Canonical and non-canonical questions in discourse

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Abstract

The aim of this chapter is to make progress in understanding what is common and what is not across canonical and non-canonical questions. The framework adopted is that of the Table model in Farkas and Bruce (2010), and the view of declaratives and interrogatives in Farkas and Roelofsen (2017). After laying out the theoretical assumptions, I argue that the commonly assumed properties of canonical questions follow from the semantics and the basic conventional discourse effects of unmarked interrogatives. Turning to non-canonical questions, whether marked or unmarked, weaken, I argue that they override or, in some cases, reinforce default assumptions characterizing their canonical sisters.

1 Introduction

Minimal pairs are among linguists's best friends. Comparing expressions that are close in form and function helps us tease apart their differences and similarities thus leading to a better understanding of each. Within the area of 'question studies', canonical and non-canonical questions form a minimal pair. Consequently, if we aim to understand non-canonical questions, as in the chapters of this volume, it is useful to compare them with expressions that are minimally different, namely canonical questions. Only once we know what canonical questions are can we understand what is special about their non-canonical sisters. Canonical questions, in turn, form a minimal pair with canonical assertions. This is so because both discourse moves are typically involved in information exchange, and both can be characterized, pre-theoretically, in terms of the other. Thus, assertions are intuitively understood as typically addressing a question under discussion (QUD), while questions, in their turn, are intuitively characterized as typically involving a request for an assertion. Furthermore, understanding either of these discourse moves requires, I assume, an explicit characterization of the interpretation of declarative and interrogative sentences, an explicit characterization of (parts of) the discourse structure against which these moves are performed, and of the ways uttering these declarative and interrogative sentences affects this structure.

The overall goal of this chapter is to characterize the class of non-canonical questions in general by contrasting them with the class of canonical questions, which in turn are understood in relation with canonical assertions. The basic assumptions concerning the semantics of interrogative and declarative sentences, and the way such sentences affect the discourse structure against which they are uttered are given in Section 2. Section 3 argues that the main properties of canonical assertions and questions follow from the basic conventional discourse effects of declaratives and interrogatives given in Section 2. Against this background, Section 4 characterizes non-canonical questions as questioning moves that depart from these canonical properties, and Section 5 concludes.

2 Theoretical assumptions

2.1 Speech acts and sentence forms

There is an obvious connection between basic sentence forms, i.e., declarative, interrogative, imperative, and the speech acts they are used to perform, i.e., assertion, question, directive. Capturing this connection, however, is not a trivial matter. Focusing on English, declarative sentences pronounced with rising intonation (known as rising declaratives) exemplified in (1), and briefly discussed in Section 4,

(1) This is a persimmon?

are referred to as questions that have been asked, despite their declarative form but in line with their intonation pattern. The issue of what the semantic content of these sentences is, as well as how they affect the discourse structure against which they are uttered is a matter of current debate. There is, however, consensus with respect to what the special property of examples such as (1) is, namely that a question is being asked by using a declarative sentence form. An example of the opposite, i.e., an interrogative form that is not used to ask a question, is exemplified in (2):

(2) *Professor to his students*:
For next time, why don't you do exercises 1 - 5 from the end of Chapter 2?

The professor's utterance in (2) would not be referred to as a question she asked despite the interrogative form used. Again, there is consensus in acknowledging that this is a departure from the norm. In what follows, unless explicitly noted otherwise, 'declarative sentence' is used instead of the more accurate 'declarative sentence with falling intonation', and 'interrogative sentence' is used to cover regular interrogatives but not the type exemplified in (2).

The examples in (3) point to a different type of problem for the direct connection between sentence form and speech act performed.

(3) a. I wonder when she visited last.
b. I don't know what I am supposed to do next.

In such examples, the speaker's point in uttering the declarative sentence can be interpreted as inviting the addressee to address the question the embedded sentence expresses. Thus, in such cases, the assertion performed in uttering the matrix sentence serves to in effect raise the question expressed by the embedded sentence. An attractive account of these cases is to treat them as assertions whose pragmatic effect is to invite the addressee to resolve the issue denoted by the embedded interrogative by alerting him to the speaker's need to resolve it.

Note next that imperatives such as (4),

(4) Tell me why you did not pick up your phone.[1]

achieve an effect hard to distinguish from that of asking the question in (5):

(5) Why did you not pick up the phone?

They do so by directing the addressee to answer the embedded question. As will become clear below, in the approach developed here, (4) is a directive, rather than a question and (5) is a question, and not a directive. The overlap in their interpretation is explained by the fact that,

[1] A similar example was brought to my attention by a reviewer.

given the basic discourse effect of a question, in default cases, questions are interpreted as requests for an answer.

Finally, note the ordinary declarative sentences in (6), which Gunlogson (2001) calles a 'declarative question'.

(6) *Speaker to a co-worker who shows up with a new hairstyle*:
You've had a haircut.

The questioning nature of this declarative, in this context, resides in the fact that the speaker assumes her addressee knows better than she does whether she has had a haircut or not, and therefore will confirm or deny the speaker's guess in a subsequent move. Note that despite this similarity with typical questioning acts, the speech act performed by the speaker of (6) would not be referred to as a question that has been asked.

How to capture the connection between sentence forms and the speech act they are used to perform on the one hand, and the complications just mentioned on the other? Even more fundamentally, how are we to define the speech acts of assertion and question? In Section 3 the notions of assertion and question are defined in terms of the denotation of the uttered sentence and its effect on the input discourse structure. Until then I will adopt the characterization that fits the typical case in the hope that it will be useful in understanding the atypical ones as well. Thus, I will assume that the speech act performed by uttering a declarative with a falling intonation in ordinary discourse is an assertion, while the speech act performed by uttering an interrogative sentence in ordinary conversation is a question. I assume that this is so because of the semantic content of such sentences. Under these assumption, the directives with interrogative forms in (2), and the question in declarative form in (1) will have to be given a special interpretation that is not solely determined by their interrogative/declarative form. The characterization of their special nature depends on further analytical and theoretical choices. With these caveats in mind, we propose below a way of capturing the connection between the semantics of ordinary interrogatives and declaratives and the speech acts they are typically used to perform.

2.2 The semantics of declarative and interrogative sentences

Following Farkas and Roelofsen (2017), I assume that the denotation of a sentence plays a crucial role in the effect its utterance has on its input context. Therefore, as a starting point, this subsection summarizes the basic assumptions concerning the denotation of declarative and interrogative sentences.

In line with both Hamblin and Inquisitive Semantics, I assume that declarative and interrogative sentences denote the same type of entity, differentiated only by its inner structure. The discussion below is framed within the framework of Inquisitive Semantics.

The term *proposition* is used here to denote a set of worlds. The denotation of both declarative and interrogative sentences is a downward closed set of propositions P, called an *issue*.[2] If P is the denotation of a sentence S, the maximal propositions (sets of worlds) in P will be referred to as the *alternatives* in P. The *informative content* of a sentence denoting an issue P, written as info(P), is $\cup$P, the union of the propositions in P.

I adopt here the view of declarative and interrogative sentences in Roelofsen and Farkas (2015). Declarative sentences are taken to involve the sentential operator DEC, whose effect is to ensure that info(P) $\in$ P. As a result, the denotation of a declarative sentence contains a unique alternative.

[2] A set of propositions P is downward closed iff for every p $\in$ P, if p' $\subset$ p, p' $\in$ P. The symbol $^{\downarrow}$ is used to denote this property.

Interrogative sentences are taken to involve a sentential operator INT, whose effect is to ensure that info(P) $\notin$ P.

Finally, I follow Roelofsen and Farkas (2015), and references therein, in assuming that sentences highlight the n-place property denoted by their overt element. 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 in what follows.

The denotations of simple declaratives, polar interrogatives and constituent interrogatives are exemplified in (7) - (9).

(7) a. Mona arrived.
b. {{**w: Mona arrived in w**}}$^{\downarrow}$

(8) a. Did Mona arrive?
b. {{**w: Mona arrived in w**}, {w: Mona did not arrive in w}}$^{\downarrow}$

(9) a. Who arrived?
b. {{w: only Mona arrived in w}, {w: only Gail arrived in w}, {w: Mona and Gail arrived in w}}$^{\downarrow 3}$

In the case of (9-a), the highlighted property is $\lambda x.$ *x arrived*.

The propositions in the denotation of an interrogative are the semantic answers to the question asked by uttering it. Asserting one of these propositions is one way of reacting to the question, and will be said to answer it. They are, of course, many other legitimate ways of reacting to a question which do not involve such an assertion. Finally, the alternatives in the denotation of an interrogative sentence cover that subset of the logical space that meets the presuppositions of the sentence.

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.

2.3 The Table model

In a conversation, what is said at a particular time is molded by the conversational past, and, in turn, shapes the conversational future. The Table model in Farkas and Bruce (2010), which I assume here, proposes a minimal context structure meant to capture this basic property of conversational exchanges focusing on what is common to and what differentiates assertions and questions.[4]

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:

1. a non-empty set of discourse participants *Part*
2. for every discourse participant $x \in$ *Part*, DC_x is a set of states, called the *discourse commitments of x*
3. a set of propositions called the cg

[3] I assume that the alternatives are reduced to the ones given above. Whether an exhaustive or non-exhaustive interpretation is intended is immaterial for present purposes, as is the issue of whether constituent interrogatives involve an existential presupposition.

[4] Considerations concerning the introduction and the tracking of discourse referents, as well as matters having to do with other speech acts not primarily concerned with information sharing, such as imperatives, will remain unaddressed below.

4. a set of issues, called the Table

5. a set of states, called the projected set (ps)

Below I briefly comment on each of these components.

Discourse participants In multiparty discourse, $|Part| > 1$. For simplicity, I will assume here that |Part| = 2. When characterizing the utterance of a sentence, the participant who utters it will be referred to as the *speaker* (Sp), and the participant to whom the speech act is addressed will be referred to as the *addressee* (Ad). By default, these two roles are played by distinct participants though of course one can speak to oneself, in which case the two roles are played by the same individual.

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. 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.

If $p \in \text{DC}_x$, 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. For every DC_x, x will be referred to as the *commitment anchor* of the propositions in DC_x. Given these assumptions, for every $x \in Part$, the set of propositions in DC_x has to be consistent, i.e., $\cap\text{DC}_x \neq \emptyset$, and, moreover, for every DC_x, it must be possible for a rational agent to believe the conjunctions of the propositions in DC_x.[5]

I follow Gunlogson (2008) in assuming that a participant's commitment set is, by default, supposed to persist throughout the conversation. Furthermore, if x is sincere, she is actually committed to her public commitments, in which case DC_x is a subset of x's doxastic background, i.e., the set of propositions Dox_x such that for any $p \in \text{Dox}_x$, x takes $w_a \in p$. This is formulated in (10):

(10) *Default sincerity assumption*
By default, it is assumed that for any $p \in \text{DC}_x$, $p \in \text{Dox}_x$.

Sp's sincerity when making an assertion is a default assumption which substitutes for that part of Grice's Quality maxim that requires one not to assert what one believes to be false.

Discourse commitments are firm, or categorical, precisely because they are projected to stay constant. Languages also provide means of signaling weakened commitments, i.e., commitments that are less than categorical. The main difference between weakened commitments and categorical ones is that the assumption of persistence is weakened in the case of the former. When a participant makes a weakened commitment to a proposition p she signals less certainty relative to w_a being an element of p, and therefore raises the possibility of her withdrawing the commitment altogether in the future of the conversation. To model non-categorical commitments I assume, following Farkas (2022) that discourse commitment lists are subdivided into categorical and non-categorical commitments, with the latter being the special case. Non-categorical commitments can be marked for Sp's public degree of credence in the relevant commitment.

The common ground (cg) The Stalnakeran common ground (cg) is the set of propositions all participants in the conversation are assumed to be committed to. The propositions in this set

[5]For more discussion of this latter requirement, which is stronger than mere consistency, see Farkas (2024). We will not discuss it further here because it is irrelevant to present purposes.

are the propositions that are elements of each DC_x, augmented by general background knowledge participants assume is shared.[6] By default, for each $p \in \text{cg}$, p is assumed to be taken as true by each discourse participant.

The Table The Table consists of a set of active issues awaiting resolution.[7] An issue P on the Table is resolved relative to a context state c iff there is a $p \in \text{P}$ such that $p \in \text{cg}_c$, the cg of c. If this condition is met, p is in the cg of the conversation, and P is removed from the Table. 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 to remove an issue from the Table is to reach a resolution. Some non-canonical ways are to agree to disagree or to agree not to pursue the issue further.

I assume that the unresolved issues on the Table are QUDs. As such, more structure has to be added to the items on the Table to model the various ways in which a QUD can be structured, but these matters are not relevant to present concerns, and therefore will be ignored below.

The projected set (ps) The ps is a forward looking conversational component that records canonical immediate future conversational states triggered by discourse moves that raise issues. In Farkas and Bruce (2010), the ps characterized these states by listing their context sets. An issue on the Table projects at least those context states in which the issue is resolved. Under this assumption, if the Table has a single issue P, containing a single alternative p, the ps will contain $\text{cs} \cap p$, where cs is the current cs. If the Table contains a single issue P, containing multiple alternatives $p_1, ...p_n$ that are compatible with the input cg, the projected set will be the set $\{\text{cs} \cap p_1, \ldots, \text{cs} \cap p_n\}$.

Meriçli (2016) suggests that, at least in typical cases, 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 Ad reactions. Under this assumption, the ps is that set of Ad commitment lists in which Ad commits to each alternative in the issue on the Table that is compatible with the input cg. Thus, in Meriçli's proposal, the ps is a set of projected DC_{Ad}. For each alternative $p \in \text{P}$ that is compatible with the input cg, the ps contains an element $\text{DC}_{Ad} \cup \{p\}$, where DC_{Ad} is the input Ad discourse commitment list. This is a first step in the process of accepting p as the resolution of P, i.e., having p in the cg and therefore intersecting the input cs with p. I follow this view with a slight change, namely, I assume that the anchor of the discourse commitment lists in ps is a free variable whose value is contextually determined, and set to Ad by default. As mentioned above, this is the typical case in which a participant is assumed to respond to the question.

2.4 Conventional discourse effects

Conventional discourse effects (CDEs) characterize the way a particular 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). These effects are conventional in as much as they are given by linguistic convention; they cannot be inferred from pragmatic considerations alone, though they are not necessarily arbitrary. They are

[6] Differentiating various types of assumed shared knowledge is an important issue but one that is not relevant to present purposes.

[7] In Farkas and Bruce (2010) the issues on the Table were assumed to form a stack. This difference is irrelevant for present purposes.

called 'discourse effects' because their contribution pertains to the context changes triggered by the utterance of a sentence.

Formally, I assume that CDEs are functions from $<$ S, P, c_i $>$ to c_o, where S is the uttered sentence, P is the issue expressed by S, c_i is the input context structure, and c_o is the output context structure. Below, CDEs are characterized by enumerating the changes they trigger to the relevant components of c_i.

Following Farkas and Roelofsen (2017), I distinguish between basic and special CDEs. Basic CDEs are determined solely by the semantic content of the sentence they are associated with, while special CDEs are contributed by special forms called d(iscourse)-markers. D-markers can contribute presuppositions, override default settings or trigger additional discourse effects in a monotonic fashion. These discourse effects are context change functions that apply to the output of basic CDEs. According to this set up, special CDEs can add to the basic effect but cannot override them.[8]

In the next two subsections we turn to the basic conventional discourse effects of declaratives and interrogatives. The discussion that follows adapts the relevant proposals in Farkas and Roelofsen (2017) to the more fine-grained view of discourse structure assumed here.

2.5 The basic CDEs of declaratives and interrogatives

The basic CDEs of a sentence The basic CDEs of a sentence are determined by its semantic content alone. Interrogative and declarative sentences have the same basic CDEs, specified in (11), where, as before, i stands for 'input' and o stands for 'output', and where P stands for the issue expressed by a declarative or an interrogative sentence S.

(11) Basic CDEs: c_i + S

1. $\text{DC}_{Sp,o} = \text{DC}_{Sp,i}$ & info(P)
2. $\text{Table}_o = \text{Table}_i$ & P
3. $\text{ps}_o = \text{ps}_i \oplus$ P

The first effect in (11) adds the informative content of the sentence expressed to DC_{Sp}. This change publicly commits Sp to w_a being an element of some alternative in P. By default, this commitment is categorical, which means that Sp presents herself as expecting to hold on to this commitment for the rest of the conversation. In terms of notation, if A is a set, A & a is the set obtained by adding a as an element of A, i.e., A & a = A $\cup \{a\}$.

The second effect adds P to the set of issues on the Table. As a consequence, the move steers the conversation towards a future state in which this issue is resolved, i.e., a conversational state in which there is a $p \in$ P such that there is agreement across participants that $\text{w}_a \in p$.

The third effect spells out all the possible first steps a participant x can take towards reaching a discourse state in which P is resolved: for each $p \in P$ that can be added to cg_i while maintaining consistency, the ps contains a future $\text{DC}_{x,o} = \text{DC}_{x,i}$ & p. I assume that by default, the value of x is Ad. This assumption captures the fact that in default cases, the participant who is assumed to react or *respond* to the speech act is Ad.

The notation used here, $\text{ps}_i \oplus$ P, stands for the operation that adds each $p \in$ P to each element of ps_i. If the Table is empty, the ps is assumed to be empty as well. Recall that by default, the

[8] This set-up ensures a tight connection between semantics and basic CDEs. As mentioned in Section 4.2 below, recent discussion of the effect of some d-markers, such as Woods and Haegeman (2023) and Gärtner and Gyuris (2023) dispense with the monotonicity requirement. Note alsothat special CDEs can be recursive, a property needed to account for languages that have stacked d-markers, as found, for instance, in Japanese (see Hirayama (2018) and references therein).

affected commitments are the categorical ones.

The effects in (11) are connected. Putting an issue on the Table amounts to a proposal to direct the conversation towards a state in which the issue is resolved because a conversational state is stable iff its Table is empty, and the canonical way of removing an issue from the Table is to reach a conversational state in which the issue is resolved. It is therefore natural to assume that the author of such a move, namely Sp, is committed to the possibility of reaching such a state. This means that she is committed to w_a being an element of some alternative in P, which in turn amounts to being committed to info(P). The change to the ps follows from the assumption that the ps encodes the first possible conversational steps towards reaching one of the possible resolutions of the issue placed on the Table.

The basic CDEs in (11) apply to both interrogatives and declaratives. Following Farkas and Roelofsen (2017) we show next that the assumed semantics of declarative and interrogative sentences combined with the effects in (11) allow us to derive the differences between their discourse effects from their semantic content alone, thus rendering separate *Assertion* and *Question* speech act operators superfluous.

The basic CDEs of a declarative sentence If S is a declarative sentence, the issue P that it expresses contains a unique alternative p, and therefore info(P) = p. According to (11), its CDEs commit Sp to info(P), which amounts to committing her to p. In order to arrive at a context state in which P is resolved, Ad has to commit to p as well, which is what is encoded in the ps, under the default value for the commitment anchor in the ps. Note that choosing Ad 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 Sp to p, and therefore choosing Sp 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, the group made up of Sp and Ad. Choosing this value, however, amounts to choosing the default value since Sp is already committed to p.

If Ad does in fact commit to p in a future move, p becomes a member of the cg and P is resolved, and taken off the Table.

To exemplify, let us consider the effects of a speaker uttering the declarative sentence in (12-a), which expresses the issue with a single alternative in (12-b):

(12) a. Amalia is home.
b. $P = \{\{\textbf{w: Amalia is home}\}\}^{\downarrow}$

Under the assumption that the Table of the input context is empty, uttering (12-a) has the effects in (13).

(13) CDEs of uttering *Amalia is home*

1. $DC_{Sp,o} = DC_{Sp,i}$ & info(P)
2. $Table_o = Table_i$ & P
3. $ps_o = \{DC_{Ad,i}$ & $p\}$

Note that since in the case of declaratives, the unique alternative in P is p. As a result, info(P) = p and therefore the first step above amounts to adding p to DC_{Sp}. Note also that since p is the unique alternative in P, the third step projects a unique future context state in which Ad commits to p.

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 Sp to the unique alternative in this issue,

and to project a future state in which Ad shares this commitment and therefore the issue is resolved and p becomes cg.

The basic CDEs of an interrogative sentence If S is an interrogative sentence, P, the issue it expresses, contains more than one alternative, and info(P) covers that part of the logical space that meets the presuppositions of the question, which we will denote by W'. Because of the difference in their denotation, the basic CDEs applied to the denotation of an interrogative yield results that differ from those we get for declaratives.

To illustrate, (14) gives the basic CDEs of uttering the polar interrogative in (14-a) determined by (11), where the commitment anchor in the ps is set to its default value.

(14) a. Is Amalia home?

b. CDEs of uttering *Is Amalia home?*

1. $\text{DC}_{Sp,o}$ =$\text{DC}_{Sp,i}$ & info(P)
2. Table_o = Table_i & $\{p, \overline{p}\}$
3. ps_o = $\{\text{DC}_{Ad,i}$ & p, $\text{DC}_{Ad,i}$ & $\overline{p}\}$

Note that info(P) = W', and therefore the commitment added to DC_{Sp} is trivial under the assumption that the input context meets the presuppositions of the question.[9]

In the case of interrogatives, just like in the case of declaratives, the default anchor for the elements of ps is Ad. Note, however, that unlike in the case of declaratives, fixing this anchor to Sp or the conversational community would not be redundant. This is so because uttering a typical interrogative does not commit Sp to any of the alternatives in the issue she places on the Table.[10]

In the aftermath of a speaker having uttered an interrogative, Ad may react by proposing to resolve the issue in one of the projected ways, and once Sp accepts the resolution Ad proposes, the issue is resolved and removed from the Table in a canonical way. Thus, the canonical way of resolving the issue Sp places on the Table involves Ad providing the relevant information. Asking a question, therefore, puts Ad in a position in which she is to resolve the issue if the discourse is to proceed in a canonical way.[11] Note that because typical interrogatives do not commit Sp to any of the alternatives in the issue she places on the Table, in their case, unlike with declaratives, there is no 'default agreement' move.

There are a variety of other felicitous ways of reacting to an interrogative, besides the projected ones, such as confessing one's inability to resolve the issue, requesting further information or even refusing to engage with the issue altogether. In the set up 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 Sp has placed on the Table in a canonical way.

[9] The issue of how presuppositions are treated in this model is non-trivial but also not directly relevant to present concerns.

[10] Special interrogatives may override this assumption, as is the case of rhetorical questions of the type *Is the pope Catholic?* or *Am I genius or am I a genious?* The *p or p* alternative questions are discussed in Biezma and Rawlins (2017).

[11] 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.

3 Canonical assertions and questions

The aim of this section is to characterize canonical assertions and questions and show that at least some of their properties follow from the denotation of interrogatives and declaratives combined with the basic CDEs of uttering such sentences discussed above.

Canonical assertions The act of asserting a proposition p is defined here as in (15):

(15) Definition of Assertion
An Assertion is the act of uttering a sentence denoting an issue P that contains a single alternative p, and whose CDEs include placing P on the Table.

Uttering an ordinary declarative sentence with falling intonation, such as the one exemplified in (16), is a canonical, or typical way of making an assertion.

(16) Amy is in San Francisco.

Under the assumptions sketched above, the unique alternative in the issue denoted by this sentence is the set of worlds in which Amy is in San Francisco. The basic CDEs of uttering it involve Sp placing this issue on the Table, categorically committing to w_a being a member of the unique alternative in it, and projecting a conversational future in which Ad shares this commitment, and therefore the issue is resolved and removed from the Table in a canonical way.

Under the assumption that canonical assertions and questions are driven by the wish to increase information the conversational community has, and do so in an efficient manner, it follows that canonical assertions will have the properties in (17):

(17) Characteristics of canonical assertions

1. *Open issue*: Sp assumes that the issue P that her move places on the Table is open in c_i, i.e., P is not resolved in c but is resolvable in some future context c' monotonically reachable from c.
2. *Ad responder*: The participant who is assumed to respond to the speech act is Ad.
3. *Sp competence*: Where p is the unique alternative in P, Sp presents herself as believing that $w_a \in p$, and as having some reason to support this belief.
4. *Ad ignorance*: Sp assumes that Ad does not believe that $w_a \in p$.
5. *Ad compliance*: Sp assumes that Ad will accept p in the future of the conversation.

Open issue follows from the assumption that Sp's move is meant to increase information. If P is not open in c Sp's aim in raising it cannot be that of reaching a future context in which P is resolved.

Ad responder follows from the assumption that the participant who is assumed to react to the speech act is the participant the speech act is addressed to, namely Ad.

Sp competence follows from the fact that since P contains a unique alternative p, info(P) = p. Consequently, the CDEs triggered by Sp's move involve adding p to DC_{Sp} resulting in Sp being committed to p. By default, one assumes that when a rational agent believes the truth of a proposition she has some basis for doing so. From this it follows that in default cases, Sp's commitment to p amounts to Sp committing that $p \in \mathrm{Dox}_{Sp}$.

Ad ignorance follows from the assumption that Sp aims to increase information available to participants. Were Sp to assume that Ad already believes that $w_a \in p$, her move would not result in increase of information on the part of Ad.

Ad compliance follows from the basic CDEs of an assertion because Sp's move projects a conversational future in which Ad accepts Sp's assertion, combined with the natural assumption that the agent of a move steers the conversation towards a state she believes the conversation will in fact reach.

Note that under current assumptions, none of the properties in (17) are hard wired in the characterization of assertions. The author of an assertion may be insincere, she may in fact not be able to produce any reason for her belief in p even if sincere, and she may, in fact, be ready to give this belief up even if she has it. It may also be that the reason for her assertion is other than that of informing her interlocutor of the truth of p. Thus, Sp may aim to remind her interlocutor of the truth of p, or just bring it up because of its relevance to the issue being discussed, while perfectly aware that Ad also believes that p is true. It may also be that the author of an assertion does not, in fact, assume that the interlocutor will accept it – she in fact may assume that p will be rejected. The aim of her assertion may well be to annoy her interlocutor, or publicize her belief despite knowing that no one will accept it for now etc. In the current set up, all such cases fall under the category of assertions, albeit non-canonical ones, i.e., assertions whose properties diverge from those of canonical ones. Since we are focused here on questions, the topic of non-canonical assertions will be left for future work.

Canonical questions The act of asking a question is defined here as in (18):

(18) Definition of Question
A Question is the act of uttering a sentence denoting an issue P that contains more than one alternative that partition W', and whose CDEs include placing P on the Table.

Under current assumptions, uttering the interrogative sentences in (19),

(19) a. Is Amy home?
b. Who are you talking to?

qualify as questions because their denotation contains more than one alternative, and their CDEs involve placing P on the Table. These CDEs also commit Sp to info(P), which in the case of questions is trivial, and project discourse futures in which the question is taken off the Table. The default way of taking P off the Table is by resolving it, and the default first step towards resolution is for Ad to commit to the truth of one of the alternatives in P.

Under the default assumption that the immediate goal of the conversation is information increase relative to P, canonical questions will have the properties in (20):[12]

(20) Characteristics of canonical questions

1. *Open issue*: Sp assumes that the issue P that her move places on the Table is open, i.e., Sp assumes that P is not resolved in c but is resolvable in some future context c' monotonically reachable from c.
2. *Ad responder*: The participant who is assumed to respond to the speech act is Ad.
3. *Sp ignorance*: Sp presents herself as being in an epistemic state such that there is no $p \in$ P, such that that $p \in \text{Dox}_{Sp}$.
4. *Ad competence*: Sp presents herself as assuming that there is $p \in$ P such that $p \in \text{Dox}_{Ad}$, and $w_a \in p$, i.e., that Ad knows the true answer to the question.

[12]For a similar, though not identical, view of canonical questions, see Geurts (2019).

5. *Ad compliance*: Sp presents herself as assuming that Ad will resolve P by publicly committing to the true alternative in P in the immediate future of the conversation.

The properties in (20) follow from default assumptions concerning information-exchange moves among participants combined with the basic CDEs of assertions and questions given in (11), and the semantic content of questions assumed here.

The first two properties, *Open Issue* and *Ad responder* are common to assertions and questions. *Sp ignorance* follows from the 'increase of information' assumption, and the fact that were Sp to think she knows which alternative in P is the true one, a more efficient way of resolving P would be to simply assert a declarative sentence that publicly commits her to that alternative.

Ad competence follows from the fact that Sp performs a conversational move that steers the conversation towards a state where a participant resolves the issue, and the default case is for that participant to be Ad. It is therefore natural to take Sp to assume that such a state can in fact be reached. Note that having Ad be the default anchor of the commitments in the ps follows from *Sp ignorance* in a conversation between two interlocutors.

Ad compliance also follows from the fact that Sp steers the conversation towards states where Ad provides the relevant information. In the absence of this assumption, Sp's speech act would be futile as far as information increase is concerned. [13]

Canonical questions, then, are conversational moves whereby an ignorant speaker requests information from an addressee whom she assumes to be knowledgeable and who, she assumes, will propose the true resolution of the issue in the immediate future of the conversation. This characterization is in line with our intuitions as well as with the observations about canonical questions in the literature – see, for instance Searle (1969). What is new in the current set up is that the properties of canonical questions in (20) follow from the semantic content and basic CDEs of the forms used to ask them. None of these properties is hard-wired in the structure or interpretation of ordinary interrogative sentences, and therefore we predict that there can be questions that override them.

We can now characterize the distinction between canonical and non-canonical questions as in (21):

(21) Canonical and non-canonical questions

a. A question will be called *canonical* iff its contextual properties conform to (20).

b. A question will be called *non-canonical* iff its contextual properties do not conform to (20).

'Contextual properties' are properties of conversational moves that are assumed to be manifest to the participants in a conversation. The fact that privately, Sp knows the true answer to a question, but this fact is not public in the relevant conversation does not render her question non-canonical by virtue of overriding *Sp ignorance*. If, however, it is assumed in the context that Sp knows the answer to her question but she asks it nonetheless, the question will qualify as non-canonical.

Before turning to non-canonical questions in the next section, we briefly compare here canonical assertions with canonical questions.

First, note that the semantic content of forms used to ask questions is more complex than that of forms used to make assertions. As a consequence, the CDEs of questions are more complex than those of assertions. When Sp makes an assertion she commits to its resolution and projects a single

[13] In Farkas (2022) *Issue resolution goal* was listed as a further property of canonical questions. It was omitted here because this property follows, for both assertions and questions, from the fact that issues are raised to be removed, and the canonical way of removing an issue is to resolve it.

way of removing the question from the Table, namely by Ad committing to the same resolution. In canonical cases, Sp makes a novel commitment and assumes Ad will accept it. Assertions can thus be seen as simpler than questions in terms of content and CDEs, a property that correlates with the fact that, cross-linguistically, interrogative sentences are never simpler in form than declarative ones. Thus, there are languages that have interrogative particles that turn a declarative into a polar interrogative, but, as far as I know, there are no languages where declaratives are formed by adding a particle to an otherwise unmarked interrogative.

Note next that Ad's acceptance of an assertion can be made simply on the basis of Sp's prior commitment, in which case Ad's commitment will be *dependent* on Sp's prior commitment, in the terms of Gunlogson (2008). It may also happen that Ad shares Sp's commitment but has independent reasons for doing so, in which case Ad *co-sources* Sp's commitment in Gunlogson's terms. Finally, note that cases in which Sp asserts p in a context in which Ad is assumed to be not only knowledgeable relative to p but in fact more knowledgeable than Sp is, as exemplified by the 'declarative question' in (6) above repeated below, would qualify as non-canonical assertions which share with canonical questions the assumption that Ad is more informed than Sp with respect to P:

(22) *Speaker to a co-worker who shows up with a new hairstyle*:
You had a haircut.

The speech act in (22) is an assertion given the semantics and CDEs of the uttered sentence. Given the pragmatics of the situation, however, Ad is assumed to be better informed than Sp with respect to the truth of the unique alternative in P, and therefore the immediate goal of Sp must be other than informing Ad of its truth.

Note that the definitions of Assertion and Question in (15) and (18) above make no reference to the sentence forms used to perform these two speech acts. The connection between assertions and declarative sentences on the one hand and questions and interrogative sentences on the other arises because the issue denoted by typical declarative sentences contains a unique alternative, while that denoted by typical interrogatives contains more than one alternatives, and it is this issue that is placed on the Table as a result of the CDEs of these sentences. There is room for special cases, however, such as declaratives that do not denote a single alternative issue due to their intonation pattern, or interrogatives with covert semantics that converts them into directives.

Turning now to reactions to canonical questions, note that in their case Sp puts Ad on the spot: Sp acts as if she assumes that Ad will commit to one of the alternatives in the issue Sp has just placed on the Table, thus typically taking the first step towards reaching a mutually accepted resolution of that issue. In doing so, Ad has to provide novel information, and will have to be the *source* of this commitment. When asking a canonical question, Sp assumes that Ad is more informed than the speaker herself with respect to P, a risky assumption given our limited insight into other people's minds.

Finally, note that the discussion above sheds light on why assertions are intuitively seen as settling a question while questions are intuitively seen as requesting an assertion. For assertions, the issue P, whose single alternative is p, is supposed to be open in the input context, and, presumably, relevant to what the conversation is about at the time. In such a case, the input context is compatible with both p and $\overline{p}$, and the question of which one of these holds should be relevant to the current stage of the conversation. This means that the issue that has these two alternatives as its members is, implicitly or explicitly, a QUD. The assertion proposes to resolve this issue in favor of p.

The issue raised by a question is also canonically open, but in the case of questions, raising it

projects futures in which a participant (Ad, by default) proposes a resolution, i.e., commits to one of the propositions in the denotation of the question. A typical way of doing that is by asserting it.

We have seen above that canonical questions and assertions are faces of the same information exchange coin. Assertions typically impart information, while questions ask for it. This intuitively obvious characterization follows from the semantic content of ordinary declaratives and interrogatives, their basic CDEs, and default assumptions about the context against which assertions and questions are made.

4 Non-canonical questions

This section discusses some ways in which questioning speech acts may diverge from the default assumptions associated with canonical questions given above. But before turning to this issue, a further distinction needs to be made concerning the linguistic form in which a question is asked.

4.1 Marked and unmarked question forms

In many languages, including English, one can distinguish between formally unmarked questions, re-exemplified in (23), and formally marked ones, exemplified in (24):

(23) a. Did Mona arrive?
b. Who arrived?

(24) a. Mona arrived, didn't she?
b. Didn't Mona arrive?

Distinguishing between marked and unmarked forms is not a simple empirical or theoretical matter, and attempting to clarify it even for English let alone cross-linguistically, is beyond the scope of this chapter. It is useful, however, to bring this distinction up in order to make the point that the contrast of interest here, namely that between canonical and non-canonical questions, is orthogonal to it. As we shall shortly see, and as it has been noted at least since Searle (1969), quiz-questions, exemplified in (25), are non-canonical:

(25) *Teacher to student*:
What is the capital of Morocco?

Note that the same linguistic form, in a different context, can function as a canonical question, as exemplified in (26):

(26) *Student to teacher*:
What is the capital of Morocco?

The interrogative form in which the question is asked has no special properties distinguishing it from ordinary constituent questions in either case, and therefore the non-canonical question in (25) is formally unmarked.

Conversely, it may happen that a formally marked interrogative can be used to ask a canonical question (or only such questions). This is possible if the function of the special marker used is to strengthen a default assumption characterizing canonical questions. Two examples of such markers are *chi* and *cusà* in the central Sicilian dialect of Mussomeneli, discussed in Bianchi and Cruschina (2022). According to Bianchi and Cruschina's account, both particles strengthen a default assumption concerning the highlighted alternative in the denotation of the question to a

conventional implicature. The particle *chi* strengthens *Ad competence* relative to that alternative, while *cusà* strengthens *Sp ignorance* relative to it. Consequently, these particles may occur in canonical questions as long as their requirement is met. Thus, *chi* is fine in canonical questions in contexts in which Sp assumes Ad competence, but also in non-canonical questions such as quiz-questions, which, as we will see below, are compatible with this assumption but do not require it.[14]

We turn now to a brief overview of some non-canonical questions abstracting away from the issue of formal markedness.

4.2 Non-canonical questions and the default properties they override

The approach presented here leads us to expect non-canonical questions that depart from their canonical counterparts with respect to the properties in (20) above. The discussion below is meant to show that this expectation is fulfilled by reviewing types of non-canonical questions depending on the default properties of canonical questions that they override.

Given the CDEs of questions assumed here, the most fertile source of non-canonical questions is expected to be the epistemic status of their answer. This is so because the informative content of questions is trivial, modulo the presuppositions associated with the question. As a result, the commitment their basic CDEs register is either trivial or presupposed, and thus not liable to being strengthened or weakened.[15] On the other hand, *Sp ignorance* and *Ad competence* may be partially or totally overridden without the question becoming logically incoherent or pragmatically useless.

4.2.1 Non-canonical questions that override *Sp ignorance*

We start our brief tour of non-canonical questions with the well-known case of **quiz-questions**, exemplified in (25) above. Their non-canonical nature stems from the fact that they are asked in contexts that override *Sp ignorance*. In such questions, Sp is contextually assumed to know the true answer to her question, and, in typical cases, there is no assumption concerning *Ad competence*. In such questions, because it is contextually given that Sp knows the answer, her aim in raising the issue cannot be taken to be that of resolving it as efficiently as possible since if that had been her aim, she would have reached it by simply asserting the true answer. In a teacher/student or quiz show type situation both participants assume that Sp's aim is to publicly establish whether Ad knows the true answer or not.[16]

Socratic questions, exemplified in (27), are closely related to quiz questions. They are asked in a context in which Sp's competence is taken for granted, but where both Sp and Ad assume Sp's aim in raising the question is to lead Ad to the true answer of that question in order to resolve an overarching super question. In this case *Ad competence* is not overridden, since upon reflection, Ad is supposed to reach the true answer on his own. Since both Sp and Ad are assumed to know the answer (though Ad only after pondering the question), *Open issue* is overridden as well.

[14] Bianchi and Cruschina claim that *cusà*, on the other hand, can only be used in canonical questions but they only consider types of non-canonical questions that contradict *Sp ignorance*. See also Gärtner and Pankau (2024) for an account of a d-marker in the Marzahn dialect of German that is only compatible with information seeking *wh*-questions. In the proposed account, this marker signals that the CDEs of questions obtain.

[15] This contrasts with assertions, whose Sp commitment contribution is typically nontrivial, and therefore open to modification with respect to its strength and the nature of the evidence that supports it.

[16] It may well be that a quiz question is asked in a context in which Ad is already assumed to be competent, or, alternatively, to be ignorant. In such cases the aim pursued by Sp in asking the question will be taken to be different, such as letting bystanders find out the true answer, or shaming Ad for his ignorance.

(27) *Teacher*: What is the subject of the sentence on the blackboard?
Student: Hm. I don't know.
Teacher: Well, what NP does the verb agree with?

Here the teacher's second question is the Socratic one. She assumes that her student is able to figure out which NP the verb agrees with, and that her question will jolt the student's memory and remind him that the verb agrees with the subject, which in turn will enable him to answer the teacher's first question.

Socratic questions point to the necessity, mentioned above, of endowing the cg with more structure. In this case the student is not able to answer the teacher's first question directly despite the fact that the necessary information to answer it is in fact assumed to be part of the background assumptions in the cg. The teacher's second question is supposed to bring its answer to salience, jolt the students memory, and thereby help the student figure out the answer to the first question, based on information in the cg but which he was unable to marshal on his own. Socratic questions remind us that actual conversations depart from the ideal in that not all information that is assumed to be in the cg is equally accessible to all participants at all times.

4.2.2 Non-canonical questions that override *Ad responder*

Recall that by default, in contexts with two or more participants, *Ad responder* ensures that the commitment anchor in the ps is Ad. In the case of questions, this is reinforced by *Sp ignorance* and *Ad competence*. This default can be overridden in situations in which it is assumed that Sp will answer her own question, in which case the question is said to be **self-addressed**. In such situations, *Sp ignorance* may be overridden as well. Questions are naturally interpreted as self-addressed in situations in which Ad is not in a position to actually participate in the conversation, as in (28):

(28) *Politician addressing her TV audience*:
Why should you vote for me? Because I have dedicated my whole life to public service.

Here Ad is the audience, which is the referent of the second person plural pronoun *you*. In this context, however it is assumed that Sp will answer her own question.

Self-addressed questions are also possible in contexts in which Ad would in principle be able to participate in the conversation but Sp assumes they will not, and that it is clear to all participants that she raises the question in order to answer it herself. The non-canonical nature of this type of question is due to the non-default value of the commitment anchor in the ps, which in turn is the result of the special nature of the situation in which the speech act is performed.

The existence of self-addressed questions such as (28) points to the necessity of separating the role of *Addressee*, i.e., the interlocutor, who is the participant with whom Sp is conversing, from the role of *Responder*, i.e., the participant who is assumed to respond to the question. These two roles are conflated in default cases, which in the present set up is captured by assuming that the default commitment anchor in the ps is Ad.

Note that unlike in the case of 'quiz' questions, the aim of Sp here is to increase public information relative to the issue she places on the Table, but special considerations lead her not to take the most efficient route for doing so.

Inclusively self-addressed questions, sometimes called 'engaging', 'conjectural' or 'topic setting' questions, are typically asked in contexts where it is mutually assumed that the answer will be reached after a series of collaborative moves involving both Sp and Ad. In such questions the anchoring in the ps is not the default value, i.e., Ad, but rather, the group made up by Sp and

Ad. Additionally, the issue raised by an inclusively self-addressed question cannot be assumed to be resolved in the immediately next move, and therefore *Ad competence* is overridden. An example of such a question is given in (29):

(29) *Alex and Bea are collaborating on a paper. At the beginning of their work session Alex says*:
So, the question now is: Why are these facts the way they are?

In this context, Alex is setting the agenda for their work rather than signaling that he assumes Bea will provide the answer.

Note that the questions that override *Ad responder* and include Sp in the projected commitment anchor may or may not override *Sp ignorance*. The context of (28) overrules *Sp ignorance*, while that of (29) reinforces it.

The interrogative forms we have considered so far have been formally unmarked. In such cases there is no d-marker that can trigger special CDEs. Consequently, the effects of these forms on their input structure is the same as that of canonical questions. The non-canonical nature of these questions is due solely to contextual assumptions shared by participants in the conversation, i.e., they are purely pragmatic. In the current approach, such an account is possible because the canonical properties of questions are not hard-wired in their semantics or their CDEs and therefore are open to being overruled by contextual factors.

4.2.3 Non-canonical questions that weaken *Sp ignorance*

Some of the non-canonical questions we have seen so far, such as quiz-questions, Socratic questions and some self-addressed questions, are asked in situations that overrule *Sp ignorance*.

Recall that ignorance was characterized above as not knowing the true answer, while competence was characterized as knowing it. There are, however, several distinct epistemic stances an agent may be in relative to the answer to an issue which fall in between these two positions. The weakest such stance, i.e., the strongest form of ignorance as to the resolution of an issue P, is when an agent is neutral relative to the alternatives in P. In such cases, there is no $p \in$ P that is favored given the doxastic base of the agent. A stronger stance is a case in which there is a $p \in$ P such that the agent's doxastic base favors p without, however, including it. If this situation obtains, the agent is said to be biased in favor of p.[17] **Biased questions** are questions that are asked in situations in which Sp is assumed to favor a particular proposition in P. The class of biased questions I consider here are questions that signal, with a special morphological or intonational marker, that Sp is biased for one specific, identifiable alternative in the denotation of the question. Such questions therefore override *Sp ignorance* without necessarily entailing that Sp knows the true answer.

Under the assumptions adopted here, the denotation of polar questions singles a particular alternative, namely the highlighted one, as a potential target for bias, while constituent questions do not. It follows then that markers specialized for signaling bias will occur with polar but not constituent questions.[18] Two examples of biased questions in English are tag interrogatives and

[17] Note that the discussion can be extended to cover deontic bias as van Rooij and Šafářová (2003)'s claim it should, by grounding the bias in a deontic rather than a doxastic base. Note also that the large issue of evidentials is connected to bias but how to capture this connection is a non-trivial matter that is beyond the scope of this chapter.

[18] Bias can be signaled with a non-dedicated marker as well, as has been shown for both positive and low negation polar questions in English. The discussion here abstracts away from this possibility. See Roelofsen and Farkas (2015) for an account of bias in positive and in low negation polar questions. Note also that an unmarked question can be asked in contexts in which Sp is assumed to be biased, as in (i):

(i) I suspect the baby is asleep already. What do you think? Is she asleep?

'high negation polar questions', exemplified in (30):

(30) a. The baby is asleep, isn't she?
b. Isn't the baby asleep?

In the case of tag interrogatives, Sp signals epistemic bias for the highlighted alternative while also signaling her readiness to accept its negation. In high negation polar questions, a topic that has attracted a vast amount of attention, Sp signals a conflict between her previous epistemic bias for p (in this case, that the baby is asleep) and the existence of current contextual evidence for $\neg p$.[19]

Whether 'rising declaratives' used as questions in English, exemplified in (31),

(31) *A to B, who is obviously getting ready to leave*:
You are leaving?

should be treated as biased questions or weakened assertions is a matter of debate in recent literature, with Farkas and Roelofsen (2017) taking the former position, and Gunlogson (2001), Rudin (2018), a. o., the latter.

Even from this most cursory look at biased questions one can conclude that they may differ with respect to the source of bias, as well as with respect to its strength. With respect to source, the bias can be rooted in Sp's doxastic state, in the context, or in a combination of both, with the two sources of bias pointing in contradictory directions. For a seminal discussion of the typology of biased questions with respect to the source of bias in Japanese, see Sudo (2013), as well as Northrup (2014) and Hirayama (2017). Most recently, Korotkova (2023) points out that Russian *razve* signals a complex combination of factors, namely epistemic bias for $\neg p$, and contextual bias for p, the latter being rooted in an abductive inference. Note that in cases of such contradictory bias, Sp's current doxastic base can well be neutral with respect to p.

In the Table model, Farkas and Roelofsen (2017) propose to treat bias as targeting the unique highlighted alternative in the denotation of the question. To capture the effect of an interrogative marked for bias they propose to add to the discourse commitments of participants a potentially empty list of *evidenced commitments*, i.e., propositions for which the commitment anchor has some evidence.[20] Biased questions add the highlighted alternative to this list. The force of bias is connected to the degree of subjective credence assigned to propositions in this list. In this framework, contextual bias would be treated as a presupposition requiring the input context to be biased for the highlighted alternative.

4.2.4 Non-canonical questions that override *Ad competence*

As mentioned above, *Ad competence* is based on potentially risky assumptions about what other people know. In the case of questions, overestimating the knowledge of Ad may lead to Ad losing face, and the question remaining unanswered. Underestimating this knowledge, on the other hand,

Finally, note that a speaker may be privately biased without the context or the form of the question signaling it, as in (ii):

(ii) A: Did you have breakfast today?
B: Yes, I did.
A: I thought so. I saw the cereal bowl in the sink.

[19]The topic of high negation polar questions is too vast to discuss here. For some seminal discussion, see t Ladd (1981), Romero and Han (2004), and the recent study in Goodhue (2018).

[20]In Farkas (2022) this is amended to dividing discourse commitments into two sets, categorical and non-categorical commitments.

may hinder getting information one wants to have. In addition, there are situations in which a speaker may well want to place a question on the Table even though it is not assumed that the addressee is able to resolve it, or even in case it is assumed that she cannot do so.

One way of dealing with situations in which Sp is seeking information but cannot assume that Ad has it is to ask an indirect question, of the type exemplified in (32):

(32) *Speaker stops a stranger in the street*
Excuse me! Do you (happen to) know where the post office is?

Here the issue Sp raises is that of Ad's competence relative to the embedded question. The question is called indirect because Sp assumes Ad will realize that the issue she is actually interested in settling is the one expressed by the embedded clause. The actual question Sp places on the Table is canonical in the sense that both *Sp ignorance* and *Ad competence* are met in the context. Its special status resides in the fact that Sp relies on Ad figuring out, with the help of Gricean pragmatics, that her aim in asking this question is, in fact, to settle the embedded question, and therefore, if the answer to the matrix question is positive, Sp can expect Ad to provide the information she is after. Such questions work precisely because Sp can assume that Ad will realize that Sp is avoiding asking the embedded question directly because the context does not support *Ad competence*.

The question in (32) overcame the absence of *Ad competence* assumption by resorting to Gricean pragmatics. Languages may, however, provide various formal markers that can be used in questions asked in situations in which the *Ad competence* assumption is not met.

A different type of situation is one where Sp cannot assume *Ad competence* but wishes to engage Ad in debating the issue nonetheless, as in the case of *engaging questions* mentioned above in (29). German questions marked by the morpheme *wohl*, discussed in Eckardt (2020), which she dubs **conjectural questions**, are examples of such engaging questions. German, then, is among those languages that have a formal d-marker, often associated with epistemic possibility, whose function is to signal that the question is engaging rather than canonical, and therefore that Sp suspends *Ad competence* but expects Ad to do her best in figuring out, together with Sp, the answer to the question raised. As mentioned above, in these cases, in the set up proposed here, the commitment anchor in the ps is the group made up of Ad and Sp.

So far, we have discussed non-canonical questions in which *Ad competence* is suspended. A more radical way of overriding *Ad competence* is to *contradict* it, and signal that Sp assumes that Ad ignores the answer to her question. In such a case *Ad compliance* must be suspended as well. In case Sp is also supposed to be ignorant, no future in which the issue is resolved is projected, and therefore the *Resolvable issue* corollary is overruled. Woods and Haegeman (2023) argue that the West Flemish question particle *kwestje* signals precisely this type of *non-inquisitorial* question: it reinforces *Sp ignorance* and marks that Sp assumes that Ad is ignorant as well. Thus, the only projected conversational state compatible with the input context as assumed by Sp is one where the question remains open, and therefore such contexts contradict, besides *Ad compliance*, *Resolvable issue* as well. For examples and discussion, see Woods and Haegeman (2023). In Woods and Haegeman's proposal, such questions project a single discourse state, one where the question remains open.[21] A similar account is proposed for the Hungarian interrogative particle *vajon* in Gärtner and Gyuris (2023).

[21]Note that this account raises a problem for the assumption in Farkas and Roelofsen (2017) according to which special discourse effects triggered by d-markers are always monotonic, i.e., can only add to the basic discourse effects associated with the semantic content of the utterance. This assumption has to be weakened in case the basic discourse effects are not compatible with the presuppositions associated with the discourse marker. The necessary weakening is a natural one. It involves projecting only those discourse futures that are compatible with input context assumptions.

4.2.5 Non-canonical questions that override *Ad compliance*

We have already seen that non-canonical questions that suspend or contradict *Ad competence* result in suspending or contradicting *Ad compliance* as well: an addressee who is not assumed to know the answer to a question cannot at the same time be assumed to provide it. Note, however, that the present set-up allows for the possibility of discourse markers whose only effect amounts to suspending *Ad compliance*, without imposing any additional assumptions concerning the epistemic status of the answer relative to any of the participants. Farkas (2022) proposes that the interrogative Romanian particle *oare* instantiates precisely this case. Its effect is to mark the question as **non-intrusive** by adding to the elements of the ps a conversational state in which the question remains open, without however ruling out states in which it is answered. In this account, this particle does not impose any restrictions concerning the epistemic status of the answer relative to the participants in the discourse, and therefore it is compatible with situations in which the responder is assumed to be ignorant, as well as situations in which she is assumed to be competent.

In the discussion above we have seen two paths that lead to suspending *Ad compliance*. One of them involves contradicting *Ad competence*, as illustrated in the account of *vajon* in Gärtner and Gyuris (2023) or *kwestje* in Woods and Haegeman (2023). The other, illustrated in the account of *oare* sketched above, involves overriding it directly, without extra assumptions involving the epistemic status of the answer relative to the responder. The crucial distinction between these two types of questions involves subtle acceptability judgements in contexts in which the responder is assumed to be competent. In such contexts, *oare*-type particles should be acceptable if the context can justify the non-intrusiveness of the question, while *kwestje*-type particles should be ruled out. Note also that *kwestje*-type questions are close to Eckardt's conjectural questions: both suspend *Ad competence*, but with different force: Sp in the case of the former signals that she assumes the responder is ignorant, while in the latter, she signals that she does not assume the responder to be knowledgeable.

I suggest that one should reserve the term *non-instrusive* for questions that add to the ps a future state in which the question remains open. Within this group of questions, *ignorant non-intrusive* questions signal that Sp assumes the interlocutors do not know the true answer to the question, whike *neutral non-intrusive* lack this component.

4.2.6 Non-canonical questions that override *Open issue*

Recall that according to the *Open issue* characteristic of canonical questions such questions should be resolvable relative to c_i but not resolved in c_i. **Rhetorical questions** override the *Open issue* assumption. According to Rohde (2006), the issue raised by a rhetorical question is either assumed to be already resolved in the input context, as in (33-a), or it is assumed to be unresolvable, i.e., both Sp and Ad are assumed to be ignorant, as in (33-b).

(33) a. Mother: Do you have your lunch?
Child: Do I look stupid? / Is the pope Catholic?
b. Imagine! They cancelled *The Hour*. What next? No show is safe anymore.

In (33-b) neither participant is assumed to know what show will be cancelled next, though both are assumed to believe that it is possible (and even likely) that some show will be cancelled. Thus, neither participant is assumed to know the true answer to the question. In fact, the rhetorical point of the question is precisely to point out that it is now impossible to predict which show will be cancelled next since cancellation can affect even the least likely. Such 'unanswerable' rhetorical questions were first discussed in Rohde (2006).

Common to both subtypes of rhetorical questions is that they override the *Open issue* assumption. I follow Rohde (2006) in calling such questions redundant. Being redundant is a necessary but not a sufficient condition to render a question rhetorical. Thus, the question in (34) raises an already resolved issue but does not qualify as rhetorical:

(34) I know you just said it but I want to hear it again. Will you marry me?

Similarly, there are questions that are presumed to be unanswerable and yet they are not rhetorical. West Flemish *kwestje* questions are a case in point. An English example is given in (35):

(35) What is in the mind of babies when they are born? Nobody knows, of course. We can only speculate.

The additional property, I claim, that renders a redundant question rhetorical is that the overt aim Sp is assumed to pursue in asking her question is to make a rhetorical point in the form of an obligatory conversational implicature to be calculated based on contextual information, to wit, the status of the question in the context, and the immediately preceding conversation. In (33-a), the child's aim in asking her question is to convey that she assumes the mother's question is just as superfluous as hers, and therefore should not have been asked. In (33-b), the speaker's aim is to convey that the rhetorical question is unanswerable precisely because, given the cancellation of *The Hour*, one can no longer predict which shows will escape cancellation.

In the view of questions presented here, rhetorical questions denote an issue P that contains multiple alternatives. Because of contextual assumptions, however, the only possible projected conversational state is the current one. This is so either because there is only one alternative in P that is consistent with the input cg of the input state, and is, in fact, already one of its elements, or because it is assumed that there is no alternative in P that is compatible with the input cg. Such a question cannot have as its aim resolving the issue it raises. What makes the question rhetorical is the obligatory conversational implicature that constitutes its rhetorical point.[22]

A summary of the main non-canonical question types discussed here and the crucial default assumptions they override is given below.[23]

	Open Issue	Ad Resp.	Sp Ign.	Ad Comp.	Ad Compl.
Quiz Qs			⋆	⋆	
Socratic Qs	⋆		⋆		
Self-addressed Qs		⋆			
Biased Qs			⋆		
Conjectural Qs				⋆	
Non-intrusive Qs					⋆
Rhetorical Qs	⋆				

Main non-canonical question types

Quiz questions, Socratic questions and Biased questions all crucially override *Sp ignorance*. Common to Quiz questions and Socratic questions is that Sp is assumed to know the answer, while in the

[22]For more discussion of rhetorical questions in the Table framework, see Farkas (2024).

[23]This summary ignores the distinction between various ways of overriding a default assumption. *Ad competence*, for instance, can be suspended in case Ad is not assumed to know the answer, but it is also suspended in case Ad is assumed to ignore the answer.

case of Biased questions, Sp is required to at least not be completely neutral with respect to which answer is the correct one. The essential difference between these three types of questions concerns the aim Sp is assumed to be pursuing in asking her question. When asking a Quiz question, Sp's aim is to find out whether Ad knows the answer or not, which is why *Ad competence* is usually overridden as well. When asking a Socratic question, Sp's aim is assumed to be to help Ad resolve an overarching question by making him ponder the immediate question and reach its answer on his own. Biased questions are neutral with respect to the aim Sp pursues in asking her question. They are not appropriate as Quiz questions in case Sp is assumed to know the true answer and the form of the question betrays which answer Sp is biased in favor of. Such questions are, however, compatible with a particularly helpful Socratic question interpretation, as exemplified in (36):

(36) *Teacher*: What is the subject of the sentence on the blackboard?
Student: Hm. I don't know.
Teacher: Well, the verb agrees with the NP *the children*, doesn't it?

Rhetorical questions differ from Socratic questions in that when asking a rhetorical question, Sp aims to make a rhetorical point rather than help Ad to resolve an overarching question.

Without aiming to be exhaustive, the discussion above shows that properties of at least some non-canonical questions, as well as those of their canonical counterparts can be derived from explicit assumptions about context structure and how these structures are changed by the CDEs of utterances.

5 Conclusion

This chapter offered a characterization of canonical questions in the Table model and then considered how non-canonical questions may diverge from their canonical sisters. In this view, the properties of canonical questions follow as default assumptions accompanying a move that places an issue that contains multiple alternatives on the Table. None of these properties is necessarily hard-wired in the denotation of interrogative sentences, and therefore it is not surprising that we find instances of non-canonical questions that override one or more of these assumptions. We have briefly discussed a variety of such cases, based on which default assumptions they override. In the present approach, the great versatility of questions is the result of the interaction of a simple semantics, a simple view of the core effects questions have on the discourse structure they update, and Gricean pragmatic considerations. If such an account is possible, parsimoniousness considerations lead us conclude that it is desirable as well.

A conclusion of this overview is that none of the default assumptions that characterize a question is necessary for an utterance to be interpreted as a question. One may then wonder whether there is a necessary and sufficient property that all utterances that qualify as questions have. In the framework presented here, the necessary and sufficient property that makes an utterance a question is that of denoting an issue that contains multiple alternatives. This, of course, is not the only possible answer. Rudin (2018), for instance, proposes that what is essential to a question is raising an issue without committing to a resolution of that issue. How to choose between these two alternatives is an issue whose resolution is left for future work.

The above discussion is meant to initiate further work on non-canonical questions. Such work will hopefully address the issue of whether all types of non-canonical questions can be insightfully captured in the Table model or not, and if not, what further assumptions one needs to make in order to capture them.[24]

[24] A useful point of departure is Bolinger (1978), which discusses a large number of cases in which polar questions

Note that, as has been pointed out above, the characterization of canonical and non-canonical assertions and questions given here is compatible with a variety of further aims speakers may pursue when performing a speech act, besides placing an issue on the Table. Among them are making a promise, issuing a threat or an invitation, informing Ad of some fact that is presented as a presupposition to be accommodated etc. How these further aims interact with the characterization of assertions and questions as defined here is an issue I leave open.

SHOULD I SAY SOMETHING ABOUT REQUEST FOR INFO BEING AT LEAST ONE OF THE AIMS OF CANONICAL QUESTIONS GIVEN THEIR CDEs., SOMETHING ALREADY MENTIONED?

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can be used but their alternative question counterparts cannot. For our purposes, this inventory of special pragmatic circumstances that are compatible with the use of a polar question raises the issue of how each can be accommodated in the current framework.

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