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Variation at the Syntax–Pragmatics Interface: Discourse Particles in Questions

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Abstract: This paper focuses on the microvariation concerning the distribution and functions of certain interrogative discourse particles found in several central and southern Italian dialects. These particles show many similarities in terms of both their morphological shapes (being homophonous to the wh-phrase corresponding to English ‘what’) and their syntactic distribution within the sentence, in that they all occur at the beginning of polar questions. However, a careful analysis of their distribution across a pragmatically defined typology of canonical and non-canonical polar questions shows that these particles are not possible in all question types. In particular, two patterns emerge: in Pattern B, the particle is associated with a conventional implicature that both the speaker and the addressee are competent with respect to the issue addressed by the polar question, while in Pattern A, this implicature is restricted to the addressee competence. This point of microvariation is then analysed by assuming that both the pragmatic assumptions of competence and the discourse participants are encoded in the syntactic representation; the cartographic framework is adopted to characterize the compositional structure.

Keywords: discourse particles; polar questions; canonical questions; non-canonical questions; speaker; addressee; Italian dialects

1. Introduction

In several languages, the primary function of a polar question particle is to mark the sentence as a question, hence directly contributing to the determination of its illocutionary force and sentence type. The particle can also help to identify the focus of the question, but the actual relationship between polar question particles and the focus varies from language to language (Ladd 2008, pp. 225–26; Bailey 2013; Dryer 2013a, 2013b). In some languages, there is no connection between the focus and the position of the particle, which independently occurs in a fixed position at the edge of the question, either in a sentence-initial position (e.g., in Yoruba) or sentence-final position (e.g., in Chinese). In other languages, by contrast, the particle attaches to the focus of the question, either in different positions depending on the location of the focus (e.g., Turkish, Bulgarian, Russian) or in a fixed position to which the focus constituent is moved (e.g., Finnish, cf. Holmberg 2014).

These interrogative particles must be distinguished from the discourse particles that can occur in questions, which mark neither the illocutionary force nor the focus of the sentence. Their specific interpretive contribution may be rather subtle, but it is intrinsically tied to the context and to the discourse participants and may thus involve various semantic and pragmatic effects, such as a bias with respect to the answer, a request for a confirmation on the basis of a (strong) presupposition, contrast against expectations, or the expression of surprise. It is precisely this type of interrogative particles (discourse particles) that are found in the Italian dialects (see, e.g., Munaro 1999; Munaro and Obenauer 2002; Munaro and Poletto 2003, 2008; Obenauer 2004; Garzonio 2004; Damonte and Garzonio 2009; Cruschina 2012; Lusini 2013). These particles may indirectly facilitate the identification of the sentence.
as a question, but in most cases, they are not exclusively limited to the interrogative force, being also possible in other sentence types. They are typically optional and contribute additional, special non-at-issue meanings to the question denotation.

In this paper, we analyse the distribution and function of a specific discourse particle found in various central and southern Italian dialects in the initial position of main polar questions. In the local dialect, this particle is homophonous to the object wh-phrase equivalent to English *what* (henceforth *what*-particles; cf. Rohlfs 1969; Manzini and Savoia 2005, 2011). Our starting point is the particle chi [‘kI] in the central Sicilian dialect of Mussomeli, and the recent analysis of this particle developed in Bianchi and Cruschina (2022) and Cruschina and Bianchi (forthcoming):

(1) (Chi) ci veni ta frati au vattisimu?

‘Is your brother coming to the Christening?’

We will then compare its function and distribution with the corresponding what-particles in other dialects, such as che in Tuscan and in Romanesco, and ce in Salentino. We show that in order to reach beyond a descriptive characterization of these particles and to capture the aspects of microvariation, it is important to adopt a formal model of the discourse context. The syntactic investigation can then build on this model as an analytic tool to establish the encoding of non-at-issue content in the syntactic structure: in other terms, the import of the ‘pragmatic’ projections must be formally characterized at an adequate level of abstraction. Non-at-issue meanings are typically anchored to the discourse participants, leading to the question of the syntactic representation of speaker and addressee in the left periphery of main clauses (see Speas and Tenny 2003; Tenny 2006).

The paper is structured as follows. In Section 2, we present a typology of canonical and non-canonical questions inspired by Farkas (2020). This typology is essential to test the distribution of the what-particles under investigation. In Section 3, we summarise our previous work on the Mussomeli Sicilian particle chi, while in Section 4, the discourse particles found in the central and southern dialects of Italy will be examined from a comparative perspective. Two types of particles will be identified, but our analysis will focus on the particles of the second type: what-particles, which roughly correspond to Sicilian chi and are limited to polar questions. The analysis of their distribution across canonical and non-canonical polar questions, developed in Section 5, will allow us to identify two patterns of microvariation concerning their function and precise pragmatic import. In Section 6, we attempt to connect these patterns of microvariation to specific pragmatic and syntactic properties, and in Section 7, we propose a syntactic implementation of our analysis. Section 8 closes the paper with some final remarks and suggestions for future research.

2. Speaker and Addressee in Canonical and Non-Canonical Questions

The previous literature on interrogative discourse particles in Italian dialects has shown that these particles contribute special meanings of pragmatic nature (Munaro and Poletto 2003, 2008; Garzonio 2004; Obenauer 2004). Building on these studies, which have highlighted the pragmatic interpretations associated with non-canonical interrogatives, in this paper, we want to flesh out the import of the interrogative what-particles chi/che/ce in the light of the typology of canonical and non-canonical questions presented in Farkas (2020).

According to Farkas (2020), canonical questions and assertions are uttered with the goal of increasing the information that is available to all discourse participants about an open issue. Each open issue consists of a set of alternative propositions, and the aim of the participants is to reach a joint commitment to the true alternative that resolves the issue. In particular, for canonical questions, Farkas proposes the following default pragmatic assumptions:
(2) 

a. **Open issue**: The speaker assumes that the issue she is introducing is not yet resolved in the input context.

b. **Speaker ignorance**: The speaker presents herself as having an epistemic state that does not support commitment to any of the alternatives in the issue.

c. **Addressee competence**: The speaker presents herself as assuming that the Addressee’s epistemic state supports her commitment to the true alternative.

d. **Addressee compliance**: The speaker presents herself as assuming that the addressee will resolve the issue by committing to the true alternative.

By (2c–d), the expected source of information is the addressee, who is assumed to know the correct answer and to be able to commit to the true alternative. The speaker is, by assumption, ignorant with respect to the open issue; otherwise, she would have directly committed to the true alternative as a more efficient move to increase the shared information.

Non-canonical questions are questions for which one or more of these assumptions do not hold. They can therefore be characterized on the basis of whether either speaker ignorance or addressee competence or indeed both default assumptions are weakened or suspended. **Quiz questions**, for example, are non-canonical questions that involve the suspension of both speaker ignorance and addressee competence. These questions are asked by a competent speaker to test the addressee’s knowledge about a specific subject:

(3) *Teacher to Joey*: Joey, what is the capital of France?

(Farkas 2020: ex. (23))

Moreover, if the speaker has a bias towards one of the alternatives in the open issue, the default assumption of speaker ignorance is weakened. However, the speaker still assumes that the addressee is able to provide a final resolution of the issue; that is, the assumption of addressee competence is still holding. This is the case of another type of non-canonical question, namely, **biased questions**, asked when the speaker believes or expects that something is the case and requests a confirmation (hence, the alternative name of **confirmation questions**). An example from English is the interrogative tag pronounced with a rising intonation, which marks the speaker’s bias towards the truth of the preceding declarative:

(4) Maria is joining us, isn’t she?

(Farkas 2020: ex. (37))

In **rhetorical questions**, instead, the open issue assumption is overridden: the speaker presupposes that the issue is already closed in the context and that its resolution is obvious to all participants. Indeed, rhetorical questions are not asked to seek an answer: speaker ignorance does not hold, and addressee competence is taken for granted. In (5), for example, a rhetorical question is used to answer a previous non-rhetorical question, pointing to the obviousness of the answer, as well as to the superfluity of the mother’s question:

(5) Mother to son: Have you packed your lunch today?  
Son: Do I look stupid?

(Farkas 2020: ex. (32))

We add **surprise/disapproval questions** to Farkas’s typology of non-canonical questions (cf. Obenauer 2004; Garzonio 2004). This type of question is very similar to rhetorical questions in that an open issue is missing, speaker ignorance is suspended, and addressee competence is automatically assumed. Unlike rhetorical questions, however, surprise/disapproval questions are not asked to point out the obviousness of the answer but to express the speaker’s incredulity or discontent towards an observed state of affairs:

(6) a. Are you eating?!  
b. What are you eating?!
The default pragmatic assumptions that are relevant to characterize canonical and non-canonical questions are speaker ignorance and addressee competence; their values are summarized in Table 1.1

Table 1. Pragmatic assumptions in canonical and non-canonical questions.

| Question Type          | Speaker Ignorance | Addressee Competence |
|------------------------|-------------------|-----------------------|
| Canonical Qs           | +                 | +                     |
| Quiz Qs                | −                 | −                     |
| Biased Qs              | −                 | +                     |
| Rhetorical Qs          | −                 | +                     |
| Surprise/Disapproval Qs| −                 | +                     |

Bianchi and Cruschina (2022) and Cruschina and Bianchi (forthcoming) have applied this typology to investigate the distribution and function of two Sicilian discourse particles found in main polar questions. In the following section, we report the characterization of the particle chi, which will be essential for the comparative analysis with similar what-particles in other Italian dialects.

3. The Sicilian Particle chi in Polar Questions

In Sicilian, a direct polar question (henceforth, PQ) is optionally introduced by the particle chi (Rohlfs 1969; Leone 1995; Cruschina 2012; Bianchi and Cruschina 2016), as exemplified in (1):

(7) (Chi) ci veni ta frati au vattisimu?

PTC there= comes your brother to-the christening

‘Is your brother coming to the christening?’

An important distributional constraint concerns the limitation to polar questions: chi can introduce PQs but is incompatible with both wh- and alternative questions, as shown in (8a) and (8b), respectively. It is important to stress that chi is incompatible with alternative questions which require a choice in a closed list and are accordingly uttered with an ascending-descending intonation (as indicated by the symbols ↑ and ↓ respectively):

(8) a. (*Chi) a cu vitti Giuvanni?

PTC ACC who see.PST.3SG John

‘Who did John see?’

b. I picciotti (#chi) sunnu dintra ↑ o nisciuti ↓?

The boys PTC are inside or gone-out

‘Are the boys at home or outside?’

(Bianchi and Cruschina 2022, pp. 3–4)

Bianchi and Cruschina (2022) and Cruschina and Bianchi (forthcoming) show that in the central Sicilian dialect of Mussomeli, chi is associated with addressee competence and is therefore possible not only in canonical PQs but also in those non-canonical PQs for which the pragmatic assumption of [+addressee competence] holds (cf. Table 1). Chi is therefore allowed in all types of PQs except for quiz PQs, as shown in (9):

(9) (#Chi) a Sicilia (#chi) jè l’isula chiù ranni d’u Mediterraneu?

PTC the Sicily PTC is the-island more big of-the Mediterranean

‘Is Sicily the biggest island of the Mediterranean Sea?’

From a pragmatic viewpoint, the role of chi is to strengthen the default assumption of addressee competence to a conventional implicature (in the sense of Potts 2005). The particle is used in PQs to highlight a unique alternative (the proposition conveyed by the sentence radical), and it conveys the conventional implicature that the highlighted alternative is decided in the addressee’s current epistemic state, either positively (yes answer) or negatively (no answer). This analysis explains why chi is excluded from wh-
questions and alternative questions: the particle requires its host clause to highlight exactly one alternative, and this is the case only in PQs (see Bianchi and Cruschina 2022 for more details).

Farkas’s characterization of (non)-canonical questions in terms of speaker ignorance and addressee competence allows us to capture the distribution of the chi particle. As we will see in the next section, it also helps us to understand the difference between chi and similar particles found in other Italian dialects.

4. Interrogative Discourse Particles in the Dialects of Italy: A Comparative Approach

In this section, we present the results of a preliminary investigation into the interrogative what-particles similar to Sicilian chi that are found in several central and southern Italian dialects. These particles present a very similar distribution; they might exhibit a different morphological realization (see below), but they are all homophonous to the wh-phrase corresponding to English what in the local dialect. These similarities beg the question of whether we are dealing with the same particle with slightly different morphological shapes but with the same value, or rather if they qualify as distinct particles playing different functions. The analysis that we will propose below implies that all these what-particles have the same import, except for one difference.

Our study is based on the data collected through a questionnaire that we administered either in a written format or by means of an online interview. The questionnaire consisted of a set of canonical and non-canonical PQs, in Italian, each presented in a context that elicited the relevant interpretation. Native speakers had to translate the questions from Italian into the local dialect and determine whether the addition of the discourse particle to a given question would prove pragmatically felicitous in the context specified. The questionnaire was followed by post hoc questions on the special meanings of the PQ in those contexts in which the discourse particle was judged as felicitous. These guided interviews were essential to identify and understand the subtle interpretations associated with the presence of the particle, a task that would have been impossible with a quantitative study.

The survey points are the following: Modica in Sicily, Reggio Calabria and Cosenza in Calabria, Mesagne in Salento, Rome (i.e., Romanesco, the Italian dialect spoken in the capital city), and the Tuscan dialects spoken in Florence and Siena. See the map in Figure 1, which also includes Mussomeli. The main aim of our investigation was to capture the patterns of variation displayed by the interrogative discourse particle. For this reason, we have only consulted a few speakers for each survey point (from one to three speakers), focusing on a qualitative analysis of the results and leaving a broader quantitative study for future research. On the basis of our data, we are not able to make solid generalizations about the exact geographic distribution of the particle, but from a semantic and pragmatic viewpoint, two clear and consistent patterns emerge. Before moving to these patterns, let us start with some empirical observations about the types of discourse particles that can occur in questions in central and southern Italian dialects.
Two types of particles can be found in questions, as already pointed out by Damonte and Garzonio (2009). The first type comprises particles that are used for emphatic purposes across different clause types, including PQ (10) and wh-questions (11): a, ca, or nca in Sicilian, a in Calabrian, and o in Florentine (see Garzonio 2004). Several dialects use ma as a sentence-initial particle in PQs (e.g., Cosenza, Reggio Calabria, Siena, Romanesco, etc.; cf. (15b), (18), (19) and (24c) below).

| (10) | a. A iddru ancora ccà jè? (Mussomeli Sicilian) |
|      | b. Ca iddru ancora ccà è? (Catanzaro Calabrian) |
|      | c. O lui che gl’è ancora qui? (Florence) |
|      | ‘Is he still here?’ |
| (11) | a. A cu u dici? (Mussomeli Sicilian) |
|      | b. Ca chini u dicià? (Crucoli Calabrian) |
|      | c. O chi lo dice? (Florence) |
|      | ‘Who says that?’ |

Questions with particles of this type are non-canonical questions and can only have a special interpretation, either as rhetorical or as surprise/disapproval questions depending on the specific context. They, therefore, seem to modify the illocutionary force of the sentence, as syntactically confirmed by their very high position in the left periphery,
preceding dislocated topics, wh-phrases, and particles of the second type (see Damonte and Garzonio 2009; Cruschina 2012).

The second type of particles are typical of PQs (12) and are incompatible with wh-questions (13), as well as with alternative questions (14) with a closed-list interpretation and accordingly uttered with an ascending-descending intonation (cf. example (8b) above). Sicilian chi belongs to this type (cf. (8) above), and so does the homophonous particle in southern Calabrian (e.g., Reggio Calabria), as well as ce in Salentino and che in Florentine, Sienese, and Romanesco.\(^6\) The second type of particle is absent in Cosentino, the Calabrian dialect spoken in Cosenza.

\[\begin{array}{ll}
\text{(12)} & \text{a. Ce } nc’ \text{ eti mammata? (Mesagne Salentino)} \\
& \text{PTC there is mum-your ‘Is your mum there?’} \\
& \text{b. Chi vai ó mercatu? (Reggio Calabria)} \\
& \text{PTC go.2SG to-the market ‘Are you going to the market?’} \\
& \text{c. Che tu l’ hai visto Mario? (Florentine, Garzonio 2004)} \\
& \text{PTC you= him has seen Mario ‘Have you seen Mario?’}
\end{array}\]

\[\begin{array}{ll}
\text{(13)} & \text{a. (*Ce) ndo sta vai? (Mesagne Salentino)} \\
& \text{PROG go.2SG ‘Where are you going?’} \\
& \text{b. (*Chi) aundi sta jendu? (Reggio Calabria)} \\
& \text{PROG stay.2GER ‘Where are you staying?’} \\
& \text{c. (*Che) indo’ tu vai? (Florentine)} \\
& \text{PTC where you= go.2SG ‘Where are you going?’}
\end{array}\]

\[\begin{array}{ll}
\text{(14)} & \text{a. (*Ce) sta rrivi a li ottu o a li novi stasera? (Mesagne Salentino)} \\
& \text{PTC PROG arrive.2SG at the eight or at the nine tonight ‘Will you arrive at eight or at nine o’clock tonight?’} \\
& \text{b. (*Chi) stasira ‘rrivi pi ll’ ottu o p’ i novi? (Reggio Calabria)} \\
& \text{PTC tonight arrive.2SG for the eight or for the nine ‘Will you arrive at eight or at nine o’clock tonight?’} \\
& \text{c. (*Che) t’arrivi all’ otto o alle nove stasera? (Florentine)} \\
& \text{PTC you=arrive.2SG at-the eight or at-the nine tonight ‘Will you arrive at eight or at nine o’clock tonight?’}
\end{array}\]

An overview of the two types of particles is presented in Table 2.

**Table 2.** Two types of interrogative particles in Italian dialects.

| Dialect             | Type 1 | Type 2 |
|---------------------|--------|--------|
| Mussomeli Sicilian  | a      | chi    |
| Modica Sicilian     | a, ca  | chi    |
| Florentine          | o      | che    |
| Reggio Calabria     | (ma)   | chi    |
| Sienese             | (ma)   | che    |
| Romanesco           | (ma)   | che    |
| Mesagne Salentino   | ce     |        |
| Cosentino           | ca, ma |        |

In rhetorical polar questions, the two types of particles can co-occur, as shown in (15):

\[\begin{array}{ll}
\text{(15)} & \text{a. Ca chi ssi pazzia? (Modica Sicilian)} \\
& \text{PTC1 ‘Are you mad?’} \\
& \text{b. Ma che ssej matta? (Romanesco)} \\
& \text{PTC2 ‘Are you mad?’} \\
& \text{c. O che tu se’ di fori? (Florentine)} \\
& \text{PTC1 ‘Are you mad?’}
\end{array}\]
Crucially, when they co-occur, the type-1 particle always precedes the type-2 particle (see Bianchi and Cruschina 2022 for discussion). In this paper, we concentrate on the second type of particles, which we dubbed what-particles.

5. Patterns of Microvariation

Our starting point is the distribution of \( \text{chi} \) in Mussomeli Sicilian, which shows that this particle is associated with addressee competence (cf. Section 3). This distribution implies that \( \text{chi} \) is possible with the question types characterized by the positive value of the addressee-competence assumption, including canonical questions. As for non-canonical questions, the only type that is excluded is \( \text{quiz PQs} \), which do not inherently rely on the assumption that the addressee is able to provide the correct answer.

If we now consider the distribution of the what-particles in other dialects across canonical and non-canonical questions, we observe some common properties in all dialects: the particles are consistently incompatible with \( \text{quiz PQs} \), whereas they are always admitted in \( \text{surprise/disapproval PQs} \) and in \( \text{rhetorical PQs} \). However, in some dialects, they can occur in canonical, information-seeking PQs, as in Mussomeli Sicilian, while in other dialects, the PQs marked with these particles never qualify as canonical and always have a non-canonical interpretation.

If we represent the pragmatic assumptions as binary features, we can define the first pattern (Pattern A) as marking all PQ types characterized by the value \([+/\text{addressee competence}]\), irrespective of the speaker-ignorance assumption, which could therefore be indicated as \([+/−\text{speaker ignorance}]\). As for the second pattern (Pattern B), we will show that in addition to \([+\text{addressee competence}]\), it also requires a negative value of the speaker-ignorance assumption, that is, \([-\text{speaker ignorance}]\). This further requirement excludes precisely one type of question, that is, canonical PQs.

5.1. Pattern A: \([+/−\text{Speaker Ignorance}, +\text{Addressee Competence}]\)

In addition to Mussomeli Sicilian \( \text{chi} \), Pattern A is also found in Romanesco and in Florentine. In these dialects, the particle is possible in canonical and non-canonical except for \( \text{quiz PQs} \). Recall that canonical questions can be defined as \([+\text{speaker ignorance}, +\text{addressee competence}]\), in that both pragmatic assumptions hold. In Romanesco and Florentine, therefore, the questions in (16) and (17) can have a canonical interpretation, where the speaker is ignorant with respect to an open issue and asks a question assuming that the addressee is able to provide the correct answer, thus solving the open issue and increasing the shared information:

(16) a. Che tt’ a ’nvitato, Claudio, à festa de laurea? (Romanesco)
   ‘Did Claudio invite you to his graduation party?’

b. Che st’ annà ar mercato?
   ‘Are you going to the market?’

c. A papà, che ssei puntuale stasera pe ccena?
   ‘Dad, are you going to be on time tonight for dinner?’

(17) a. Claudio, che t’ ha invitato alla su festa di laurea? (Florentine)
   ‘Did Claudio invite you to his graduation party?’

b. Che tu vai ai’ mercato?
   ‘Are you going to the market?’

c. Babbo, che tu se’ in orario per la cena stasera?
   ‘Dad, are you going to be on time tonight for dinner?’
The same questions in (16) and (17) can have a non-canonical interpretation as biased PQs, that is, in contexts in which the speaker is not completely ignorant about the open issue but has a bias towards a positive answer. We will discuss this non-canonical interpretation in more detail in the next section. In Romanesco and in Florentine, the particle can also occur in rhetorical (18) and in surprise/disapproval PQs (19):\

\[
\begin{align*}
(18) & a. \quad \text{Ma che ssej matta? Io nun ce l’ ho, ‘e chiavi! (Romanesco)} \\
& \quad \text{PTC PTC be.2SG mad I not there= them= have.1SG the keys} \\
& \quad \text{‘Are you mad? I don’t have the keys!’} \\
& b. \quad \text{O che tu se’ di fori? Io un ce l’ ho mica! (Florentine)} \\
& \quad \text{PTC PTC you= be.2SG of out I not there= them= have.1SG NEG} \\
& \quad \text{‘Are you mad? I don’t have them!’}
\end{align*}
\]

The only exception is quiz PQs, where both assumptions are overridden ([-speaker ignorance, -addressee competence]). As already remarked, the particle is incompatible with this non-canonical question type, also in the dialects exhibiting Pattern A (cf. the examples in (20) and (21)). Pattern A is summarized in Table 3.

\[
\begin{align*}
(19) & a. \quad \text{(Ma) che sta ancora a dormì? (Romanesco)} \\
& \quad \text{PTC PTC stay.PROG.2SG still at sleep.INF} \\
& \quad \text{‘Are you still sleeping?’} \\
& b. \quad \text{(Ma) sej ancora a lletto? (Florentine)} \\
& \quad \text{PTC PTC be.2SG still in bed} \\
& \quad \text{‘Are you still in bed?’} \\
& c. \quad \text{O che tu dormi ancora?! (Florentine)} \\
& \quad \text{PTC PTC you= sleep.2SG still} \\
& \quad \text{‘Are you still sleeping?’} \\
& d. \quad \text{O tu se’ ancora a letto? (Florentine)} \\
& \quad \text{PTC PTC tu= be.2SG still in bed} \\
& \quad \text{‘Are you still in bed?’}
\end{align*}
\]

\[
\begin{align*}
(20) & a. \quad \text{(Che) Napoleone (che) è nnato ‘n Francia? (Romanesco)} \\
& \quad \text{PTC Napoleone PTC is born in France} \\
& \quad \text{‘Was Napoleon born in France?’} \\
& b. \quad \text{(Che) aveva ‘n cavallo nero? (Florentine)} \\
& \quad \text{PTC had.3SG a horse black} \\
& \quad \text{‘Did he have a black horse?’}
\end{align*}
\]

\[
\begin{align*}
(21) & a. \quad \text{(Che) Napoleone (che) gl’ è nato in Francia? (Florentine)} \\
& \quad \text{PTC Napoleone PTC he= is born in France} \\
& \quad \text{‘Was Napoleon born in France?’} \\
& b. \quad \text{(Che) c’ avea un cavallo nero? (Florentine)} \\
& \quad \text{PTC there= had.3SG a horse black} \\
& \quad \text{‘Did he have a black horse?’}
\end{align*}
\]

Table 3. Pattern A across different question types.

| QUESTION TYPE     | SPEAKER IGNORANCE | ADDRESSEE COMPETENCE | PATTERN A |
|-------------------|-------------------|----------------------|-----------|
| Canonical PQs     | +                 | +                    | ✓         |
| Quiz PQs          | -                 | -                    | #         |
| Biased PQs        | -                 | +                    | ✓         |
| Rhetorical PQs    | -                 | +                    | ✓         |
| Surprise/Disapproval PQs | - | +                    | ✓         |

When going back to canonical questions, it must be emphasized that the particle is not obligatorily present. This does not mean that two versions of the same PQ, one with and the other without *chi*, have exactly the same meaning and pragmatic function. Bianchi and
Cruschina (2022) and Cruschina and Bianchi (forthcoming) argue that Mussomeli Sicilian chi strengthens the addressee-competence assumption to a conventional implicature (cf. Section 3). This means that the particle is not really optional and that its presence contributes a specific, pragmatic import to the PQ.

Admittedly, since the particle strengthens an assumption that is in any case present by default, this meaning is rather subtle and could hence be difficult for native speakers to capture or detect. However, a context in which the speaker knows that the addressee is necessarily competent about the current issue, and strongly expects a complete answer, would favour or even require the presence of the particle:

(22) ??(Chi) va a chiazzia ranni, st’ autobus? (Mussomeli Sicilian)
\[ \text{PTC} \text{goes to-the square big this bus} \] ‘Does this bus go to the main square?’

(23) ??(Chi) píaazzu passari? (Mussomeli Sicilian)
\[ \text{PTC} \text{can.1SG pass} \] ‘Can I go through?’

Contexts of this type are characterized by an informative asymmetry whereby the addressee’s competence is taken for granted by virtue of their professional status, for example, as a bus driver (22) or as a traffic policeman (23).5

5.2. Pattern B: [−Speaker Ignorance, +Addressee Competence]

In the other dialects investigated, the particle is more limited in its distribution in that it cannot occur in canonical PQs. This suggests that the particle is incompatible with the value [+speaker ignorance] that characterizes canonical PQs, and it is only possible in non-canonical PQs with a [−speaker ignorance] assumption. In these dialects, too, the particle is incompatible with quiz PQs. We analyse this distribution by claiming that the particle is only compatible with the following combination: [−speaker ignorance, +addressee competence].

Interestingly, this second pattern is found in the same regions as the dialects displaying Pattern A and with identical particles, proving that we are indeed dealing with microvariation: the dialect of Siena in Tuscany (as opposed to Florentine) and eastern Sicilian dialects such as that of Modica (in contrast with the dialect of Mussomeli). The dialects of Reggio Calabria also show the same pattern, and so does the Salentino dialect of Mesagne. Pattern B is summarized in Table 4.

Table 4. Pattern 2 across different question types.

| Question type          | Speaker ignorance | Addressee competence | Pattern B |
|------------------------|-------------------|----------------------|-----------|
| Canonical PQs          | +                 | +                    | #         |
| Quiz PQs               | −                 | −                    | #         |
| Biased PQs             | −                 | +                    | ✓         |
| Rhetorical PQs         | −                 | +                    | ✓         |
| Surprise/Disapproval PQs| −                 | +                    | ✓         |

In the dialects exhibiting Pattern B, the particle appears at the beginning of PQs, including PQs that may, at first sight, look like a canonical question; their interpretation, however, is never canonical. According to our informants, in these dialects, the PQs introduced by what-particles are interpreted as biased PQs.

The type of bias associated with a PQ can be different, depending on the context and on the information shared by the participants. In our investigation of the non-canonical interpretations of biased PQs, two qualitatively distinct types of bias are relevant. Following Sudo (2013), we call them epistemic and evidential bias. Both biases involve inferences regarding the issue raised by the question, but while the epistemic bias is about the speaker’s belief or expectation towards a certain alternative, typically related to previous
knowledge, the evidential bias is based on the evidence that is available in the current conversation contexts and that, in principle, is accessible to all discourse participants (see also Büring and Gunlogson 2000).

Let us consider the equivalent of the PQs in (16) and (17) in the dialects with Pattern B, bearing in mind, however, that the very same interpretations are possible in the dialects with Pattern A, too:

(24) a. (Chi) t’ ammitau Claudio à sa festa? (Modica Sicilian)
   PTC you= invited.3SG Claudio to-the his party
   ‘Did Claudio invite you to his party?’

b. (Chi) sta jennu ò miccatu?
   PTC stay.PROG.2SG go.GER to-the market
   ‘Are you going to the market?’

c. Papà, stasira (?chi) arrivi puntuali à cena?
   dad tonight PTC arrive.2SG punctual to-the dinner
   ‘Dad, are you going to be on time tonight for dinner?’

(25) a. (Ce) t’ è nvitatu Claudio a la sua festa di laurea? (Mesagne Salentino)
   PTC you= has invited Claudio to the his party of graduation
   ‘Did Claudio invite you to his graduation party?’

b. (Ce) sta vai a lu mercatu?
   PTC PROG go.2SG to the market
   ‘Are you going to the market?’

c. Papà, (?ce) rrivi puntuali a la cena stasera?
   dad PTC arrive.2SG punctual to the dinner tonight
   ‘Dad, are you going to be on time tonight for dinner?’

Native speakers agree that the particle should be left out if these questions are asked as canonical PQs, that is, in contexts in which it is clear that the speaker’s epistemic state is neutral with respect to the true answer (e.g., in (24a), the people who are expected or supposed to go to the party). If the particle is present, the PQ conveys a specific bias.

In particular, the contexts in which PQs such as (24a) and (25a) would be appropriate involve an epistemic bias conveying a positive expectation: on the basis of some known information, the speaker expects the addressee to answer positively. The appropriate context for the PQ in (24b) and (25b), by contrast, would more naturally prompt an evidential bias. The propositional content is anchored to the present, so the most natural interpretation assigned by our informants to this question—when it is marked with the particle—is one in which a positive answer (i.e., that the addressee is going to the street market) can be inferred from “evidence that has just become mutually available to the participants in the current discourse situation” (Büring and Gunlogson 2000). Proximity to the street market or the sight of shopping bags could provide such contextual evidence. In this case, too, the PQ conveys a request for a confirmation of an inference, hence the alternative name of confirmation questions for this type of non-canonical PQs (Bianchi and Cruschina 2022).

On the other hand, the most natural interpretation of the question in (24c)/(25c) is that of a canonical PQs, insofar as it can hardly be interpreted as a biased question. An evidential bias is difficult to set up, presumably because it would be hard to imagine any contextual evidence that could lead to the expectation of a positive answer. An epistemic bias is in principle possible, but it was not supported in the context provided. In this case, our informants judged the use of the particle as odd and infelicitous.

As for rhetorical and surprise/disapproval PQs, the particle is allowed, similarly to Pattern A. Some examples are given in (26) and (27), respectively:
(26) a. (Ca/a) chi ssi pazza? Iu nun l’ agghiù! (Modica Sicilian)

PTC si be.2SG mad I not them= have.1SG

b. Ce si paccia? Io nun i tegnu! (Mesagne Salentino)

PTC be.2SG mad I not them= have.1SG
c. Ma cche se’ grulla? Io un ce l’ ho! (Siena)

PTC be.2SG mad I not them= have.1SG

‘Are you mad? I don’t have them! ’

(27) a. (Ca/a) chi ancora sta rummiennu?! (Modica Sicilian)

PTC sta stay.2SG sleep.GER

b. Ce sta durmi ancora?! (Mesagne Salentino)

PTC PROG.2SG sleep.2SG still
c. Che stai ancora dormendo? (Siena)

PTC PROG.2SG sleep.GER

‘Are you still sleeping?’

Table 5 summarizes and compares the two patterns of microvariation.

Table 5. A comparison between Pattern A and Pattern B.

| QUESTION TYPE | PATTERN A (Mussomeli, Romanesco, Florentine) | PATTERN B (Modica, Reggio Calabria, Mesagne, Siena) |
|---------------|---------------------------------------------|--------------------------------------------------|
| Canonical PQs | √                                           | #                                                |
| Quiz PQs      | #                                           | #                                                |
| Biased PQs    | √                                           | √                                                |
| Rhetorical PQs| √                                           | √                                                |
| Surprise/Disapproval PQs | √       | √                                                |

We want to close this section on variation with a note about the regional varieties of Italian spoken in central and southern Italy. Just like in the Tuscan dialects and in Romanesco, *che* is commonly found as an interrogative discourse particle in the PQs produced by speakers of Italian from central and southern regions. Interestingly, Cruschina (2012, pp. 211–15) identifies two main patterns and shows that the types of PQs marked with *che* in central and southern Italian are similar to those discussed here. However, a more fine-grained typology of PQs, such as the one presented in this paper, allows us to better capture the overall aspects of microvariation.

6. A Closer Look at the Particles’ Meaning

The conventional implicature conveyed by the what-particles in Pattern A expresses an attitudinal relation between the speaker and the addressee’s epistemic state. However, the speaker’s bias in confirmation questions is commonly conceived of as a property of the speaker’s epistemic state. Under such a view, it is difficult to attribute a single coherent import to what-particles in Pattern B. For this reason, we tentatively propose a different characterization of the speaker’s bias: the bias is not about the truth of the propositional content, but rather, it is about the answer that the speaker expects from the addressee.

In order to implement this insight, we assume two compositional layers on top of the sentence radical (indicated as $α$ in (28)). The lower layer (labelled $β$ in (28)) takes in input the informative proposition highlighted by the sentence radical $α$ (call it $p$) and returns the proposition that $p$ is positively decided in the addressee’s epistemic state (call it $q$). Essentially, $q$ describes a state of affairs in which the addressee’s answer will be positive.

The higher layer $γ$ encodes the speaker’s attitude towards proposition $q$, i.e., (intuitively) their attitude about the addressee’s expected positive answer, as schematically represented in (28):
In general, the ATT(itude) relation expresses what the speaker believes about the addressee’s epistemic state. The content of the ATT relation can be characterized in terms of likelihood:

(i) \( q \) (the addressee answering positively) is more likely than its negation. This corresponds to the speaker’s bias, i.e., the fact that they expect a positive answer from the addressee.

Note that the evaluation of likelihood can be based either on an epistemic modal base (i.e., previous information makes a positive answer more likely) or on a circumstantial modal base, based on the relevant circumstances that the speaker has access to (i.e., certain relevant facts make the positive answer more likely). The nature of the modal base thus distinguishes the epistemic from the evidential bias. The modal base itself is a contextually supplied parameter so that the ATT relation can exploit different modal bases in different contexts.

(ii) \( q \) is as likely as its negation. This corresponds to the implicature of addressee competence: the speaker has no bias as to whether the addressee will answer positively or negatively, but they expect that the addressee’s epistemic state supports one of the two answers.

(iii) either \( q \) is certain or its negation is certain. This corresponds to the implicature that the speaker knows what the addressee’s answer will be. This implicature can be taken to characterize rhetorical questions, as well as surprise-disapproval questions.

In (i)–(iii), the propositional content \( p \) is taken to be decided in the addressee’s epistemic state, either positively or negatively: this implies the notion of addressee competence.

(iv) There is no epistemic or evidential modal base accessible to the speaker that allows them to evaluate the relative likelihood of \( q \) and its negation. The speaker does not anticipate anything about the relation between the addressee’s epistemic state and the informative proposition \( p \). This attitude can be taken to characterize quiz questions, where the addressee’s competence cannot be taken for granted by the speaker.

This approach allows us to capture the different imports of what-particles in Pattern A and in Pattern B. In Pattern A, the particle’s import is (ii): the speaker takes the addressee to be in a position to answer the question but has no bias as to whether the answer will be positive or negative. In Pattern B, instead, the particle conveys (i): the speaker expects the addressee to answer positively on the ground of some available information or some circumstantial evidence.

6.1. A Possible Diachronic Path

An important question related to diachrony and language change concerns the origins of what-particles: Why does this wh-element become a question particle, and how did it acquire this function diachronically? In some dialects, what-particles are also homophonous with the declarative complementizer (see Rohlfs 1969; Manzini and Savoia 2005: I, p. 506, 2011). This led Rohlfs (1969, §757) to hypothesize that the particle originates from the declarative complementizer in an expression comprising an implicit predicate inquiring about the truth of a proposition: ‘(is it true) that \( p \)?’. Damonte and Garzonio (2009, p. 109) propose a similar analysis, postulating instead a silent modal predicate: ‘(is it possible) that \( p \)?’. In some dialects, however, the what-particle is not homophonous with the complementizer (e.g., in the Sicilian dialects of Mussomeli and Modica, where the complementizer is \( ca \), and in the Salentino dialect of Mesagne, which has \( cu \) and \( ca \) as subordinating complementizers). Only the homophony with the wh-phrase corresponding to English ‘what’ seems to be a widespread common property of all what-particles, and this can be revealing with respect to the issue of their origins. Rohlfs (1969: §757) himself suggests the alternative hypothesis that the particle originates from the wh-phrase and, in
particular, from a biclausal construction with ‘what’ expressing wonder or surprise: ‘What? p?’ Reanalysis then converted this construction into a monoclausal structure.\(^{18}\)

Starting from this second hypothesis, we tentatively outline a possible diachronic path.\(^{19}\) Following Rohlfs, the starting point is a fragment wh-question, an independent speech act expressing surprise and coordinated to the following PQ (see Portner 2006). The wh-element was then reanalysed as part of the functional structure of the following PQ to mark surprise/disapproval questions. These correspond to the conventional implicature in (iii) above: the speaker is certain of how the addressee will answer, and their certainty is based on a circumstantial (evidential) modal base consisting of a state of affairs that holds at the speech time (whence the meaning of ‘sudden discovery’ in the sense of DeLancey 1997; Aikhenvald 2012). In addition, the circumstantial modal base is compared to its complement\(^{20}\) (which would make certain the opposite answer) by ranking the two on an evaluative scale anchored to the speaker’s expectations (surprise reading) or their preferences (disapproval reading).

In a subsequent stage, this evaluative component is lost, and the attitudinal relation is weakened from certainty (iii) to an asymmetric relation between the confirming answer and the denying answer, which corresponds to the speaker’s bias as characterized in (i) above. The weakening consists in the fact that any circumstantial modal base that makes the addressee’s answer certain will also make it more likely than the opposite answer, though not vice versa. This stage of development characterizes what-particles in Pattern-B dialects.

At the next stage, the import of the what-particle is further weakened to mere addressee competence, as typical of canonical PQs, whereby the two opposite answers are equally likely, cf. (ii) above.\(^{21}\) This simply constitutes a strengthening of the default assumption of addressee competence, as evidenced in the dialects with Pattern A.

Under this tentative reconstruction, at the syntactic level, the wh-element loses its independent status, while at the interpretive level, its import is gradually weakened. This diachronic path can be thought of as an instance of grammaticalization. Since different stages of grammaticalization can coexist in a language variety, the wh-particles of Pattern B can also express the stronger readings (surprise/disapproval and rhetorical questions); similarly, in Pattern A, apart from a canonical interpretation, they also can mark the stronger readings, including that of biased questions.

7. The Syntactic Side

After discussing the interpretive import of what-particles, we now propose a syntactic implementation. To this aim, we assume as a starting point the Speech Act projections proposed in Speas and Tenny (2003) and Tenny (2006). According to the authors, these projections are located in the highest portion of the functional structure of main clauses, and they encode the speech event. The latter involves three arguments: the Agent, corresponding to the speaker/author; the Goal, corresponding to the hearer/addressee; and the Theme, corresponding to the utterance content. In declaratives, these arguments are syntactically realized in a ‘Larsonian’ structure (see Larson 1988) in which the Theme is syntactically more prominent than the Goal:
The utterance content is a Sentience Phrase, which hosts in its Spec a phonologically empty sentient argument (PRO) corresponding to the ‘Seat of Knowledge’: the person whose epistemic state supports the propositional content of CP. The syntactic configuration is such that in the declarative structure (29), the PRO argument is c-commanded only by the Speaker: hence, the latter qualifies as the Seat of Knowledge in declaratives.

Speas and Tenny propose that in questions, the Goal/addressee argument is syntactically promoted (similarly to Larson’s analysis of the English double object construction) and becomes the closest c-commander for the PRO argument in Spec, SenP, as illustrated in (30) below. Consequently, in questions, the addressee qualifies as the Seat of Knowledge.

This syntactic shift accounts for the phenomenon of the interrogative flip, exemplified in (31):

(31) a. Honestly, Al is unreliable.
    b. Honestly, is Al reliable?
In declaratives like (31a), the adverb honestly conveys the speaker’s attitude: it is the speaker who is being honest in asserting the relevant proposition. In interrogatives such as (31b), however, the adverb is anchored to the addressee, who is expected to be honest in answering the question. Assuming that the adverb is located within the Sentience Phrase and is anchored to the sentient PRO, the different control configurations in (29) and (30) determine the interrogative flip.

Going back to our compositional analysis, sketched in (28) above, recall that we characterized non-canonical meanings in terms of the speaker’s expectations about the addressee’s epistemic state. We, therefore, introduce two modifications to Speas and Tenny’s analysis.

First, we take their Sentience Phrase to encode the commitment to the truth of the prejacent proposition on the part of the commitment anchor, which is represented by PRO. Following Krifka (2015), we dub this projection the Commitment Phrase (ComP).

Furthermore, we hypothesize that a functional projection is located between $S_A^1P$ and $S_A^2P$, corresponding to layer $\gamma$ in (28); let us dub this projection Att(itude) Phrase:

\[
[S_A^1P \text{ Speaker } [S_A^1 \text{ AttP ATT } [S_A^2P \text{ [addressee]}_2 I S_A^2P \text{ [ComP \ PRO}_2 \ CP \ [S_A^2 t_2]]]]]
\]

The ATT head conveys to the addressee the speaker’s degree of certainty about the commitment expressed by the commitment anchor (i.e., the addressee themselves under the interrogative flip). From this perspective, what-particles realize the relational head ATT$^0$, but they encode different speaker attitudes in Pattern A vs. Pattern B.

Admittedly, this analysis is motivated by considerations of semantic compositionality rather than by compelling empirical evidence. However, if we are on the right track, other discourse particles should exist that convey one of the implicatures in (i)–(iv), thus marking different types of non-canonical questions. We predict that such particles only appear in main clauses since embedded clauses lack the Speech Act Projections; this should correlate with the impossibility of embedded non-canonical questions. Furthermore, we predict that such particles occupy a fixed position in the highest part of the clausal structure and cannot appear in intermediate positions within the sentence radical.

From the viewpoint of micro-variation, this proposal offers a precise characterization of the meaning of what-particles that is consistent with their syntactic distribution in different types of polar questions. In our view, one major hindrance to the analysis of micro-variation in this domain is the difficulty of understanding which particles should be compared to which ones in different varieties. We believe that our interface approach may help overcome this difficulty and thus prove useful for future research.

8. Conclusions

In this paper, we have proposed an analysis of the what-particles found in central and southern Italian dialects. The different functional distribution of these particles may yield the impression that we are dealing with distinct, dialect-specific particles. In fact, our analysis shows that what-particles have the same function, and their distribution in different types of PQs in Pattern A and in Pattern B can be explained in terms of the specific speaker attitude that they express. It is interesting to note that the two identified patterns of distribution are not random or unrelated: the conventional implicature expressed in Pattern B characterizes a more informed speaker attitude than in pattern A. In the absence of historical data, we relied on this observation to speculate on the direction of change that led to the two patterns. We argued that Pattern B constitutes a less grammaticalized pattern of distribution of what-particles, which convey a marked (biased) speaker attitude; in some dialects, their import was shifted to convey the unmarked speaker attitude corresponding to the default assumption of addressee competence. This shift in meaning led to the inclusion of canonical PQs in the functional marking domain, that is, to Pattern A.

In conclusion, our study offers an example of a semantic and pragmatic approach to syntactic microvariation, which will hopefully provide a major stimulus to further
research on interrogative discourse particles, as well as on phenomena at the syntax–pragmatic interface, more generally. The exact localization of what-particles and the precise geographical distribution of the two patterns is indeed yet to be determined (see Rigau and Prieto 2005; Prieto and Rigau 2007; Kocher 2017, in press, for similar particles in other Romance varieties such as Catalan). Our small sample of dialects is already able to show that the two patterns do not follow neat regional or dialectal boundaries, being found within the same dialect group and region (e.g., the dialects of Mussomeli and Modica in Sicily and the dialects of Florence and Siena in Tuscany). The microvariation connected to the two patterns may, in fact, be rather fine-grained and affects closely related dialects, with the possibility of inter-speaker variation, and only further studies of this type can shed light on the distribution of what-particles and of the two patterns.

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Notes

1 In Table 1 the combination of the two features [+speaker ignorance, −addressee competence] is missing. However, this does not mean that questions with similar assumptions are not available. Farkas (2020) calls them tentative questions, that is, questions by which “a Speaker may well want to place an inquisitive issue 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.” She provides the following example, featuring a modal interrogative:

(i) The Speaker and the Addressee are in a used car lot, looking at a car whose price is not visible
How much could this car cost?

This type of questions, however, are not relevant to our argument; thus, we did not include them in the Table.

2 We are very grateful to all our informants and consultants. In particular, for their help, data, and discussion, we would like to thank Giuseppe Aresta, Giuliano Bocci, Maria Rita Ferlisi, Mara Frascarelli, Jacopo Garzonio, Alessandra Lombardi, Domenico Pardo, and Giulio Scivoletto.

3 On the Sicilian particles, see Cruschina (2012). See, in particular, Scivoletto (2020) and Cruschina and Bianchi (forthcoming) on the Sicilian particle a. On the particle ca in Calabrian dialects, see Damonte and Garzonio (2009), and on Florentine che, see Garzonio (2004). The Calabrian and Florentine examples in (10) and (11) are from Damonte and Garzonio (2009).

4 Most probably, Italian ma has the same function and distribution in PQs and belongs to the same group.

5 A further possible interpretation is known in the literature as can’t find the value (CFV), in which the speaker expresses that, despite the efforts, they are not able to find a plausible or acceptable value for the missing argument corresponding to the wh-phrase. This interpretation, however, is only possible with wh-questions and has therefore not been taken into consideration in this paper. See Obenauer (2004) and Garzonio (2004) for more details.

6 According to Damonte and Garzonio (2009), the Sardinian interrogative particle a belongs to this group too, but we have not included it in our discussion. It is true that the syntactic distribution of this particle is similar to the other particles of the same type (e.g., it is limited to PQs, it follows a dislocated topic), but this particle is morphologically different (deriving from Latin AUT) and is incompatible with a fronted focus, unlike Sicilian chi (cf. Cruschina 2012; Bianchi and Cruschina 2016).

7 As pointed out by an anonymous reviewer, it is interesting to notice that while in (18a) the sentence-initial ma seems to be obligatory, it is only optional in (19a,b) (cf. also 26c from Sienese). In Florentine, by contrast, the presence of o is always obligatory in non-canonical questions. At this stage we not able to provide a detailed account of this difference, but we would like to remark that in (19) ma is not really optional, in that its presence correlation with a specific additional import, a meaning that can be defined as counter-expectational as in Giorgi’s (2018) analysis. In other words, without ma the questions in (19a) and (19b) simply express the speaker’s surprise or disapproval, the same questions with ma also signal that the addressee was expected to do something else (rather the sleeping, cf. 19a) or be to somewhere else (rather than in bed, cf. 19b), thus sounding more like reproaches.
Contrary to modal particles such as those described by Coniglio (2008, 2011), among many others. In Krifka (2015), the commitment anchor is identified as the speaker (or addressee) by the immediately higher compositional layer, the Act Phrase. For space limitations we cannot discuss in detail Krifka’s proposal.

We have only tested positive PQs. The availability of the negation in PQs marked with the particle seems to be subject to dialectal variation. It is possible in Sicilian, although the interpretations still need to be investigated thoroughly, while it is only accepted by some but not all speakers of Florentine (see Garzonio 2004). It is well known that negative PQs are associated with a bias (see Romero and Han 2004; Sudo 2013); the nature of the possible biases, as well other possible non-canonical interpretations in our approach, remains to be investigated.

A similar characterization in terms of evidential bias is proposed in Kocher (2017, in press) for Catalan PQs marked by sentence initial que. An epistemic bias for the same question (24b)/(25b) is not excluded, if the speaker can draw an inference (a belief or an expectation) based on previous information, for example the fact that the addressee is known to always go the street market on that day and/or at that specific time. This interpretation was not spontaneously provided by our informants, but it was accepted as a felicitous context for the use of the particle when it was presented to them.

For the distinction between Italian dialects (Italo-Romance dialects or primary dialects) and the regional varieties of Italian (also known as dialects of Italian or secondary dialects), see Loporcaro (2009).

This approach was inspired by Krifka’s (2015) analysis of speech acts as commitment space updates.

Strictly speaking, the negation of \( q \) (it is not the case that \( p \) is positively decided) includes both the possibility that \( p \) is negatively decided (negative answer) and the possibility that it is neither positively nor negatively decided (no answer). We stipulate that the first possibility prevails, since the speaker is not interested in evaluating the possibility that the addressee cannot answer.

The types of modal base and the definition of relative likelihood were first proposed by A. Kratzer. The full definition exploits another contextual parameter (the stereotypical ordering source), which we do not discuss here. See Kratzer (1991) for a concise synthesis of this approach.

We return to the mirative (surprise) and bouletic (disapproval) nuances in Section 6.1.

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We return to the mirative (surprise) and bouletic (disapproval) nuances in Section 6.1.

See also Manzini and Savoia (2005), and Manzini (2014) for the idea that what-particles are nominal heads on a par with finite complementizers and demonstratives.

More complex particles comprising a form of the light verb do exist in some dialects and could possibly witness intermediate stages or alternative outcomes of the process of language change (see Leone 1995; Cruschina 2012; Lusini 2013).

Depending on the specific dialect, diachronic data on PQs may be (partially) available. It would however be a difficult task to determine the distribution of the particles across canonical and non-canonical questions, according to the typology at the basis of this study.

This is a simplification from the received analysis of counterfactual readings. The formal details are not necessary for the purposes of this discussion.

Informally, the weakening is as follows: in the biased state (i), the speaker’s confirming answer is equally or more likely than the denying one, but the denying answer is not equally or more likely than the confirming one (see Kratzer 1991). By dropping the second clause, the two answers become equally likely.

The hypothesized structure differs from the one proposed in Cruschina and Bianchi (forthcoming), where only Pattern A was taken into account.

In Krifka (2015), the commitment anchor is identified as the speaker (or addressee) by the immediately higher compositional layer, the Act Phrase. For space limitations we cannot discuss in detail Krifka’s proposal.

Contrary to modal particles such as those described by Coniglio (2008, 2011), among many others.

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