee competence* is not met and yet she nonetheless wishes to address an issue, a common strategy is to use a modalized interrogative form, as discussed above in (20), repeated in (79):

(79) *Context: There is a knock on the door in the middle of the night. Amy says to Bob:*
Who could it be?

Here the speaker has reason to believe that her addressee is as ignorant as to the identity of the night time visitor as she is. She therefore does not directly raise the issue of who the person is, but rather, the issue of who this person *could* be. Under the current approach, this is a canonical, unmarked question whose semantic content is a set of modalized propositions, and therefore the

[28] In their case, the *nothing/nobody* answer is special and is typically singled out as a target of negative bias, as argued, for instance in Onea and Zimmermann (2019).

speaker is projecting modalized responses. By pragmatic reasoning, the addressee can infer that the speaker wishes to resolve the issue she raises in order to eventually resolve the issue of what the actual identity of the night time visitor is. If a cooperative addressee can resolve this latter issue, he will do so.

7 Conclusion

This paper introduced on the scene a type of non-canonical questions that has not been previously discussed in the literature, dubbed here *non-intrusive*, by discussing the details of the distribution and interpretation of interrogatives marked by the morpheme *oare* in Romanian. In the account developed here, *oare* is a de-marker that contributes a special discourse effect to the sentences in which it appears, an effect that targets the canonical future conversation states the utterance of the sentence in question projects. The account correctly predicts that *oare* can only occur in interrogatives, and that its presence gives rise to questions that do not put the addressee on the spot. The details of the proposal rely on a variant of the context structures proposed in Farkas and Bruce (2010), and make crucial use of the ps component of these structures. In this account, *oare* applies to the context that results when the input context is updated with I, the interpretation of the CP in which *oare* occurs. The result is a new context identical to the input one except for the addition of $\mathrm{DC}_{X,c} \cup \{\mathrm{info}(I)\}$ to the ps. This addition results in allowing compliant responses that do not resolve the issue raised by the question. If this proposal is on the right track it can be seen as providing a justification for assuming the existence of de-markers as well as for including the ps among the components of context structures as proposed in Farkas and Bruce (2010).

According to the view defended here, de-markers may signal departures from default assumptions that make a question canonical. In this view, the existence of questions marked for weakening the *Addressee compliance* assumption is not surprising. The fact that non-intrusive questions are close to and yet not identical with conjectural questions is also explained, under the assumption that the main effect of using a conjectural question is to weaken the *Addressee competence* assumption. Work on this type of questions shows the importance of looking beyond bias in investigations of non-canonical questions. It also highlights the problem of accounting for the constraints on sentence type that discourse markers are subject to in an explanatory manner, a problem similar to accounting for constraints imposed by predicates on the type of sentences that can serve as their complement.

After presenting the account, we situated non-intrusive questions within the typology of non-canonical questions in Section 6. In the present setup, the default assumptions characterizing canonical questions follow from their semantic content and the basic CDE they trigger. Non-canonical questions involve departures from these assumptions. In some cases, these departures are marked in the interrogative form used, while in others, they are not.

An issue left for future research is whether other languages have markers similar to *oare*, and to what extent the details of the distribution and interpretation of these markers match those of *oare* in Romanian. On a more general note, the approach here makes certain predictions with respect to canonical and non-canonical questions and the interrogative forms used to ask them, which invite further empirical study. An important open issue is that of predicting which types of non-canonical questions are likely to be formally marked and which are not. The general moral this discussion leads to is that the typology of non-canonical questions should allow for fine-grained distinctions differentiating these special questions from the canonical case.

References

Anand, P. and Hacquard, V. (2008). Epistemics with attitude. In *Semantics and linguistic theory*, volume 18, pages 37–54.

Bartels, C. (1999). *The intonation of English statements and questions: a compositional interpretation*. Routledge, New York.

Beltrama, A., Meertens, E., and Romero, M. (2020). Alternative questions: Distinguishing between negated and complementary disjuncts. *Semantics and Pragmatics*, **5**(13).

Bhadra, D. (2020). The semantics of evidentials in questions. *Journal of Semantics*, **37**(3), 367–423.

Biezma, M. and Rawlins, K. (2012). Responding to alternative and polar questions. *Linguistics and Philosophy*, **35**(5), 361–406.

Biezma, M. and Rawlins, K. (2017). Rhetorical questions: Severing asking from questioning. In *Semantics and Linguistic Theory*, volume 27, pages 302–322.

Büring, D. (2003). On D-trees, beans, and accents. *Linguistics and Philosophy*, **26**, 511–545.

Caponigro, I. and Sprouse, J. (2007). Rhetorical questions as questions. In *Proceedings of Sinn und Bedeutung*, volume 11, pages 121–133.

Ciardelli, I., Groenendijk, J., and Roelofsen, F. (2019). *Inquisitive Semantics*. Oxford University Press.

Condoravdi, C. and Lauer, S. (2012a). The basic dynamic effect of interrogative utterances. Presented at the 13th Texas Linguistics Society Conference.

Condoravdi, C. and Lauer, S. (2012b). Imperatives: Meaning and illocutionary force. *Empirical issues in syntax and semantics*, **9**, 37–58.

Dayal, V. (2019). The fine structure of the interrogative left periphery. Presented at the Third International Workshop on Inquisitiveness Below and Beyond the Sentence Boundary (InqBnB3) in Amsterdam.

Dayal, V. and Grimshaw, J. (2009). Subordination at the Interface: A Quasi-subordination Hypothesis. Manuscript, Rutgers University.

Dehé, N. and Braun, B. (2019). The prosody of rhetorical questions in English. *English Language and Linguistics*, pages 1–29.

Eckardt, R. (2018). Evidentials in different kinds of questions: The case of German *wohl*. to appear in *Semantics and Pragmatics*.

Eckardt, R. and Beltrama, A. (2019). Evidentials and questions. In C. Piñón, editor, *Empirical Issues in Syntax and Semantics 12*, pages 1–35. CNRS.

Faller, M. (2002). *Semantics and pragmatics of evidentials in Cuzco Quechua*. Ph.D. thesis, Stanford University.

Farkas, D. F. and Bruce, K. B. (2010). On reacting to assertions and polar questions. *Journal of semantics*, **27**, 81–118.

Farkas, D. F. and Roelofsen, F. (2017). Division of labor in the interpretation of declaratives and interrogatives. *Journal of Semantics*, **34**(2), 237–289.

Frana, I. and Menéndez-Benito, P. (2019). Bias and evidence. The case of the evidential future in Italian. In *Proceedings from SALT 19*.

Fălăuş, A. (2014). Presumptive mood, factivity and epistemic indefinites in Romanian. *Borealis Academic Publishing*, **3**(2), 105–124.

Fălăuş, A. and Laca, B. (2014). Les formes de l'incertitude. Le futur de conjecture en espagnol et le présomptif futur en roumain. *Revue de linguistique romane*, **78**, 313–366.

Giannakidou, A. and Mari, A. (2018). A unified analysis of the future as epistemic modality. *Natural Language and Linguistic Theory*, **36**, 85–129.

Giurgea, I. (2018). The Romanian particle 'oare' in a comparative and historical perspective. In G. P.-D. et. al, editor, *Comparative and Diachronic Perspectives on Romance Syntax*, pages 401–432. Cambridge Scholars Publishing.

Goodhue, D. (2018). *On asking and answering biased polar questions*. Ph.D. thesis, McGill University, Montreal.

Gunlogson, C. (2001). *True to Form: Rising and Falling Declaratives as Questions in English*. Ph.D. thesis, University of California at Santa Cruz.

Gunlogson, C. (2008). A question of commitment. *Belgian Journal of Linguistics*, **22**, 101–136.

Hamblin, C. L. (1971). Mathematical models of dialogue. *Theoria*, **37**, 130–155.

Hill, V. (2002). Complementizer Phrases (CP) in Romanian. *Italian Journal of Linguistics*, **14**, 223–248.

Hirayama, H. (2017). On 'no' and 'no da' questions in Japanese. Talk presented at the UCSC-Stanford Workshop on sentence types.

Hirayama, H. (2018). Discourse effects in biased questions in Japanese. In M. S. K. Shin Fukuda and M.-J. Park, editors, *Online Proceedings of Japanese and Korean Linguistics 25*.

Hooper, J. B. and Thompson, S. A. (1973). On the applicability of root transformations. *Linguistic inquiry*, **4**(4), 465–497.

Ippolito, M. and Farkas, D. F. (to appear). Assessing alternatives: the case of the presumptive future in Italian. *Linguistics and Philosophy*.

Irimia, M.-A. (2010). Some remarks on the evidential nature of the Romanian presumptive. In *Selected Papers from 'Going Romance'*, pages 125–144.

Ivan, R.-R. (2013). Wondering about OARE: Is it a Q-particle for Romanian. In B. Surányi, editor, *Proceedings of the Second Central European Conference in Linguistics for Postgraduate Students*.

Jeong, S. (2018). Intonation and sentence type conventions: Two types of rising declaratives. *Journal of Semantics*, **35**(2), 305–356.

Karttunen, L. (1974). Presupposition and linguistic context. *Theoretical linguistics*, **1**(1–3), 181–194.

Krifka, M. (2013). Response particles as propositional anaphors. In *Proceedings of Semantics and Linguistic Theory (SALT 23)*, pages 1–18.

Krifka, M. (2015). Bias in commitment space semantics: Declarative questions, negated questions, and question tags. In *Semantics and Linguistic Theory (SALT) 25*, pages 328–345.

Ladd, R. (1981). A first look at the semantics and pragmatics of negative questions and tag questions. In *Proceedings of Chicago Linguistics Society, Volume 17*, pages 164–171. CLS.

Littell, P., Matthewson, L., and Peterson, T. (2010). On the semantics of conjectural questions. In T. Peterson and U. Sauerland, editors, *Evidence from Evidentials*, pages 89–104. University of British Columbia Working Papers in Linguistics 28.

Lohnstein, H. (2007). On clause types and sentential force. *Linguistische Berichte*, (209), 63–86.

Malamud, S. and Stephenson, T. (2015). Three ways to avoid commitments: Declarative force modifiers in the conversational scoreboard. *Journal of Semantics*, **32**, 275–311.

McCloskey, J. (2006). Questions and questioning in a local English. *Crosslinguistic research in syntax and semantics: Negation, tense, and clausal architecture*, pages 87–126.

Meriçli, B. (2016). *Modeling indirect evidence*. Master's thesis, UCSC.

Mihoc, T., Bhadra, D., and Falaus, A. (2019). Epistemic modals, deduction, and factivity. In *Proceedings from SALT 2019*.

Murray, S. (2010). *Evidentiality and the structure of speech acts*. Ph.D. thesis, Rutgers University.

Northrup, O. (2014). *Grounds for Commitment*. Ph.D. thesis, UCSC.

Onea, E. and Zimmermann, M. (2019). Questions in discourse: an overview. In *Questions in Discourse*, pages 5–117. Brill.

Reese, B. (2007). *Bias in questions*. Ph.D. thesis, University of Texas at Austin.

Reese, B. and Asher, N. (2007). Prosody and the interpretation of tag questions. In E. Puig-Waldmüller, editor, *Proceedings of Sinn und Bedeutung 11*, pages 448–462.

Roelofsen, F. and Farkas, D. F. (2015). Polarity particle responses as a window onto the interpretation of questions and assertions. *Language*, **91**(2), 359–414.

Romero, M. and Han, C.-H. (2004). On negative yes/no questions. *Linguistics and Philosophy*, **27**(5), 609–658.

van Rooij, R. and Šafářová, M. (2003). On polar questions. In R. B. Young and Y. Zhou, editors, *Proceedings of Semantics and Linguistics Theory (SALT 13)*, pages 292–309. CLC Publications.

Rudin, D. (2018). *Rising above Commitment*. Ph.D. thesis, University of California, Santa Cruz.

Rudin, D. (2019). Embedded Rising Declaratives and embedded quotation. In K. L. Katherine Blake, Forrest Davis and J. Rhyne, editors, *Semantics and Linguistic Theory (SALT 29)*, pages 1–21.

Sauerland, U. and Yatsushiro, K. (2017). Remind-me presuppositions and speech act decomposition: Evidence from particles in questions. *Linguistic Inquiry*, **4**(48), 651– 678.

Searle, J. R. (1969). *Speech acts: an essay in the philosophy of language*. Cambridge University Press.

Sudo, Y. (2013). Biased polar questions in English and Japanese. In D. Gutzman and H.-M. Gaertner, editors, *Beyond expressives: explorations in use-conditional meaning*. Leiden: Brill.

Truckenbrodt, H. (2004). Zur Strukturbedeutung von Interrogativsätzen. *Linguistische Berichte*, pages 313–350.

Truckenbrodt, H. (2006a). On the semantic motivation of syntactic verb movement to C in German. *Theoretical Linguistics*, **32**(3), 257–306.

Truckenbrodt, H. (2006b). Replies to the comments by Gärtner, Plunze and Zimmermann. *Theoretical Linguistics*, **32**(3), 287–410.

Westera, M. (2017). *Exhaustivity and intonation: a unified theory*. Ph.D. thesis, Institute for Logic, Language and Computation, University of Amsterdam.