

Questions and Epistemic Stance in Contemporary Spoken British English



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OVERALL CONCLUSIONS

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INTRODUCTION

This book focuses on the relationship between questions and epistemic stance, specifically between wh-, alternative and polar questions (= polar interrogatives, tag and declarative questions) and the epistemic positions those questions come from and are directed at.

The main theoretical framework is given by our KUB model (acronym of Knowing, Unknowing, Believing) and Conversational Analysis, in particular Stivers, Enfield and Levinson's (2010) study on questions and responses and John Heritage's model of epistemic stance (Heritage and Raymond 2005; Raymond and Heritage 2006; Heritage 2012a, 2012b).

As is well known, questions have different functions, can perform different actions (*speech acts* in Austin's (1960) terminology; *social actions* in the Conversational Analysis terminology). The most frequent are (i) request for information and (ii) request for confirmation, so we mainly focus on those questions whose social action is either of the two.

1. The KUB model

In a previous book, *Epistemic stance in dialogue: Knowing, Unknowing, Believing* (Zuczkowski, Bongelli and Riccioni 2017), we extensively presented our model of epistemic stance, according to which speakers can communicate each single piece of information either as *known/certain* or *uncertain* or *unknown*. They can of course shift from one position to another not only in each of their turns but even in one and the same turn.

From the KUB perspective, communication may be seen as originating in one of the three epistemic positions of a speaker and being directed at another of the three in the interlocutor who, in turn, can reply from any of the three epistemic positions, by aligning fully, partially, or by misaligning with the speaker's epistemic expectations.

In that book, when describing in detail the three epistemic positions and their lexical and grammatical markers, we touched upon the relationship between epistemic stance and questions (Chapter 3: 66-70), applying our KUB model to questions and arguing that different types of questions convey a questioner's different epistemic positions, either Unknowing or Uncertain.

At around the same time, we published a study (Vincze et al. 2016) in which the KUB model was applied to a particular type of question, which we called *ignorance-unmasking questions*, in a French political debate.

We continued to explore this topic and published other two studies, on questions in English (Riccioni et al. 2018), and in Italian (Bongelli et al. 2018).

Since then on, our attention has focused on (i) alternative questions, (ii) questions addressed toward the Uncertain position and (iii) rhetorical questions, to the point where we have amassed enough material to write a book-length account of the relationship between questions-responses and epistemic stance from the point of view of our KUB model.

2. Stivers, Enfield and Levinson's (2010) study on questions and responses

As far as questions-responses are concerned, our main point of reference and comparison is a special issue of the *Journal of Pragmatics* edited by Stivers, Enfield and Levinson (2010). This special issue, dedicated to how speakers of ten different languages *design* and *use* questions and responses, presented a qualitative description and quantitative documentation of question-response pairs from a Conversation Analysis perspective (Stivers 2010).

The *definitions* of the question types under analysis in our book, as well as the notions of *question design*, *social action*, *preference organization* (type conforming and non-conforming answers), and *types of responses* (answer-response, non-answer response, non-response), are all taken from the *coding scheme* for question-response sequences (Stivers and Enfield 2010) that was developed and used by the team of ten researchers (each working on a different language) in the papers published in that special issue (Stivers, Enfield and Levinson 2010).

Such notions, well known and established in the literature, allow us to demonstrate something new concerning the relationship between questions and epistemic stance, i.e., to determine and specify which of the three different epistemic positions (Knowing, Unknowing and Uncertain) give rise to different types of questions and responses.

In order to test the theoretical points raised in our book against authentic language data and to subject these latter to quantitative analysis, the American English corpus analysed by Stivers (2010) not being available to other researchers, we chose to use the Spoken British National Corpus 2014 (Love, Hawtin and Hardie 2017), the most recently-compiled as well as the largest existing corpus of spoken British English (of any variety).

3. John Heritage's model of epistemic stance

In the field of Conversation Analysis, the main frame of reference on epistemic stance is that of John Heritage and colleagues' studies (Heritage and Raymond 2005; Raymond and Heritage 2006; Heritage 2010, 2011, 2012a, 2012b, 2013, 2014; Stivers, Mondada and Steensig 2011; Heritage and Raymond 2012, Mondada 2013; Hayano 2014).

Heritage makes a distinction between *epistemic status* and *epistemic stance* and, regarding *questions*, he introduces the concept of *epistemic asymmetry*, claiming that each different type of question—such as wh-questions, polar interrogatives, tag and declarative questions—establishes a different gap in knowledge, i.e., a distinctive *epistemic gradient*, between a *less knowledgeable* questioner (K-) who lacks a piece of information and a *more knowledgeable* respondent (K+) who has or is supposed to have that information.

4. Aims of the book

Although we generally agree with Heritage's distinction between *epistemic status* and *epistemic stance* as well as his notion of *epistemic gradient*, we argue that his model including a *less knowledgeable questioner* (K-) and a *more knowledgeable respondent* (K+) could be further developed, following our KUB model, by introducing an explicit distinction within both the K- and K+ positions, as follows:

- (1) within the K- position, a less knowledgeable questioner who asks a question because *s/he does not know* a piece of information (*Where is Ulrich?*), should be distinguished from a less knowledgeable questioner who asks a question because *s/he is uncertain about* a piece of information, i.e., *s/he does not know whether* a piece of information is true (*Is Ulrich at home?*), or *s/he believes that* a piece of information is more likely to be true than not (*Ulrich is at home, isn't he?*).

In other words, we aim to show that questions do not come from an undifferentiated K- position but from two distinct epistemic positions: the *Unknowing* and the *Uncertain*.

Wh-questions (*Where is Ulrich?*) arise from the Unknowing position since they express a *lack of knowledge* (= un-knowledge) concerning the identity of a wh-word (*who, what, where*, etc.), while alternative questions (*Is Ulrich at home or skiing?*), polar interrogatives (*Is Ulrich at home?*), tags (*Ulrich is at home, isn't he?*), and declarative questions (*Ulrich is at home?*) arise from the Uncertain position since they

express a *lack of certainty* (= un-certainty) concerning the truth value either of one complete proposition, as is the case in polar questions, or of two (or more) propositions, as is the case in alternative questions. In this sense, wh-questions are *unknowing questions*, while the other four types of question are *uncertain questions*.

- (2) We also aim to show that uncertain questions convey different degrees of uncertainty, and are thus located at different points along the epistemic continuum of the Uncertain position which ranges between two poles: the Not Knowing Whether (the maximum uncertainty) and the Believing (the minimum uncertainty).

Alternative questions and *neutral* polar interrogatives, which advance a doubt, are closer to the Not Knowing Whether pole and for this reason can be called Not-Knowing-Whether-questions, while *non-neutral* polar interrogatives, tag and declarative questions, which advance a supposition, are closer to the Believing pole and for this reason can be called Believing-questions.

We agree with Heritage that each different type of question (wh-questions included) establishes a different epistemic gradient between the questioner and the respondent, but the *less knowledgeable* questioner (K-) in his model corresponds in our model to a questioner who moves between three different epistemic positions, the Unknowing, the Not Knowing Whether and the Believing.

- (3) According to the KUB model, a distinction analogous to that made within the questioner's K- position (see point 1 above) should be made within the respondent's K+ position, since not all questions are addressed toward the respondent's Knowing position: they can also be addressed toward his/her Believing position, i.e., to a respondent who is not expected to know the answer but is expected to be able to advance a hypothesis, supposition, opinion and so on.

The question *where is Ulrich?* in this respect is very different from *where could Ulrich be?* Both questions come from the Unknowing position but the former is directed at someone who is supposed to *know* where Ulrich is, while the latter is directed at someone who *cannot know* but only *suppose* where Ulrich is.

In this case, questions and answers (when these latter align with the former) concern what the respondent *believes*, not what s/he *knows*: s/he is supposed to *know nothing*, i.e., neither *more* nor *less* than the questioner.

Our third main aim is thus to show that questions are not addressed to an undifferentiated K+ position but to two distinct epistemic positions, either the *Knowing* or the *Believing*.

5. The Uncertain position

As an overall result of our study, question-answer sequences are seen as originating either from the questioner's Unknowing position or from his/her Uncertain position (either Not Knowing Whether or Believing) and as being directed not only towards the respondent's Knowing position but also to the Believing pole of the Uncertain.

The inclusion of the Uncertain position is the main difference between Heritage's model and our own. Indeed, in our view, epistemic stance is not only a matter of knowing more or less (K+ or K-) than the interlocutor (in Heritage's terminology), i.e., of *Knowing* and *Un-knowing* (in our terminology), but may also involve *Not Knowing Whether* and *Believing*.

The epistemic expressions *Not Knowing Whether* and *Believing* refer to linguistic phenomena that are different from those referred to by *Knowing* and *Unknowing*. They refer instead to a third epistemic position, the Uncertain, which has an epistemic status of its own and which is separate from Knowing and Unknowing.

6. Further aims

Given its relevance, the Uncertain position is also investigated in relation to *dubitative* and *rhetorical* questions.

Dubitative questions include a lexical marker of uncertainty such as the adverb *maybe* (Stivers and Enfield 2010), for example *is Ulrich maybe at home?*

We initially ask ourselves why alternative and polar questions may be dubitative while wh-questions cannot (**Where is maybe Ulrich?*). We find that the answer lies in the different epistemic positions such questions come from.

Wh-questions cannot include *maybe* since they convey a lack of knowledge: the unknown element cannot be cast into doubt, because it is presupposed to be true (*Ulrich is somewhere*). The definite but unspecified element marked by the wh-word does not allow for un-certainty, only un-knowledge.

In contrast, polar and alternative questions express a lack of certainty concerning the truthfulness of the proposition(s) advanced (one in polar questions, two or more in alternative questions). Their epistemic design is

already uncertain at the grammatical level; for this reason they can include *maybe*, since this adverb is perfectly compatible with the uncertainty already encoded in the plain question form.

Secondly, we wonder what effect, if any, the presence of *maybe* in polar and alternative questions might have on the questioner's epistemic commitment when such questions are compared with their corresponding plain forms. In other words, are dubitative questions more or less uncertain than plain questions?

We will see that, when added to questions coming from the Not Knowing Whether pole where uncertainty is maximal, *maybe* mitigates what it finds there: it finds no certainty, only uncertainty, and as a result it mitigates the uncertainty: such questions are thus *less uncertain* than their plain forms.

On the contrary, when added to questions coming from the Believing pole where the degree of certainty is higher than that of uncertainty, *maybe* mitigates the degree of certainty (the proportion of certainty and uncertainty still remaining in favour of the former), thus these types of dubitative questions are *more uncertain* than their plain forms.

Rhetorical questions are asked and understood not as information-seeking but as conveying information to the addressee, specifically a *strong assertion* of the *opposite polarity* to that of the question (Bolinger 1957, Horn 1978, Quirk et al. 1985, Koshik 2005): *what difference does it make?* is equivalent to the negative assertion *it makes no difference*. This is the traditional view in the literature.

In terms of the KUB model, this means that the assertion implicit in the question conveys the Knowing position. But is it really true that rhetorical questions *always* convey *strong* reverse polarity assertions?

We claim that rhetorical questions featuring a modal conditional can be read as conveying reverse polarity assertions of *mild* strength, i.e., *mitigated* assertions coming from the Believing pole of the Uncertain position, i.e., from a stance which is *less strong* than the Knowing.

Even though the *epistemic strength* of the assertion is downgraded, such questions can still function as rhetorical. *Who would have dreamt of putting this on here?* means *nobody would have dreamt to put this on here*.

The conditional in such questions is not restricted to the meaning of the question posed, but is part of the implicit assertion itself. As a consequence, the implicit assertion cannot originate in the Knowing pole, since Knowing cannot be expressed by conditionals.

Throughout Chapters 3-12, examples from the Spoken BNC2014 are analysed in order to back up our claims with corpus-based evidence.

The initial analysis is *qualitative*: the speakers' epistemic positions are identified by examining the evidential and epistemic markers, both lexical and grammatical, used in the conversational sequences.

This qualitative analysis allows to understand the epistemic dynamics among interlocutors in terms of negotiation, alignment, partial alignment, misalignment, etc.

The last chapter of the book shows how to perform a *quantitative* analysis of the interlocutors' epistemic positions in a dialogue.

The quantitative analysis of any dialogue is based on its previous qualitative analysis and consists in singling out the number of words dominated by their respective evidential and epistemic markers, namely the *scope* (Quirk et al.1985) of such markers, in order to identify how much Known, Unknown and Uncertain there is in each turn and its turn constructional units (TCUs), in each sequence (adjacency pairs, triplets, etc.), in a whole dialogue and also, respectively, for each interlocutor.

In the dialogue analysed in the last chapter we quantify the distribution of Known, Unknown and Uncertain among interlocutors not only regarding the epistemic *origin* but also the epistemic *destination* of their words.

In this way we can draw up a complete quantitative map of the epistemic stance involved in the dialogue as a whole.

7. Plan of the book

The book is divided into three parts. In Part 1 (Chapters 1-2) we describe the theoretical framework, methodology and main aims of our research.

The KUB model is presented in a slightly different version from that provided in our previous work (Zuczkowski, Bongelli and Riccioni 2017), in that the difference within the Uncertain position between the Not Knowing Whether and Believing poles is now made more explicit.

To avoid unnecessary confusion, we have not changed the acronym KUB, but stress that the letter B refers not only to Believing but also to Not Knowing Whether, i.e., the other pole of the Uncertain position, as the figures with circles and arrows will show in the next chapters.

In Part 2 (Chapters 3-9) we try to achieve our three main aims, i.e., to show that:

- (1) questions come from two different epistemic positions (the Unknowing and the Uncertain, this latter being further subdivided into the Not Knowing Whether and the Believing poles);
- (2) they are addressed toward two different positions (the Knowing and the Believing);

- (3) they sit at different points along the epistemic continuum which goes from the Unknowing position to the Believing pole of the Uncertain position.

Particular attention is devoted to *alternative questions* and *polar interrogatives*. In the linguistic literature, few studies have examined the relationship between alternative questions and epistemic stance. The best known type of alternative question in the literature, for obvious reasons, is the paradigmatic one in which two alternatives are lexicalised (e.g., *did you have caesareans or natural births?*). Thus Chapter 4 presents a study that we carried out analysing 611 alternative questions extracted from the Spoken BNC2014 in order to find out more about their possible linguistic design as well as to have quantitative data to refer to.

Three research questions are answered: (1) how many alternatives are present in each question (two, three, more?), (2) how such alternatives are expressed from a lexical and grammatical point of view, (3) how such questions are answered.

Four types of linguistic design (*complete, incomplete, indefinite, negative*) and two main epistemic designs are found. Negative alternative questions, i.e., *or not* questions, though less frequent than the other three types, are also interesting from a theoretical point of view, since they are closely related to polar interrogatives.

As for polar interrogatives (Chapter 5), in the linguistic literature there are two contrasting views on their design, that originate in the work of H.O. Coleman (1914) and D. Bolinger (1978) respectively. The former suggested that a polar interrogative is nothing but an incomplete alternative question in which the second alternative (*or not?*) has been suppressed and remains implicit, not lexicalised (we call this type of questions *neutral polar interrogatives*). Bolinger instead claims that polar interrogatives advance a *hypothesis* for confirmation (we call this type of questions *non-neutral polar interrogatives*).

The dispute between Coleman and Bolinger is not idle, since the different ways of reading the linguistic design of polar interrogatives reverberate in the type of *social action* (information vs confirmation seeking) assigned to them and thus in their *epistemic design* as well.

The two different viewpoints on polar interrogatives may well be due to their linguistic design, which (differently from the other question types under analysis) usually gives no lexical or grammatical indication of whether a hypothesis is being advanced or not. The question design of polar interrogatives therefore appears somewhat ambiguous, in that it seems to be open to both Coleman's and Bolinger's readings.

This difficulty is not only theoretical but also has an effect on the empirical analysis of such questions. To investigate it further, extracts from the Spoken BNC2014 are discussed in order to show that in some cases, not even the context, turn sequential position or propositional content can help establish whether a polar interrogative is information- or confirmation-seeking, or indeed something else.

A further problem the present book intends to pose concerns the Unknowing position. In Chapter 8 we claim that not only the Uncertain position but also the Unknowing is an epistemic continuum with different degrees of unknowledge, ranging from open to closed and finally dual wh-questions as far as the number of their possible answers is concerned.

Open wh-questions expect many possible answers, the specifics of which are unknown to the questioner, i.e., s/he has no idea of the answer (*where did they sell the ticket that won the last Italian national lottery?*). This is the prototype of wh-questions.

Closed wh-questions expect only a few possible answers which are therefore more or less known to the questioner, i.e., s/he has already some idea of what they are. In a normal context, the range of answers to the question *how much water do you drink a day?* can be easily supposed by the questioner: from about one to three litres.

Dual wh-questions expect a couple of possible answers which are well known to the questioner: *which pair of shoes should I wear* (between two pairs)?

Dual wh-questions are particularly interesting since they border on alternative questions, the first question type at the beginning of the Uncertain position.

Such questions can be transformed into their corresponding alternative questions, thus they are usually interchangeable in the same context of occurrence: *which pair should I wear?* $\leftarrow \rightarrow$ *should I wear this pair or that one?*

Both questions are information seeking and expect the same content response, i.e., an answer between two alternatives (*this pair* versus *that pair*), and the questioner *perfectly knows* what these alternatives are: by asking *which pair of shoes should I wear?*, the questioner is not groping in the dark (as it usually happens with open wh-questions), she has already a precise idea of the possible answer (as normally happens with alternative and polar questions).

Since uncertainty by definition implies a doubt between (at least) two alternatives, dual wh-questions (and their interchangeability with corresponding alternative questions) pose the problem of whether they still convey an unknowing or instead an uncertain stance.

In favour of the unknowing stance we advance three arguments, two theoretical and one practical.

Part 3 (Chapters 10-12) has a further aim, i.e., to show how important it is to distinguish the Unknowing from the Uncertain position when examining types of questions in addition to the five treated in Part 2, for example dubitative and rhetorical questions.

In particular, our reading of *dubitative questions* shows that distinguishing between the Not Knowing Whether and Believing poles is fundamental to their correct interpretation; and the traditional way of viewing *rhetorical questions* is cast in a new light when these are considered in relation to the Believing pole.

Our final purpose is to show that the *qualitative* analysis of dialogues performed using the KUB model can also serve as a solid base on which to build a rigorous and exhaustive *quantitative* analysis.

A summary and discussion of our research are found in the overall conclusions that close the book.

PART 1

KUB MODEL AND CONVERSATIONAL ANALYSIS ON QUESTIONS AND RESPONSES

Chapters 1 and 2 of Part 1 describe the theoretical framework, methodology and main aims of our research.

CHAPTER 1

KNOWING, UNKNOWING, NOT KNOWING WHETHER AND BELIEVING

1.1 Epistemic stance and KUB model

Many studies have been dedicated to the communication of epistemic stance (see, among others, Biber and Finegan 1989; Ochs 1996; Kärkkäinen 2003; Biber 2004; Du Bois 2007; Englebretson 2007; Keisanen 2007; Simon-Vandenberg 2008; Jaffe 2009; Kirkham 2011; Stivers, Mondada and Steensig 2011; Chindamo, Allwood, and Ahlsén 2012; Hayano 2013; Lindström and Karlsson 2016; Roseano et al. 2016; Gablasova et al. 2017; Mortensen and Mortensen 2017; Wang and Jiang 2018; Poole, Gnann and Hahn-Powell 2019; Bristol and Rossano 2020; Herder et al. 2020 etc.).

With the term *epistemic stance* or *epistemic position* (which we treat as synonymous) some of the abovementioned authors refer to the speakers' *commitment* towards the truth of the propositional content being communicated (see for example, Chindamo, Allwood, and Ahlsén 2012); for other authors, the *source of information / modes of knowing* should also be included: "epistemic stance refers to knowledge or belief vis-à-vis some focus of concern, including degrees of Certainty or knowledge, degrees of commitment to truth of propositions, and sources of knowledge, among other epistemic qualities" (Ochs 1996: 410).

Our view, based on the results of empirical research on spoken and written corpora (see the KUB bibliography at the end of this book) is closer to this latter perspective: epistemic stance includes both the epistemic and the evidential aspects, which we consider as two sides of the same coin.

Thus epistemic stance refers to both the epistemic and the evidential *positions* which speakers take in the here and now of communication, i.e., it refers to both the speakers' *commitment* towards the truth of the piece of information being communicated and the speakers' *source* of, i.e., *access* to, that piece of information.

Such positions are expressed through the evidential and epistemic *markers*, both lexical and morphosyntactic, i.e., grammatical,¹ that speakers use to refer to themselves in the here and now of communication.

According to our KUB model, all such markers convey three main positions, each having two sides, one evidential (source, access) on the left of the slash (/), the other epistemic (commitment), on the right:

Knowing / Certain position;
 Not Knowing Whether—Believing / Uncertain position;
 Unknowing / Neither certain nor uncertain position.

In brief, this means that speakers can communicate each single piece of information either as known/certain or uncertain or unknown. They can of course shift from one position to another not only in each of their turns but even within one and the same turn.

From the KUB perspective, as we will show in the next chapters, communication may be seen as originating in one of the three epistemic positions of a speaker and being directed at another of the three in the interlocutor who, in her/his turn, can reply from any of the three epistemic positions, either aligning, partially aligning or misaligning with the speaker's position.

That the three positions are two-sided, i.e., both epistemic and evidential, means that, when a piece of information *p* is communicated as certain (the speaker's commitment to the truth of *p* is maximum or high), for instance *Someone is playing guitar*, it is also communicated as something the speaker knows, and vice versa: when communicated as known to the speaker, *p* is also communicated as certain to him/her.

When communicated as uncertain (the commitment is minimum or low), *p* is also communicated as something the speaker either does not know whether or not true (e.g., *I'm doubtful about going to the movie*) or believes to be true (e.g., *I think I'll go to the movie*), and vice versa.

Not Knowing Whether and *Believing*, as we will see in detail later on, are the poles between which the different degrees of uncertainty range: *Not Knowing Whether* represents the maximum uncertainty, *Believing* the minimum.

But there is a third possibility: besides being communicated as either certain or uncertain, *p* can be communicated as unknown to the speaker. In this case, *p* is also communicated as neither certain nor uncertain (no commitment at all): when a piece of information is unknown, it is missing;

¹ The terms *grammatical* and *morphosyntactic* are used synonymously.

therefore, it cannot be communicated as either certain or uncertain, both of which require information to be present: the speaker cannot commit to what is absent, lacking, i.e., to what s/he does not know.

In the following, the three positions are presented in more detail.

1.2 The Knowing/Certain position

The *Knowing/Certain position* (for simplicity's sake abbreviated to *Knowing position*) can be represented in the following way:

in the here and now of communication
I (the speaker) *tell you* (the hearer) that
 in the here and now of communication
I know that p and *I am certain* that p

The piece of information p is therefore something the speaker *says* s/he *knows* (evidentiality) and *is certain* (epistemicity) to be true.

1.2.1 Markers

The most typical marker for communicating a piece of information from the Knowing/Certain position is the *plain declarative sentence*, i.e., the declarative sentence in the indicative mood (either present, past or future) without any lexical marker of epistemicity or evidentiality (Lyons 1968; Aimer 1980), as in examples (1) and (2):

- (1) Someone is playing the guitar
- (2) When I was a child, I was greedy for cherries

These examples show that speakers do not usually need to express their own access to the information with lexical *evidential* markers nor their own certainty about the truth of the information with lexical *epistemic* markers.

Normally, the plain declarative structure is quite sufficient to communicate the information as known/certain, making the presence of lexical markers, both evidential and epistemic, superfluous, if not totally redundant, in most communicative contexts and conversational sequences.

Yet declarative sentences can also include *lexical* markers, both *evidential*, as in examples (3) and (4):

- (3) *I hear* that someone is playing the guitar
- (4) *I remember* that, when I was a child, I was greedy for cherries

and *epistemic*, as in examples (5) and (6):

(5) *I am sure* that someone is playing the guitar

(6) *No doubt* that, when I was a child, I was greedy for cherries

1.2.2 Knowing

In terms of the speaker's access to the information, what difference is there, if any, between verbs like *hearing* and *remembering* in examples (3) and (4), and the verb *knowing* that gives its name to this epistemic position?

In examples (3)-(4) the evidential verbs in the first person, present tense and indicative mood *I hear* and *I remember* reveal the speaker's *specific* access to the information in the here and now of communication.

If, on the other hand, I (the speaker) say

(7) I know that Ulrich is at home

the lexical marker *I know* is not as specific as *I hear* and *I remember*, since I say that I know the piece of information, but I do not say *how* I know it.

As a matter of fact, after example (7) my interlocutor could ask me "How do you know that?" and I could answer by specifying my access to the piece of information *Ulrich is at home*: for example, I could say "He just called me from there".²

My interlocutor could not ask me the same question "How do you know that?" after examples (3) and (4), since in those cases my access to the information is already specified, lexicalised, explicit.

The verb *I know* is therefore unspecified and more general than *I hear*, *I remember*, *I see*, etc.; we consider it as the *hyperonym* and in this sense it encompasses them all.

This means that the verbal expression *Knowing* or *I know*, which designates the evidential aspect of the present position, is a *general* label (a *macro-marker*) which encompasses and stands for all the *specific* evidential markers (*micro-markers*) such as *I hear* / *I remember* / *I see*, etc. In brief, such a general label refers to what is communicated as knowledge by the speaker, i.e., as true information.

² The implicit evidential marker in *he just called me from there* is *I remember*, as shown in example (4) in relation to example (2). It is worth underlining that the piece of information acquired by the speaker prior to the here and now of communication is accessed by her/him in the here and now of communication through memory.

1.2.3 Certain

In examples (5) and (6) the speaker's *evidential* access to the information being communicated is not lexicalised; nevertheless, through the *epistemic* markers *I am sure* / *No doubt* the piece of information is explicitly communicated as something whose truth the speaker is certain of.

Like the verbal expressions *knowing* and *I know*, the adjective *certain*, as well as the verbal expression *I am certain*, can function as *general* labels, i.e., *macro-markers*, which encompass and stand for all the epistemic markers, i.e., *micro-markers*, like *I am sure*, *no doubt*, *I am convinced*, *certainly*, etc., which speakers use to refer to their particular commitment to the truth of the information in the here and now of communication.

Information is communicated as *certain* explicitly, i.e., lexically, in examples (5) and (6); implicitly, i.e., non lexically, in examples (1)-(4) and (7).

As anticipated above, in examples (1)-(7) evidentiality and epistemicity seem to be two sides of the same coin, in the sense that the one entails the other: when information is communicated as known by the speaker, it is simultaneously communicated as certain for him/her; when it is communicated as certain, it is simultaneously communicated as known.

At this linguistic-communicative level, a piece of information, both *known* and *certain*, is delivered by the speaker and understood by the hearer as *true* information.³

Thus *truth* is the common feature that connects the known and the certain, i.e., knowledge and certainty. In principle, to say that the information is communicated as known and certain to the speaker is equivalent to saying that the information is communicated as true.

It is worth noting that a basic epistemological principle in epistemic logic is *veridicality* (Hintikka 1962): if a proposition *p* is known, then it is true. A sentence like *I know that p* presupposes that *p* is true. Knowledge is commonly taken to be veridical: only true propositions can be known (Rendsvig and Symons 2019).

1.3 The Uncertain position

A piece of information is communicated as *uncertain* when the speaker's commitment to its truth in the here and now of communication is at the minimum or low level, such as in examples (8)-(10):

(8) *Perhaps* Miki is at home

³ On the difference between *certain* and *true* see section 1.5.4 in this chapter.

- (9) He *may* be at home
 (10) He's *likely* to be at home

To say that the speaker's commitment to the truth of the information is at the minimum level is the same as to say that the truthfulness of the information is communicated as doubtful.

Like the adjective *Certain* and the verbal expression *I am certain* (see above), also the adjective *Uncertain* and the verbal expression *I am uncertain* or *I am not certain* are *general* labels, i.e., *macro-markers*, which encompass and stand for all the epistemic markers, i.e., *micro-markers*, like *perhaps*, *may*, *likely* in examples (8)-(10).

The *Uncertain position* includes everything that speakers communicate—lexically or morphosyntactically—as being *uncertain*, *possible*, *probable*, *supposed*, *assumed*, *believed*, *doubted*, *suspected*, etc.

As these expressions suggest, in addition to the strict sense of uncertainty expressed through negative particles and affixes, e.g., *I do not know whether...*; *I'm not sure that...*; *I'm uncertain about...*, etc., this epistemic position also encompasses possibility and subjectivity.

Possibility is expressed, for example, by the epistemic use of the modal verbs *can*, *may*, *must* *might*, *could*, etc. referring both to present and possible (conditional) time; by expressions such as *it is possible/probable*, etc.; by epistemic future; if clauses, etc.

Subjectivity, i.e., the communication of the speaker's point of view, is typically expressed with verbs of opinion (*I think*, *I suppose*, *I doubt*, *I guess*, etc.) and related expressions (e.g., *in my opinion*, *according to me*, etc.).

Since these concepts partially overlap, we prefer to use the more generic term *uncertainty*, which encompasses them all.

1.3.1 Two poles of the Uncertainty position: Not Knowing Whether and Believing

On the basis of our empirical research (already mentioned in section 1.1), the *Uncertain position* proves to be an epistemic continuum which ranges between two opposing poles of *Not Knowing Whether p or non p* (NKW) and *Believing that p* (B), see Figure 1:

I do not know whether p or non p..... *I believe that p*

(I am equally uncertain whether p is true or false) (I am inclined to believe that p is true)

Figure 1. The two poles of the Uncertain position

The NKW pole represents the maximum degree of uncertainty (uncertainty in the strict sense): the speaker communicates the information as something s/he does not know to be either true or false.

Sentences like *I do not know whether I'll go to the movie or not* and *I do not know whether I'll go to the movie or to the theatre*, i.e., sentences whose design can be formally represented as *I do not know whether p or non p* and *I do not know whether p₁ or p₂*, usually express, respectively, that *p* and *non p*, on the one hand, and *p₁* and *p₂*, on the other, are equally possible of being true and that the speaker is equally uncertain of the two possibilities: no indication of considering one of the options as being more probable than the other is given; both options are possibly true to the same degree (50%-50%).⁴ This proportion represents the maximum degree of uncertainty.

The B pole, on the contrary, represents a lower, i.e., minimum, degree of uncertainty (uncertainty in the sense of speaker's subjectivity): the speaker communicates the information as something s/he believes to be true.

Sentences like *I believe that I'll go to the movie*, *I think that Ilaria is cooking*, i.e., sentences whose design can be formally represented as *I believe that p*, normally convey that, though the speaker does not know whether *p* is true or false, s/he is nonetheless inclined to believe that the explicit (lexicalised) positive alternative (*p*) is more likely to be true than the implicit (not lexicalised) negative one (*non p*).

This design allows the speaker to indicate a preference for *p*, which is assigned a higher degree of probability of being true than *non p*.

From equal probability (NKW pole) the speaker's commitment shifts gradually towards unequal probability (B pole), from maximum uncertainty to minimum uncertainty.

Since the Uncertain position ranges along two opposite poles, two different representations are needed for it, one for each pole:

1. in the here and now of communication *I* (the speaker) *tell you* (the hearer) that in the here and now of communication *I do not know whether p* is true or false;
2. in the here and now of communication *I* (the speaker) *tell you* (the hearer) that in the here and now of communication *I do not know whether p* is true or false, but *I am inclined to believe that p* is true.

⁴ Of course, when there are more than two alternatives in a question, each of them is always given the same likelihood of being true.

As said above, the degree of uncertainty of the two poles, Not Knowing Whether and Believing, is different.

1.3.2 Markers

As shown in Figure 2, the most typical markers for communicating a piece of information from the Uncertain position can be grouped into the following six categories, both lexical and morphosyntactic (Bongelli et al. 2012, 2014, 2019; Zuczkowski et al. 2016; Zuczkowski, Bongelli and Riccioni 2017).

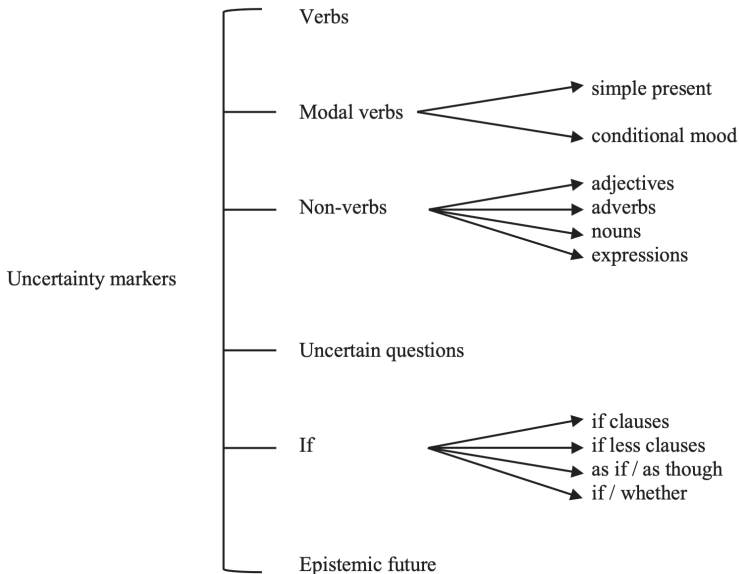


Figure 2. Categories of Uncertainty markers

Verbs. These are evidential and epistemic verbs conjugated on the first person singular or plural of the simple present such as *I believe, I suppose, we think*, as well as on the singular or plural third person, when they include the speaker: these can be presented in both a non-personal use such as *one hopes* as well as under a passive one such as *it is believed*.⁵

⁵ An interesting application of the KUB model to mental verbs of Believing in Polish can be seen in Szczyrbak (2018, 2019).

The verb *to seem* (and its synonyms) in the simple present is consistently classified as an uncertainty marker in any person (I, you, s/he, it, we, they) as it indicates uncertainty with any pronoun.

Modal verbs. We prefer to distinguish the simple present from the conditional mood of such verbs.

Modal verbs in the simple present. These include modal verbs used to communicate uncertainty or possibility in the present: *can*, *may*, *may not*, *must*, and *must not*. We do not include the negative form of *can* because it communicates impossibility, and therefore certainty. For example

(11) We *cannot* from this evidence deduce that he is innocent

All other negative forms of modal verbs are labelled as uncertainty/possibility markers. The modal verb *must* deserves a separate discussion since it can have an epistemic or a deontic meaning. For example, in

(12) Gill *must* have flown to Rome

the word *must* has an epistemic meaning since it can be paraphrased as *I believe that she has flown to Rome*.

In contrast, in

(13) Gill *must* fly to Rome

the *must* has a deontic meaning and, as such, it is labelled as a marker of the Knowing/Certain position, not the Uncertain.

When *must* is used with an epistemic meaning, as in the case of a sentence like (12), the speaker communicates uncertainty, i.e., s/he communicates that s/he does not know whether Gill has flown to Rome but s/he is inclined to believe that Gill has done so.

On the contrary, when *must* is used with a deontic meaning, as in the case of a sentence like (13), we consider it as communicating certainty, i.e., we believe that it conveys the speaker's certainty, since it occurs in a declarative sentence. In other words, according to Chindamo, Allwood, and Ahlsén (2012: 619), although *must* as well as other modal verbs, adverbs and expressions “do not in themselves have an affective or epistemic stance function [...], they might be part of an affective or epistemic stance”.

Modal verbs in the conditional mood. Include *could*, *might*, *ought*, *should*, and *would*. These can be used in positive as well as negative forms, both of them indicating uncertainty. The verb *could* deserves a separate discussion since it can be used to communicate a possibility in the conditional mood such as in

(14) I *could* stay tonight

or to refer to past such as

(15) She *could* be very attractive, when she wanted to

Contextual elements, such as the presence of another verb in the past tense or temporal deixis, can help in disambiguating the interpretation. Only the former case is uncertain; the latter is known/certain.

Non-verbs (adjectives, adverbs, nouns, expressions). They are grouped in one and the same category:

- **adjectives:** include examples such as *possible* and *unlikely*. These are included only when they indicate the speaker's uncertainty in the present as stated in the previous sections:

(16) *It is possible* that she has flown to Rome

In this example *possible* refers to the uncertainty stated by the speaker in the here and now of communication. A counter-example is

(17) It was possible that she had flown to Rome

Here *possible* refers to the uncertainty stated by the speaker in the past; not in the here and now, i.e., it refers to a past uncertainty of the speaker that here and now is communicated as certain:

here and now I tell you that
I remember (= I know / am certain) that
it was possible that she had flown to Rome

- **adverbs:** include examples such as *perhaps* and *likely*:

(18) *Perhaps* she has flown to Rome

Differently from the adjectives *possible*, *unlikely*, etc., adverbs like *perhaps*, *maybe*, etc. usually refer to the speaker's uncertainty in the here and now of communication even when they are included in sentences in the past tense: *Perhaps she has flown to Rome* = here and now I communicate that here and now *I do not know whether* she has flown to Rome.

The same holds true for *Perhaps she told me that she would fly to Rome*, but it does not for *She told me that perhaps she would fly to Rome*. In this last example, here and now *I know that* she told me p, the adverb *perhaps* included in p refers to her past uncertainty, not mine, neither past nor present.

- **nouns:** include examples such as *impression* and *doubt* when they refer to the speaker's uncertainty in the here and now of communication:

(19) *There is some doubt* that she has flown to Rome

In contrast,

(20) There was some doubt that she had flown to Rome

refers to the speaker's uncertainty, but not in the here and now of communication (see example 17 above).

- **expressions:** include examples composed not by one word, as for the previous categories, but by several ones such as *speaking for myself*; *according to my view*, *there is reason to believe* or *in my opinion*:

(21) *In my opinion*, she has flown to Rome

Uncertain questions. As we will see in the next chapters, alternative and polar questions (= polar interrogatives, tag and declarative questions) are considered uncertain in that they come from either the questioner's Not Knowing Whether or Believing position:

(22) Has she flown to Rome or Milan?

(23) Has she flown to Rome?

(24) She has flown to Rome, hasn't she?

(25) She has flown to Rome?

This category includes only the uncertain *direct* questions; the *indirect* ones are included in the following category “If”, in particular in the sub-category “If and whether”.

If. In this category we include:

If clauses (conditionals): In the English language, there are different forms of if clauses. The zero conditional occurs when *if* is accompanied by simple present in the conditional clause (protasis) as well as simple present in the main clause (apodosis). This is the only situation in which we do not classify the if clause as uncertain since *if* can be paraphrased by a temporal conjunction, for example “when” and “every time,” all of which communicate certainty. An example is

(26) If the weather is fine, I usually go for a long walk

All other forms are considered as markers of uncertainty, namely:

- Simple present + simple future, such as in

(27) *If I have enough money, I will buy that boat*

- Simple present + simple conditional, such as in

(28) *If you like it, we could buy that boat*

- Simple past + simple conditional, such as in

(29) *If I had enough money, I would buy that boat*

- Past perfect + perfect conditional, having as an example

(30) *If I had had enough money, I would have bought that boat*

If-less clauses (Omero et al. 2020) are the implicit if clauses, i.e., the constructions without the explicit *if*, such as

(31) *Had I had enough money, I would have bought that boat*

where the initial expression *had I had* is equivalent to *if I had had*.

Comparative constructions introduced by *as if* and *as though* (Swan 2005; Zuczkowski et al. 2014) including the following examples:

(32) It is *as if* the dancers wanted to communicate a message

(33) The dancers' arms, so wide open, look *as though* they were hung on a cross

If and whether introducing *indirect* uncertain questions (see above). In this function *if* and *whether* are generally preceded by a perceptual or cognitive verb,⁶ as in the following examples:

(34) I want to go and see *if that boat is still on sale*

(35) We must ascertain *whether or not that boat is still on sale*

Epistemic or conjectural uses of *will*: When used in the future, this marker indicates certainty in non-epistemically qualified declarative sentences such as

(36) He will buy that boat

which can be paraphrased as

I (*now*) know that he (*in the future*) will buy that boat

In contrast, the epistemic sentence

(37) *He will be wondering where we are*

can be paraphrased as

I (*now*) think that he is (*now*) wondering where we are.

In the latter example, *will* does not refer to the future but to the present, i.e., it is simultaneous with the time when communication occurs and it expresses a conjecture of the speaker (Celle 2005), i.e., her/his uncertainty.

⁶ On the use of *whether* with the verbs *to be certain* and *to know* see Hölker (2014).

1.4 The Unknowing position

The Unknowing position concerns all types of information speakers say they do not possess, they have no idea about. When conveyed from the Unknowing position, i.e., as unknown to the speaker, a piece of information *p* is communicated as missing: the speaker says that s/he has no evidential access to it; therefore, her/his commitment towards the truth of *p* can be neither certain nor uncertain, but simply lacking, as for example when s/he says:

- (38) *I don't know* what to do
- (39) *I do not remember* her name
- (40) *I do not see* where Alex is
- (41) *Their fate remains a mystery*
- (42) *The identity of the assassin is still secret*

In examples (38)-(40) the speaker is communicating that s/he lacks information concerning her/his future actions, a name and a place respectively.

The most typical marker of the Unknowing position is the expression *I do not know p* (example 38), but the unknown information can also be lexically communicated through the negative form of the verbs of the known (*I don't remember / see / hear*, etc.), as examples (39) and (40) show.

Adjectives like *incomprehensible*, *mysterious*, *obscure*, etc. and nouns like *mystery*, *secret*, etc. are also used to form expressions that communicate un-knowledge, lack of knowledge, as in examples (41) and (42).

In all the above examples the speaker is communicating that s/he has no evidential access to the piece of information and this informative gap (caused by the absence of the source) becomes, at the same time, a void of epistemic commitment. No evidential access, no epistemic commitment.

In other words, the Unknowing position is marked by the absence of information and, as a result, it can communicate neither certainty nor uncertainty, both of which require information to be present. The information gap characterising the Unknowing position corresponds to a commitment void: the speaker cannot commit to what s/he does not know.

The unknowing position can be thus represented as follows:

in the here and now of communication
I (the speaker) *tell you* (the hearer) that
 in the here and now of communication
I do not know p, i.e., *I am neither certain nor uncertain* that *p*

Like the expressions Knowing, Not Knowing Whether, Believing, Certain and Uncertain, also the verbal expression *Unknowing* or *I do not know*, which designates the evidential aspect of the present position, is a *general* label (a *macro-marker*) which encompasses and stands for all the *specific* markers (*micro-markers*) like those in examples 38-40 above.

It is worth noting that we can say *I do not know p* (e.g., I do not know what to do / who made that / why you ran away / etc.) but we cannot say **I do not know that p* (e.g., **I do not know that Alex is surfing / was surfing / will surf*), we can only say *I did not know that p*, i.e., *that Alex is surfing*, etc.

At the end of section 1.2.3 we said that a sentence like *I know that p* presupposes that *p* is true. Such a presupposition is part of the speaker's *background knowledge*. If s/he says **I do not know that p*, on the one hand s/he says that *p* is part of her/his background knowledge, i.e., that s/he knows that *p*; on the other hand, with the same sentence s/he denies that it is so. There is thus a contradiction in what s/he says. It is to this contradiction that the unacceptability of **I do not know that p* is due.

On the contrary, there is no contradiction in the sentence *I did not know that p* (which implies that now I know that *p*) as well as in the sentence *s/he does not know that p*, i.e., when the subject of the sentence is different from the speaker's "I". In this case, the speaker presupposes that *p* is true, i.e., s/he says that s/he knows that *p* is true, but s/he is talking of another person, not of her/himself: it is that person, not her/himself, who *does not know that p* (Beaver and Geurts 2014; Mulligan and Correia 2017; Ichikawa and Steup 2018).

1.5 In the here and now of communication I the speaker tell you the hearer that...

The definitions and representations of the KUB positions given in sections 1.2, 1.3.1 and 1.4 respectively (*in the here and now of communication I the speaker tell you the hearer that ...etc.*), have three main features in common, which always recur:

- (1) the expression *in the here and now of communication*,
- (2) the first person (singular, plural, as well as impersonal constructions that refer back to the speaker's *I*),
- (3) the present tense and the indicative mood of the performative expression *I tell you*, and the evidential/epistemic expressions *I know, I am certain, I do not know whether*, etc.

These features are fundamental to properly understand the epistemic stance perspective and, as a consequence, our KUB model: they indicate that the speaker *is saying* (I tell you) how s/he is gaining access (I see/remember/believe...) or is not gaining access (I do not know) to the piece of information *p* and what his/her commitment to its truth is (for me it is certain/probable/possible... that *p*...) in relation to the time when and the place where communication occurs, which is always the here-and-now.

Let us make some more comments on such features and their theoretical and practical consequences.

1.5.1 *I tell you that I know...*: epistemic stance is a linguistic, communicative notion, not a mental one

It should be noted that the *performative* expression *I tell you* precedes, i.e., grammatically governs, both the *evidential* expressions *I know*, *I do not know whether* etc., and the *epistemic* expressions *I am certain* and *I am uncertain*.

This means that epistemic stance is a *linguistic, communicative* notion, not a mental one, and that it is encoded in what speakers say.

For example, in normal contexts a sentence like *Daniel is on the beach* as an answer to the question *Where is Daniel?* is usually understood as conveying that the speaker's commitment towards the truth of the information is high, since the sentence is an epistemically "unmarked" (Lyons 1968) or "unqualified" (Aijmer 1980) declarative sentence: the presence of this grammatical epistemic marker allows us to say that the information is *communicated* by the speaker as something s/he knows (evidentiality) and is certain about (epistemicity), independently from whether such information really corresponds to a mental state or whether the speaker is lying.

Analogously, an answer like, for example, *Maybe Daniel is on the beach* is normally understood as conveying that the speaker's commitment towards the truth of the information is low, because of the presence of the epistemic adverb *maybe*: this lexical marker of uncertainty allows us to say that the information is *communicated* by the speaker as something s/he is uncertain about, again independently from whether such information really corresponds to a mental state or whether the speaker is lying.

In principle, those who analyse epistemic stance in conversation neither treat the linguistic data as mental nor are they interested in knowing whether such data correspond to possible mental states. They try to understand what kind of epistemic stance the linguistic data conveys, mainly through the analysis of the epistemic and evidential markers, both lexical and

morphosyntactic, which speakers use to refer to themselves in the here-and-now of communication.

1.5.2 Lying

We want to stress that, when people use declarative sentences with or without lexical markers of the Known/Certain, they communicate knowledge and certainty even when the piece of information *p* may prove false, groundless, or even when they intentionally tell a lie, i.e., when they *say* that they know *p* (linguistic, epistemic Knowing position) while in their mind they *are uncertain* about *p* (mental state) or even *do not know* *p* (mental state).

For instance, at school, if a little boy who has not studied his geography lesson answers *Milan* to the teacher that asked him what the capital of Italy is, he communicates as certain a wrong piece of information. If a woman says *I am forty years old*, when she is actually fifty, she intentionally does not tell the truth, she lies. Independently of the fact that the two pieces of information are both false, they are communicated as true, certain, known to the speaker.

Something similar holds true for the Uncertain and Unknowing positions.

People can *say* that they *do not know whether* *p* or that they *believe* *p* (linguistic, epistemic Uncertain position) when they in fact *know* *p* or *do not know* *p* (mental states).

They can also *say* that they *do not know* *p* (linguistic, epistemic Unknowing position) when in fact they *know* *p* or *do not know whether* *p* or *believe* *p* (mental states).

1.5.3 Whose knowledge, un-knowledge and uncertainty

A speaker can use an evidential and epistemic marker to refer either to her/himself (*I—we*) or to somebody else (*you—s/he—they*) either in the present (e.g., *I / you etc. / know that p*) or past (*I / you etc. / knew that p*) or future (*I / you etc. / will know that p*).

Epistemic stance is conveyed only by the evidential and epistemic markers which refer to *the speaker in the here and now of communication* (not to someone else in the past or in the future), i.e., epistemic stance only regards the epistemic position the speaker (*not somebody different from the speaker*) is taking in the here and now of communication, *not before or after*.

This *asymmetry* between, for instance, *I know / I am uncertain*, etc. (epistemic stance) and *I knew / Daniel knew / I was uncertain / Daniel was uncertain / etc.* (no epistemic stance in the proper sense) is analogous to the asymmetry typical of the performative verbs (Austin 1975²: 62-63), between their performative use (e.g., *I promise*) and their descriptive ('constative' in Austin's terminology) use (*I promised / I will promise / Daniel promises / etc.*).

Therefore, in the example *Daniel is uncertain whether p* the epistemic marker *is uncertain*, although in the present, does not refer to the speaker but to somebody else.

In the example *I was uncertain whether p* the epistemic marker *was uncertain* does refer to the speaker, but in the past, not in the here and now of communication.

In both examples, the piece of information that Daniel is uncertain, or that I was uncertain about something, is communicated *in the here and now* not as uncertain but as known/certain; the access to the piece of information is *here and now I know* and *here and now I remember* respectively; the commitment is *here and now I am certain* in both cases:

here and now *I know / I am certain* that Daniel is uncertain about p
 here and now *I remember / I am certain* that I was uncertain about p

Remaining with the same examples, only sentences like (or corresponding to) *I am uncertain whether p* convey the speaker's Uncertain position.

Something analogous holds true for sentences including an evidential marker like *Daniel knows p* (e.g., *Daniel knows when to go away*), *Daniel knows that p* (e.g., *Daniel knows that she will come back*), *I knew p*, *I knew that p* and so on. Only sentences like (or corresponding to) *I know p* and *I know that p* convey the speaker's Certain position.

1.5.4 Certainty/uncertainty and truth/falsehood

The previous sections, particularly the one on lying, give us the opportunity to clarify the notion of certain/uncertain in relation to that of true/false.

Certainty/uncertainty is very different from truth/falsehood: the former is encoded in communication, the latter is not.

In everyday communication truth/falsehood usually has to do with the result of a comparison between what speakers say and the state of affairs they refer to: for example, when someone says *Daniel is at the library*, normally for both speaker and hearer the information is evaluated as true if Daniel really is at the library, i.e., if the utterance corresponds to the

communicated state of affairs; if not, it is evaluated as false. Yet, in both cases, in the here and now of communication the information is communicated as certain, i.e., as if it were true,⁷ through its declarative structure in the present indicative, which, as said, is usually assigned the status of a morphosyntactic marker of Certainty.

In general, in order to know whether the information *Daniel is at the library* is true or false, the hearer needs further and successive proof (when that information is really news to her/him).

In order to know whether that information is communicated as certain or uncertain, the hearer needs no further or successive proof.

This means that truth and falsehood are *extrinsic*, *external* to communication, in the sense that they cannot simply be verified by communication alone. On the contrary, Certainty and Uncertainty (=epistemicity) are *inherent* to communication, *intrinsic* to it, they are *encoded* within the communication, i.e., they cannot not be communicated.

⁷ We use the expression *as if* because, in the here and now of communication, the hearer may not know whether the information communicated by the speaker is true or false; for sure the hearer only knows whether the information is communicated as certain or uncertain.

CHAPTER 2

THEORETICAL FRAMEWORK, AIMS, METHODOLOGY

2.1 Theoretical framework

The KUB model (Zuczkowski, Bongelli and Riccioni 2017) is the main theoretical framework of the present study on the relationship between questions and epistemic stance. The other two basic reference points are represented by (for questions) Stivers, Enfield and Levinson's (2010) study on questions and responses, and (for epistemic stance) by John Heritage's model (Heritage 2012a, 2012b).

2.1.1 Stivers, Enfield and Levinson's (2010) study on questions and responses

Questions have been extensively investigated in different disciplines that focus on language study, including linguistics, philosophy of language, anthropology, Conversation Analysis; and from a range of perspectives: formal, functional, interactional being the most prominent (see, for example, Steensing and Drew 2008; Freed and Ehrlich 2010; Enfield 2011; Enfield, Brown and De Ruiter 2012; De Ruiter 2012; Hayano 2014; Lee 2015; Raymond 2015; Hennoste, Rääbis and Laanesoo 2017; Mikesell et al. 2017; Seuren and Huiskes 2017; Kärkkäinen and Thompson 2018).

A systematic cross-linguistic survey of the pragmatics of the question-response system in everyday conversations was carried out by the Multimodal Interaction Project research team at the Max Planck Institute for Psycholinguistics (Stivers, Enfield and Levinson 2010).

This study aimed to qualitatively describe and quantitatively document, from a Conversation Analysis perspective, the ways in which speakers *design* and *use* questions and responses in ten different languages from five continents, among which American English (Stivers 2010).

The team of ten researchers, each working on a different language, developed and used the same scheme for coding 350 question-response

sequences, each in their own language-specific corpus of video-taped conversations in a range of dyadic and multi-participant interactions.¹

The details of the *coding scheme*, including explanations of each coding category, are described in Stivers and Enfield (2010). Three primary question types are identified: *wh-questions* (also called content questions, Q-word questions, etc.), *alternative questions*, and *polar questions* (also called yes-no questions). The latter are further subdivided in three sub-types: *polar interrogatives*, *tag questions* and *declarative questions*.

The authors “feel that the scheme is empirically well-grounded and analytically well-motivated, and stands a good chance of usefully handling the kinds of distinctions in this domain that are likely to be relevant for any language in any cultural setting” (Stivers and Enfield 2010: 2620).

In this book, we focus on such question types and take Stivers, Enfield and Levinson’s (2010) above-mentioned survey as our point of reference and comparison, together with Stivers’ (2010) analysis of question-response pairs in her American English corpus.

2.1.2 John Heritage’s model of epistemic stance

In the field of Conversation Analysis, the main frame of reference on epistemic stance are John Heritage and colleagues’ studies (see, for example, Heritage and Raymond 2005; Raymond and Heritage 2006; Heritage 2011, 2012a, 2012b, 2013, 2014; Stivers, Mondada and Steensig 2011; Heritage and Raymond 2012; Mondada 2013; Drew 2018), which are partially based on the pioneering works of Labov and Fanshel (1977) on information classification, Pomerantz (1984a) on preference organization, Kamio (1979, 1994, 1995, 1997a, 1997b) on territories of information.

By making a distinction between *epistemic status* and *epistemic stance*, Heritage took Kamio’s theory a step further. The *epistemic status* refers to “the distribution of rights and responsibilities regarding what participants can accountably know, how they know it, whether they have rights to describe it” (Heritage and Raymond 2005: 15). It is “based upon the participants’ evaluation of one another’s epistemic access and rights to specific domains of knowledge and information. The epistemic status is distinct from the epistemic stance that is encoded, moment by moment, in turns at talk.” (Heritage 2012a: 7).

¹ “The coding scheme was developed through two cycles of pilot coding and evaluation, involving the application of draft coding categories to data from different languages, and collaborative discussion of conceptual and analytic issues that arose” (Stivers and Enfield 2010: 2620).

Heritage (2010, 2012a), among other topics, also deals with the *relationship* between *questions* and *epistemic stance*, a topic less extensively investigated in the literature. In particular, introducing the concept of *epistemic asymmetry*, he focuses on the relationship between different types of questions and different levels of epistemic gap between a *less knowledgeable* questioner (K-) and a *more knowledgeable* respondent (K+). In this respect, the notion of *epistemic gradient* is fundamental (Heritage and Raymond 2012: 180-181):

the act of questioning, however it is managed, invokes a claim that the questioner lacks certain information (or lacks certainty about it). We will refer to this as a 'K-' position. At the same time it also invokes the claim that the addressee has this information (or is likely to have it). The addressee is projected as in a knowledgeable, or 'K+' position. The act of questioning invokes this relative K-/K+ epistemic gradient between questioner and answerer, and, with it, the relevance of a response to the question. [...] However, different question designs can adjust the depth of the epistemic gradient between questioner and respondent, encoding different degrees of information gap and different levels of commitment to the candidate answer advanced by the questioner.

For instance, the different epistemic gradients established by questions such as (Q1) *Who did you talk to?* (wh-question), (Q2) *Did you talk to John?* (polar interrogative), (Q3) *You talked to John, didn't you?* (tag question), (Q4) *You talked to John?* (declarative question) are illustrated in Figure 1:

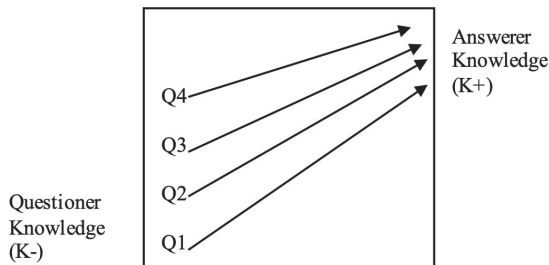


Figure 1. Epistemic gradient (Heritage and Raymond, 2012: 181): Q1, Q2, Q3, Q4 represent respectively the above mentioned four examples: wh-question, polar interrogative, tag and declarative question

All four questions are united in assigning ultimate authority for the information being sought to the respondent. However, they differ in the extent to which the questioner claims pre-existing access to the information under question. Each question establishes a distinctive gap in knowledge, a distinctive epistemic gradient, between questioner and respondent (Heritage and Raymond 2012: 181).

The arrows start from distinct points of origin but converge at one and the same destination.

We reformulate Heritage and Raymond's quotation and figure in the following way: along the epistemic continuum, running from K- (questioner's *lesser* knowledge) to K+ (answerer's *greater* knowledge), the wh-question Q1 is the nearest to the questioner's level of *lesser knowledge* (K-) and the farthest from the answerer's level of *greater knowledge* (K+), since a wh-question, "claiming no knowledge concerning the target state of affairs, expresses the largest knowledge gap and the steepest epistemic gradient" (Heritage and Raymond 2012: 181), i.e., the questioner knows nothing about the answer, the answerer is supposed to know everything.

Conversely, Q4, being a declarative question, i.e., a strong supposition or "best guess" (see Chapter 7), is the farthest from the level of the questioner's lesser knowledge (K-) and the nearest to the level of the answerer's greater knowledge (K+), since the questioner knows what the answer is, almost to the same degree as the answerer does.

2.2 Aims

Although we generally agree with Heritage's distinction between epistemic status and epistemic stance and his notion of epistemic gradient, we argue that his model including a less knowledgeable questioner (K-) and a more knowledgeable respondent (K+) is somewhat generic, in the following sense.

In our view, the distinction between the questioner's *unknowledge* and *uncertainty* is outlined in Heritage and Raymond's (2012: 180-181) above-quoted statement: "the act of questioning, however it is managed, invokes a claim that the questioner *lacks certain information (or lacks certainty about it)*. We will refer to this as a 'K-' position" (*emphasis added*).

Yet, the distinction between *lack of information* (lack of knowledge, *unknowledge*) and *lack of certainty* (*uncertainty*) about the information is not made *explicit*, i.e., is not related to two different epistemic positions.

Following our KUB model, we propose an explicit distinction within both the K- and K+ positions, as follows:

- (1) within the K- position, a less knowledgeable questioner who asks a question because *s/he does not know* a piece of information (*Where is Ulrich?*), should be distinguished from a less knowledgeable questioner who asks a question because *s/he is uncertain about* a piece of information, i.e., *s/he does not know whether* a piece of information is true (*Is Ulrich at home?*), or *s/he believes that* a piece of information is more likely to be true than its opposite (*Ulrich is at home, isn't he?*).

In other words, we aim to show that questions do not come from an undifferentiated K- position but from two distinct epistemic positions: the *Unknowing* and the *Uncertain*. Wh-questions arise from the Unknowing position since they express a *lack of knowledge* (= un-knowledge) concerning the identity of a wh-word (*who, what, etc.*), while the other three types of question analysed by Heritage in Fig. 1 (i.e., polar interrogatives, tag, and declarative questions), plus a fourth type (alternative questions) included in Stivers, Enfield and Levinson's (2010) typology, arise from the uncertain position since they express a *lack of certainty* (= un-certainty) concerning the truth value of one complete proposition, as in polar questions, or two (or more) propositions, as in alternative questions. In this sense, wh-questions are *unknowing questions*, while the other four types of question are *uncertain questions*.

- (2) We also aim to show that uncertain questions convey different degrees of uncertainty, thus placing themselves in different points along the epistemic continuum of the Uncertain position ranging from the Not Knowing Whether pole, the maximum uncertainty, to the Believing pole, the minimum uncertainty. Namely, alternative questions and neutral polar interrogatives are closer to the Not Knowing Whether pole, while non-neutral polar interrogatives, tag and declarative questions are closer to the Believing pole.
- (3) According to the KUB model, a distinction analogous to that made within the questioner's K- position (see point 1 above) should be made within the respondent's K+ position, in the sense that not all questions are addressed to the respondent's Knowing position; they can be addressed to his/her Believing position. For example, both the following *wh-questions*

- (1) Where *is* Ulrich?
- (2) Where *could* Ulrich be?

come from the questioner's Unknowing position but, while the former is addressed to the Knowing position, i.e., to a respondent who is

expected to know the answer (e.g., *Ulrich is skiing*), the latter (given the presence of the conditional *could*, not of the indicative *is*) is addressed to the Believing pole of the Uncertain position, i.e., to a respondent who is not expected to know the answer but is expected to be able to advance a hypothesis, supposition, opinion and so on (e.g., *Ulrich could be skiing*), as illustrated in Figures 2 and 3. From now on, the epistemic dynamics involved in the question-response sequences (invented ad hoc or extracted as examples from the Spoken BNC2014) will be illustrated with the help of circles and arrows, which are simply intended to represent visually what is encoded in the communication. The circles represent the four epistemic positions of two interlocutors, so the arrows have both an epistemic origin and an epistemic destination.²

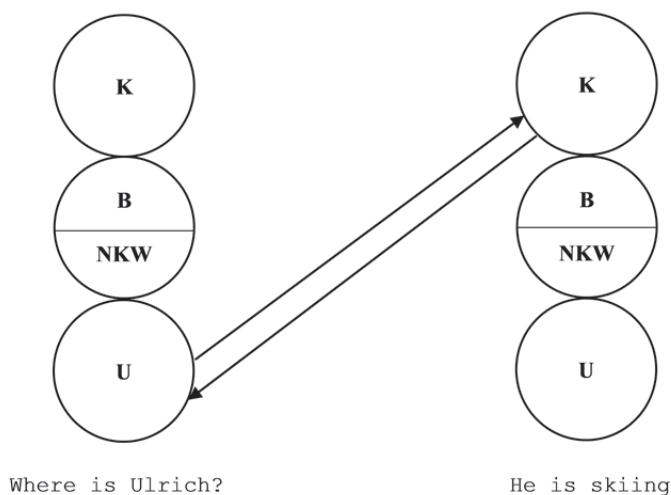


Figure 2. The arrows indicate the epistemic origin and destination of the wh-question (U = Unknowing → K = Knowing) and the response (K → U): the expected answer comes from the same epistemic position towards which the question is addressed (alignment, parallel arrows). B (Believing) and NKW (Not Knowing Whether) refer to the two poles of the Uncertain position

² In developing these figures, we have drawn inspiration from the diagrams used in Transactional Analysis (Berne 1961, 1964, 1970, 1972) to illustrate a person's Ego States (Parent, Adult, Child) and their transactions with another person's Ego States. We do not, however, intend this to imply that Ego States have any bearing on epistemic positions.

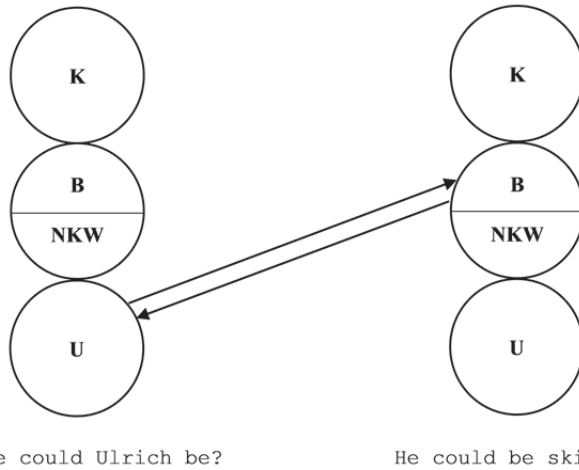


Figure 3. The expected answer comes from the Believing position towards which the question is addressed

Analogously, the following *polar interrogatives*

(3) *Is Ulrich at home?*

(4) *Do you think that Ulrich is at home?*

come from the questioner's Not Knowing Whether position, but while the former is addressed to the respondent's Knowing position, the latter is addressed to the Believing position. As a consequence, the expected answer (*yes* or *no*) comes from the Knowing and the Believing position respectively, as illustrated in Figures 4 and 5:

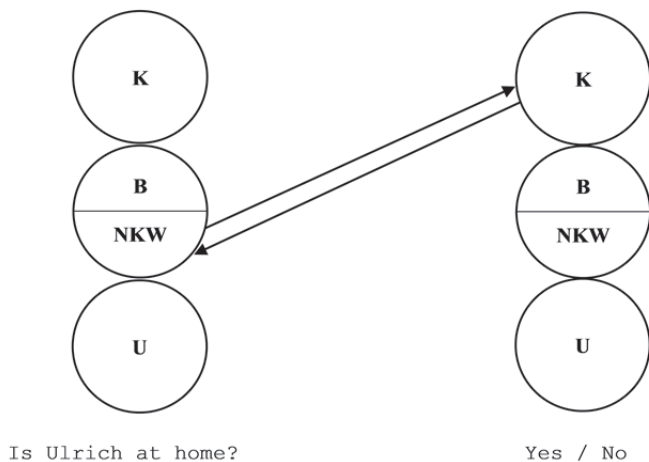


Figure 4. The expected answer, whether affirmative or negative, comes from the Knowing position towards which the question is addressed. *Yes* means *He is at home*, *No* means *He is not at home*

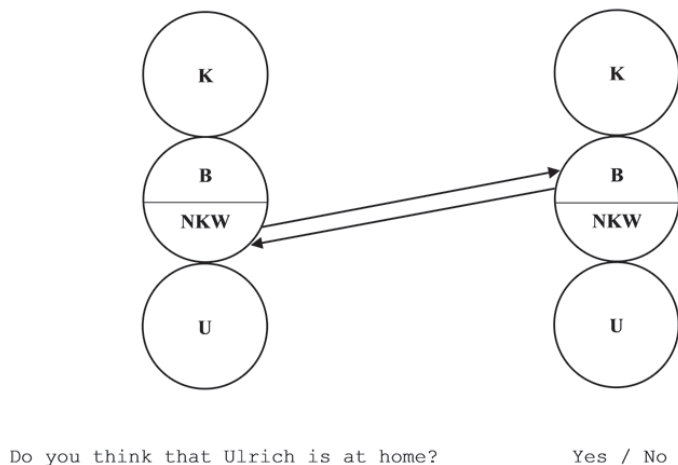


Figure 5. The expected answer, whether affirmative or negative, comes from the Believing position towards which the question is addressed. *Yes* means *I think he is at home*; *No* means *I think he is not at home*

Of course, in all four cases, the ultimate authority for the information being sought is assigned to the respondent, who is *more knowledgeable* than the questioner, in the general sense that s/he is expected to *have* the answer.

But, only in examples (1) and (3) do the questions and answers concern what the respondent *knows*; in examples (2) and (4), they concern what the respondent *believes*, not what s/he knows: s/he *knows nothing*, neither *more* nor *less* than the questioner.

For this reason (the requested information can be either a piece of knowledge (K) or a belief (B)), we prefer to use the expression *informed answerer* or *information-holder* rather than *more knowledgeable answerer*, and the expression *uninformed questioner* or *information-searcher* rather than *less knowledgeable questioner*. The term *information*, differently from the term *knowledge*, is semantically neutral with respect to knowledge and belief (see Overall conclusions, section 20).

Our third main aim is thus to show that questions are not addressed to an undifferentiated K+ position but to two distinct epistemic positions, either the *Knowing* or the *Uncertain*.

Thus, hereafter, question-answer sequences will be seen as originating from the questioner's either Unknowing or Uncertain position and as being directed not only at the respondent's Knowing position but also at the Uncertain. The Uncertain position turns out to be the main difference between Heritage's model and ours.

2.3 Methodology

In order to show the relationship between questioner's and answerer's epistemic positions and different types of question, we analyse question-answer sequences in fragments of conversations extracted from the Spoken British National Corpus 2014 (Love, Hawtin and Hardie 2017; henceforth Spoken BNC2014), a corpus of 11.5 million words of transcribed informal spoken British English.

The data was collected between 2012 and 2016 and comprises the transcriptions of 1,251 recordings of spontaneous conversations between total of 668 individuals engaging in conversations with friends and family members (*ibid.*: 320). These individuals are deemed to be representative of a cross-section of the British population in terms of age, gender, profession, level of education, and variety of English spoken (*ibid.*: 329-333).

The transcription of the audio recordings was carried out by a team trained to work with a transcription scheme that was devised specifically for the Spoken BNC2014 project (*ibid.*: 333). It is very much an "orthographic"

transcription (*ibid.*: 337), designed to facilitate the lexical retrieval of words in the corpus, rather than a prosodic transcription of the sort typically used in spoken discourse analysis.

The transcripts therefore do not indicate any intonation or lengthening of words, nor do they show where overlaps occur; they do, however, indicate short (.) and long (...) pauses (*ibid.*: 37). Orthographic punctuation is largely absent: proper names (e.g., cities, countries) are capitalised but punctuation marks (full stops, commas, etc.) are not used, with the sole exception of question marks. These are used not to indicate discourse boundaries but rather to reflect where in the discourse the transcribers felt that a question was being asked (*ibid.*: 37-38).

In addition to the three syntactically-signalled question forms (yes-no questions, wh-questions, and tag questions),

transcribers observed that there were many more cases where they were confident that a question was being asked, but that lacked a fully grammatical interrogative form. These included questions expressed incompletely (with some surface form(s) omitted), or questions expressed in declarative form with audible rising intonation” (*ibid.*: 38).

Each of the 668 speakers is indicated by a unique code (e.g., S0305) which remains the same across all recordings in which they participate (*ibid.*: 36); their names, however, were anonymised, or “de-identified”, as were all names of people, places, companies, etc. referred to in the conversations (*ibid.*: 338-339), thus we find in the transcripts such codes as --ANONnameM and --ANONnameF to respectively indicate de-identified male and female proper names. All unclear words are signalled in the transcript as --UNCLEARWORD.

The choice to use the Spoken BNC2014 seemed opportune due to its being (i) the most recently-compiled and (ii) the largest existing corpus of spoken English (of any variety).

The extracts discussed in Chapters 3-11 are to be taken as *canonical* examples, i.e., examples that are intended to be *paradigmatic* or *representative* of the specific question type under examination.

The qualitative analysis of the different question types represented by the examples discussed serves to highlight their *presuppositions*, *question design*, *social action*, and *preference organization*. Such notions, well known and established in the literature, will allow us to demonstrate something new concerning the relationship between questions and epistemic stance, i.e., to prove the three points made in the previous section.

2.3.1 Presuppositions

As regards presuppositions, we will make reference mainly to Heritage (2010), but also to Lyons (1977), Levinson (1983), Clayman (1993), Clayman and Heritage (2002), Heritage (2003): what wh-questions presuppose is true, what alternative and polar questions presuppose is possible.

For example, in a doctor-patient interaction, the wh-question *What kind of contraception do you use?* “linguistically presupposes that the patient uses contraceptives”, i.e., that the proposition *you use contraceptives is true* (Heritage 2010: 47).

On the contrary, the polar interrogative asked by another physician *Are you using any contraception?* is more cautious, since it conveys the doctor’s view “that the patient *might* be using contraception but does not presuppose it” (Heritage 2010: 47).

In other words, the question design does not presuppose that the proposition *you are using contraception is true* but conveys that it is *possibly* true. If it is possibly true, it is also possibly false.

2.3.2 Question design

The term “question design” (or *linguistic design*) refers to the formal coding of questions, i.e., to the lexico-morpho-syntactic or prosodic interrogative marking they rely on (Stivers and Enfield 2010: 2621).

The three question types (wh-, alternative, and polar questions) we focus on in the present book are very different in this respect.

2.3.3 Social action

The term “social action” refers to the actions performed by questions, i.e., their *communicative functions*. In Stivers and Enfield’s (2010: 2623) coding-scheme seven types of social actions are listed:

- *request for information*: “questions were coded as requesting information only if it seemed that there was no other primary action to be coded”;
- *repair*: “questions including open class repair initiators (‘Huh?’ or ‘What?’) as well as partial repeats (‘He went where?’) were coded as other initiations of repair”;
- *request for confirmation*: “questions (usually declarative although this was not criterial) that asserted a proposition for confirmation such as ‘So you’re coming tomorrow night’ were coded as requests for confirmation”;

- *assessment* (stating evaluation; seeking agreement): “evaluations that were formatted to seek agreement such as ‘Isn’t it beautiful out today?’ or ‘She’s such a pretty girl isn’t she?’ were coded as performing an assessment”;
- *suggestion/offer/request*: “questions that suggest, propose, or offer something to another as well as questions that request something from another were coded in a simple category (e.g., ‘Did you want some?’ [about a breakfast cereal]). This was because there were insufficient numbers to warrant several discrete categories but these actions seemed to cohere in various ways”;
- *rhetorical question*: “questions that may seek a response but do not seek an answer. For instance, questions that assert an opinion as in ‘Everything comes out in the wash doesn’t it?’ said by a husband to his wife after he has spilled something on the table cloth, were coded as rhetorical questions”;
- *outloud*: “questions delivered to no one in particular often with lower volume and do not appear to be designed to secure a response (e.g., ‘Now where are my keys.’ while looking in a bag) were coded as outlouds”;
- *Other*: “if the action did not fit into the other categories well, then contributors were asked to code ‘Other’ and list, as specifically as possible, the social action that the utterance was being used for”.

According to the results of the qualitative and quantitative analysis of all ten languages investigated in Stivers, Enfield and Levinson (2010), the main social actions are *request for information* (or *information seeking*) and *request for confirmation* (or *confirmation seeking*). These are the most frequent and are strictly related to the type of question design and expected response.³

For this reason, in the following chapters we mainly focus on those questions whose social action is either information- or confirmation-seeking. Polar questions are mainly *confirmation seeking* and require a “yes” or “no” answer, i.e., a closed answer, while wh-questions and alternative questions are mainly *information seeking* and require a content answer: wh-questions require a response specifying the identity of the wh-

³ “Distinctions between types of question based on information structure (e.g., polar versus content questions) cross-cut the kinds of social action they may be used for” (Enfield 2010: 2654).

word, while alternative questions require a response specifying which alternative is chosen by the respondent.⁴

2.3.4 Preference organization

The term “preference organization” refers to a “set of constraints that questions impose upon recipients” (Hayano 2014: 404). Among these constraints, we focus on preference for *type conformity over nonconformity of responses*: *yes* or *no* are type-conforming answers to polar questions (Raymond 2003); choosing one alternative over the other is a type-conforming answer to alternative questions; while specifying the reference of the wh-word (a person for *who*, a place for *where*, etc.) is a type-conforming answer for wh-questions (Hayano 2014; see also Pomerantz 1984a; Pomerantz 1984b; Pomerantz 1988; Pomerantz and Heritage 2014; Lee 2014).

2.3.5 Answer-response, non-answer response, non-response

In addition to the notion of type-conforming and non-conforming answers, following Stivers and Enfield’s (2010: 2624) coding scheme, we also use their distinction among three different types of response that can be given to questions:

- *answer*: “answers directly dealt with the question as put. Answers could be visible (e.g., a head nod or shake) or vocal (‘Uh huh’, ‘Yeah’ or longer more involved answer including repeats of the question to confirm or disconfirm)”;
- *non-answer response*: “the recipient of the question gave a verbal response that failed to **directly** answer the question as put. This included laughter, ‘I don’t know’, initiation of repair (e.g., ‘What?’) or other inserted sequences, gestural responses such as shrugs that do not answer the question. Other sorts of non-answer responses included ‘Maybe’, ‘Possibly’ or responses that deal with the question indirectly (e.g., A: ‘Do you see Jack much?’ B: ‘He moved’)”;
- *non-response*: “non-response was coded if the person did nothing in response, directed his/her attention to another competing activity, or initiated a wholly unrelated sequence (i.e., **not** something such as a repair initiation that would allow an answer to ultimately be provided)”.

⁴ “The difference between this action [requesting confirmation] and requesting information is, that the speaker displays that she *already* has some idea of the answer and is merely requesting that the other confirm this” (Heinemann 2010: 2715).

As said before, the notions of presupposition, question design, social action, preference organization (type conforming and non-conforming answers) and types of responses (answer, non-answer, non-response) serve to make a new contribution to the field of epistemic stance, i.e., in determining and specifying which of the two different epistemic positions (Unknowing and Uncertain) give rise to different types of question.

Then, on this basis, we will make explicit and formally represent the different *epistemic design* underlying wh-questions, on the one hand, alternative and polar questions, on the other. The verbal expressions introducing the two epistemic designs (*I do not know* for wh-questions vs *I do not know whether* for alternative and polar questions) will also function as a *linguistic test* to distinguish between the two question types.

PART 2

UNKNOWING AND UNCERTAIN QUESTIONS

Aims

The main aims of Part 2 (Chapters 3-9) are to show that

- (1) questions are either unknowing (Chapter 3) or uncertain (Chapters 4-7);
- (2) uncertain questions convey different degrees of uncertainty (Chapters 4-7) as well as unknowing questions display different degrees of unknowledge (Chapter 8);
- (3) unknowing and uncertain questions can be addressed not only toward the respondent's Knowing position but also toward her/his Believing position (Chapter 9).

Methodology

In Stivers, Enfield and Levinson (2010), as we have said in Chapter 2, section 2.1.1, ten different language-specific corpora of question-response sequences were analysed by ten different researchers, all following the same coding scheme.

The American English corpus was analysed by Stivers (2010); for each question type, she cites at least one canonical example taken from the corpus.

We will use the same approach to our examples extracted from the Spoken BNC2014 corpus, treating them as *representative* of the five question types we are going to discuss in Part 2 from the perspective of epistemic stance, using them as a starting point for our investigations.

In a similar vein, the definitions of the different question types are for the most part taken from the above mentioned special issue (Stivers, Enfield and Levinson 2010), in particular from Stivers (2010) and Stivers and Enfield (2010).

Chapters 3-7 all have the same organisational structure: definition and basic features of the specific question type under examination; quotation of at least one example taken from the Spoken BNC2014 corpus; epistemic analysis and discussion of the example(s).

CHAPTER 3

WH-QUESTIONS

3.1 Definition

A content or “Q-word” question (or “WH” question) is where part of a proposition is presupposed, and the utterance seeks the identity of one element of the proposition. Thus, in “Who stole my newspaper” it is presupposed that “Someone stole my newspaper”, and the purpose of the question (at least nominally) is to ascertain the identity of the person corresponding to this “someone” (Stivers and Enfield 2010: 2621).

Wh-questions or *Q-word questions* are so called since they usually open with one of the following operators beginning with *wh*:

- (1) who / whom / whose
- (2) what
- (3) which
- (4) when
- (5) where
- (6) why

This list is completed by a seventh word exceptionally beginning not with *wh*, only with *h*:

- (7) how

These words can be called “the magnificent seven”, like the famous Western film, since they refer to the main *ontological categories* (Enfield 2010: 2661) that constitute our world (or, at least, our experience of the world, see Zuczkowski, Bongelli and Riccioni 2017, Chapter 1):

- *space* (where),
- *time* (when),
- *substance* (what, who, which), i.e., “entities” (persons, things, events, actions, states of affairs, etc.) that are experienced as *units* which can be

identical to themselves in different places and times, thus implying the further ontological categories of *unity* and *identity*;

- *reason* (why), which has to do with the *causal relationships* among the above mentioned “substances”, i.e., with the different forms of causality, both *efficient* (causation) and *finalis* (purpose);
- finally, the word *how* can refer either to
 - *manner* (e.g., how did you reach the station?) or
 - *quantity* (e.g., how much / far / long / big...is it?).

In terms of *communication* and *cognition*, the magnificent seven could be thought of as the main *co-ordinates* or *points of reference* that a person who is receiving an incomplete piece of information needs in order to complete it, i.e., to place it on a linguistic and cognitive map (frame, structure) that features all the relevant parts.

For example, if you tell me *I met Ilaria*, this information already contains the *who* (*I, Ilaria*), the *what* (*met*) and the (generic) *when* (in the past, *met*). The further relevant parts that this type of information requires in order to be complete can be, in principle, those referring to the place *where* you met her, the specific time *when* you met her in the past (yesterday, two hours ago, etc.), the manner (casual or intentional) *how* it happened that you met her, and maybe the reason *why* you met her, if the verbal expression *I met* refers to an intentional act and not a casual event.

Now suppose I am interested in finding out the place where you met her, so I ask you *Where?* As an answer, I expect you to tell me the place where you met her, i.e., I expect you to give me a piece of *information*, an *informative content*, for example *At the bus station*.

This means that, in reply to my wh-question, you have to “word” the place where you met her, i.e., you have to tell me which actual place *where* is, what the *identity* of that place is. That would be an answer-response type, as well as being a type-conforming answer, as far as *preference organization* is concerned (see Chapter 2, section 2.3.4).

For this reason, wh-questions are also called *information questions* or *content questions*: they aim to discover what the queried wh-word refers to and thus expect an *open-ended* answer. In other words, they cannot be answered with *yes* or *no*, i.e., with a *close-ended* answer, as instead happens with *polar questions* (polar interrogatives, tag questions, declarative questions), also called *yes-no questions* for this very reason.

3.2 Search string: extracts from Spoken BNC2014

Of all the 7 *wh*-words, we choose here to focus on *how much* questions. Following the simple query syntax of the Spoken BNC2014, we formulated the following regular expression in order to locate all initial-turn *how much* questions:¹

```
<u> How much _{VERB} _{PRON} _{VERB} ***** \? </u>
```

This query returned 109 matches in 100 different texts. Of these, we decided to analyse the following excerpt, in which a *how much* question is treated as *representative* of the *wh*-question type. Our main aim is to show which epistemic stance is conveyed by *wh*-questions.

3.2.1 Excerpt 1 (S3RN 104-130)²

The following excerpt is taken from a dinner conversation between two female friends, both of whom are professionals: S0052, 32 years old, and S0109, 27 years old.

The excerpt consists of 27 turns, which we have numbered progressively starting from number 1. In order to facilitate the qualitative analysis, the turns are divided into three parts: 1-6, 7-13, 14-27.

- | | |
|-------------|---|
| 1.S0052: | have I told you about my drinking less? |
| 2.S0109: | no (.) drinking less? |
| 3.S0052: | yeah |
| (.)4.S0109: | no |
| 5.S0052: | I've decided to try and drink less |
| 6.S0109: | but that's a bad thing |

In line 1, S0052 introduces a new topic via the polar interrogative *Have I told you about my drinking less?* This is a *story preface* (Jefferson 1978; Sacks 1974a; Schegloff 2007; Terasaki 2004; Stivers, Mondada and

¹ CQPweb regular expression syntax is explained in <https://cqpweb.lancs.ac.uk/doc/cqpweb-simple-syntax-help.pdf>, last accessed 09 January 2018.

² From here on, Spoken BNC2014 excerpts are numbered consecutively. For each, we specify the relevant text identifier code for the recording (here, "S3RN") and, within that recording, the line numbers (= speaker turns) of the first and last lines of the excerpt (here "104-130").

Stensig 2011) or an *abstract* (Labov and Waletzky (1967/1997): a clause or a set of clauses which introduce or summarize the story to tell.

The abstract announces that the speaker has something to narrate to the hearer and implies a proposal for negotiating both their *conversational* and, in our view, *epistemic roles*: the narrator and the audience, i.e. someone who knows something (belonging to her/his experience) is going to tell it to someone else who does not know it yet.

The abstract is also usually used for presenting the story as “good” or interesting or entertaining for the audience or, again, relevant to the ongoing talk (Johnstone 2016). In the case of our excerpt, the abstract is expressed by a question, thus it is clear that it is functioning as a device for conversational and epistemic negotiation.

In line 2, S0109 seems interested in knowing the story, as suggested by her response, which includes another question *no* (.) *drinking less?*. The *no* denies prior knowledge and enables S0052’s progress to the telling.

In the same line 2, after a micropause, S0109 seems surprised and asks an echo question (*drinking less?*) (Sobin 1990). S0052 (line 3) confirms and S0109 (line 4) restates her lack of knowledge, favouring S0052’s storytelling about her own attempt to drink less (line 5). S0109’s reply in line 6, being a negative evaluation of S0052’s attempt, is not aligned.

Up to this point, the reader might be confused: how can drinking less be “a bad thing”? Why? The possible misunderstanding, due to the intrinsic ambiguity of spoken language, will be clarified a few lines later.

- 7.S0052: mm (.) it depends on how much you're drinking to start with (.) so I get paranoid that I'm going to get a headache if I don't drink (.) and it turns out I was actually drinking quite a lot each day
- (.)8.S0109: well you're quite tall
- 9.S0052: does that make any difference?
- 10.S0109: well
- 11.S0052: so I'm now drinking less and I'll probably I'm still drinking (.) so I didn't drink very much when I was like a child I think
- 12.S0109: so you're making up for it?
- 13.S0052: and then I started drinking loads and now I just started cos I cos I so I was drinking lots in a like paranoid I'm going to get a headache way (.) but then still having headaches so it's clearly not through dehydration so (.) I cut down on my ridiculous drinking

In line 7, S0052 does not agree with S0109's previous negative evaluation: she backchannels with a receipt token (*mm*) signalling a weak acknowledgment anticipating (also with a micropause) a negative agreeing response (Gardner 1997). S0052 describes her drinking as excessive and almost *pathological*, thus implying that *drinking less* is not a *bad thing*.

In line 8, S0109 replies with an assertion (*you're quite tall*) which seems to justify S0052's *drinking a lot*; but S0052 (line 9) does not agree and produces what may be read as a rhetorical question (Quirk et al. 1985; Koshik 2005): *does that make any difference?* = that makes no difference.

In line 11, S0052 states that at the moment she is drinking less and thinks that, when she was a child, she did not drink very much. S0109 seems to reply with an ironic declarative question: *so you're making up for it?*

The question receives no answer and S0052, in line 13, restates arguments supporting her choice of cutting down on her *ridiculous drinking*.

By this point, the reader should have understood what will be even clearer in the following lines: the interlocutors are talking about drinking less *water*. This emerges over the course of the conversation which, however, starts off in a way that would lead most to assume that it is alcohol that the speaker has started drinking less of: when the direct object of drink is not specified, it is expected to be something that is not necessary for human survival (Radden and Dirven 2007: 44-45), indeed, as Hoey (2005) argues in his "drinking problem hypothesis", the phraseology implies that the speaker has a drinking problem concerning *alcoholic* drink, yet this is not borne out in the context.

- 14.S0109: → **how much did you drink a day then?**
 15.S0052: about (.) I don't know three litres maybe? But I had a lot and now I'm having about two litres a day (.) which I think is more normal
 16.S0109: yeah (.) you're meant to drink two litres a day but it's not all meant to necessarily co- come from
 17.S0052: you're meant to drink two litres?
 18.S0109: two litres
 19.S0052: yeah
 20.S0109: but it doesn't all have to come from drink
 21.S0052: yeah I think I'm now drawing drinking like the right amount rather than a ridiculously large amount like I was drinking (.) because I can't you know these big glasses
 22.S0109: yeah
 23.S0052: I have like (.) well I drink a litre I drink a litre at school and then I drink one of them in the morning and like

- maybe three in the evening (.) so I'm still drinking one in the morning and a litre at school (.) I'm just having less in the evening
- 24.S0109: that's probably sensible
- 25.S0052: yeah cos also I go to the toilet every night and that's quite annoying
- 26.S0109: and then you complain that you can't sleep
- 27.S0052: yeah I know (.) so just like part of my like you know (.) improving my life in crazy ways

In line 14, S0109 asks S0052 a wh-question (*How much did you drink a day then?*) to which at first S0052 tries to answer (line 15) with approximators (*about*), indicators of her lack of knowledge (*I don't know*), and uncertainty (*three litres maybe?*). After these three attempts, S0052 finally succeeds in giving a proper answer to S0109's question (*But I had a lot*). Then she adds the amount she is drinking now, again approximately (*about two litres a day*), an amount that she evaluates as *more normal*. Both S0109's wh-question and S0052's answer will be analysed in more detail in sections 3.2.2-3.2.4.

In lines 16-20 the two friends briefly discuss the fact that the necessary amount of liquid does not come exclusively from drinking water.

In line 21, S0052 restates her point: now she is drinking the right amount, no longer *a ridiculously large amount*. In line 23, she specifies how much, when and where she drinks during the day. S0109's reply in line 24 is formally aligned (*that's probably sensible*).

In line 25, S0052 expresses agreement by adding a complication resulting from drinking too much: *going to the toilet in the middle of the night*.

In line 26, S0109 elaborates on the same point with a slightly critical assertion: *and then you complain that you can't sleep*.

S0052 (line 27) explicitly agrees with her friend (*yeah I know*) and then she uses self-mockery for justifying her choices.

3.2.2 *How much did you drink a day?*

According to Heritage (2010: 47) "all questions embody presuppositions about the states of affairs to which they are directed". For example, in a doctor-patient interaction, the wh-question *What kind of contraception do you use?* "linguistically presupposes that the patient uses contraceptives", i.e., that the proposition *the patient uses contraceptives* is *true*. Since the

doctor does not know what kind of contraception is being used, he asks in order to find out.

Following Heritage's and Stivers and Enfield's definition of wh-questions quoted at the beginning of this Chapter, S0109's wh-question *How much did you drink a day?* in turn 14 linguistically presupposes that *you drank a given amount a day*, i.e., that this proposition is *true*.

Since S0109 does not know how much S0052 used to drink a day and is interested in knowing, she poses a question which seeks to establish the identity of the wh-word *how much*, i.e., the amount of drinking corresponding to *how much*.

In other words, S0109 is seeking a piece of information she does not possess and which S0052 does. This piece of information is unknown to S0109; it is missing, absent, representing an informative void.

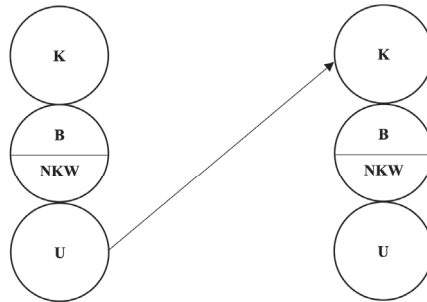
In this sense, the social action of wh-questions like this one is *information-seeking*³ and the answer they expect⁴ is a *content response* that provides information on the specific wh-word featured in the question.

In Heritage's (2012a, 2012b, 2013, 2014) model, in using a wh-question S0109 puts herself in a less knowledgeable position (K-) and S0052 in a complementary more knowledgeable one (K+) (see Chapter 2, section 1.2). S0109 asks for information belonging to S0052's epistemic domain and expects a content response as a type conforming answer.

In our model, Heritage's K- more specifically means that the question arises from the questioner's *Unknowing* position and K+ more precisely means that the question is directed at the respondent's *Knowing* position and expects an answer coming from there (Figure 1).

³ In the American English corpus of questions analysed by Stivers (2010: 2776, Table 2), the main social actions of content questions are *information request* and *initiation of repair*, the former being almost four times more frequent than the latter. No content question has *confirmation request* as its social action. In our view, initiation of repair can also be considered as a sub-type of information request, since its aim is to obtain information about something in the interlocutor's prior turn that was misunderstood or misheard, e.g., *What did you say?* or *You're going where?* etc.

⁴ The terms *to expect* and *expectations* are related to the notion of preference organization.



how much did you drink a day then?

Figure 1. The arrow indicates that S0109's wh-question comes from the Unknowing and is addressed towards the interlocutor's Knowing

3.2.3 The epistemic design of wh-questions

Any full reasonable analysis or theory of questions should relate their *direct* forms to the corresponding *indirect* ones (Belnap 1963; Aqvist 1965; Hintikka 1974; Karttunen 1977, etc.), especially when the type of analysis is epistemic. A direct question can be treated as semantically equivalent to a declarative sentence containing the corresponding indirect question embedded under a suitable *evidential* or *epistemic* verb.

If we use the introducing verb *to know* (Biber et al. 1999: 976) to transform the direct interrogative *How much did you drink a day?* into the corresponding indirect one, we have

(a) *I do not know* how much you drank a day

The expression *I do not know* signals S0109's total lack of knowledge concerning *how much* and makes explicit her Unknowing position.

Thus the *epistemic design* of wh-questions may be formally represented as follows:

(a₁) *I do not know* + p

where *p* is the content of the question, in our case *how much you drank a day*.

The epistemic design represents the syntactic and semantic structure of the questioner's epistemic position.

3.2.4 S0052's answer

From the perspective of epistemic stance, S0052's answer in turn 15 is very interesting since S0052 shifts from one epistemic position to another. From the point of view of this *epistemic shift*, S0052's turn can be divided into five Turn Constructional Units (TCUs):⁵

- (1) about (.) [Knowing]
- (2) I don't know [Unknowing]
- (3) three litres maybe? [Uncertain]
- (4.1) But I had a lot [Knowing]
- (4.2) and now I'm having about two litres a day (.) [Knowing]
- (5) which I think is more normal [Uncertain]

Since TCUs 4.1 and 4.2 come from the same Knowing position, in order to facilitate the qualitative analysis, we consider them together as if they were a single TCU.

S0052's attempts to give an answer in the first three TCUs, shifting from the Knowing (*about*) to the Unknowing position (*I don't know*), then to the Uncertain (*three litres maybe?*), is accomplished in TCU 4.1 (*But I had a lot...*), where *a lot* means more than the *about two litres* S0052 is having now (TCU 4.2), a quantity that she evaluates as *more normal* (TCU 5).

S0052's answers concerning her *past* drinking end in TCU 4.1. In TCU 4.2 and 5 she adds further information concerning her *current* drinking; such information is coherent and consistent with her answers in the previous TCUs but, strictly speaking, does not seem to be a direct answer to S0109's question. However, it indirectly helps to understand that in the past S0052 used to drink more than her present two litres, probably the three litres mentioned in TCU 3.

For this reason, in the following analysis and figures we have also considered the last two TCUs as forming part of S0052's response to S0109's question (see in particular Figures 6 and 7).

Let us look at the five TCUs in detail.

⁵“Turns are thus incrementally built out of a succession of *turn- constructional units* (henceforth TCUs), such as sentences, clauses, phrases, and individual words. Each TCU is a coherent and self-contained utterance, recognizable in context as ‘possibly complete’ ” (Clayman 2014: 151).

First TCU: *about* (.) = I drank a day about (.) [Knowing]

The presence of the adverb *about* (=approximately) conveys that S0052 is trying to tell S0109 the approximate amount of her daily drinking before now, so it is plausible to complete the adverb *about* by inserting it into the sequence *I drank about... a day*.

A sentence is approximate if it includes indefinite quantifiers such as *about, some, any, few, a few, several, many, etc.*, which in principle could be replaced by a number (Sadock 1977; Allwood et al. 2014; Caffi 1999, 2007) “Approximate” is the opposite of “exact”, not of “certain”: *I drank about three litres a day* is approximate and certain (and comes from the Knowing); *I maybe drank about three litres a day* is approximate and uncertain (and comes from the Believing).

Instead of adding the approximate amount of her past drinking after *about*, S0052 stops, leaving her TCU suspended (.). It is plausible to assume that she is trying to recall the approximate amount, but is unable to quantify it, as the second (*I don't know*) and third (*three litres maybe?*) TCUs suggest.

Since *I drank about... a day* is a plain declarative sentence in the past indicative, it conveys a Knowing position.

This first TCU can therefore be considered as S0052's attempt to give an answer-response type from the Knowing position, i.e., an answer which directly answers S0109's question and aligns with S0109's expectations, i.e., knowing how much S0052 drank a day (Figure 2).

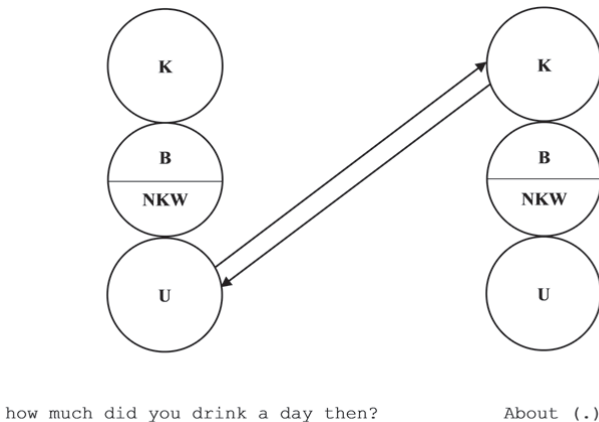


Figure 2. Origin and destination of S0109's question and S0052's first TCU. The parallel arrows show that the first TCU, coming from the Knowing position, is an attempt to give an answer-response type to S0109's question, i.e., to align with S0109's expectations

Second TCU: *I don't know* = I don't know how much I drank a day approximately [Unknowing]

In line with S0109's wh-question (*How much did you drink a day then?*) and the completion we suggested for the first TCU (*I drank about...*), this second TCU (*I don't know*) can be completed as *I don't know how much I drank approximately*, i.e., as corresponding to a declarative sentence coming from the Unknowing position.⁶

In the field of Conversational Analysis, a lack of knowledge claim such as *I don't know* is considered to be a *non-answer response* type, i.e., an answer that fails to directly answer the question (see Chapter 2, section 3.5) and therefore misaligns with it, as the different directionality of the arrows in Figure 3 shows.

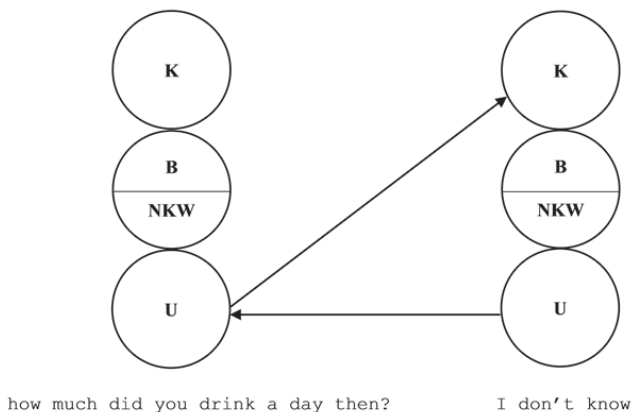


Figure 3. Differently from the first TCU (Figure 2), this second TCU comes from the Unknowing position, not the Knowing. The arrows are no longer parallel, they now form an acute angle that indicates misalignment

Third TCU: *three litres maybe?* [Uncertain, either Believing or Not Knowing Whether]

In this third TCU, S0052 tries to answer S0109's question with another (*three litres maybe?*). This question has two peculiarities. It is primarily

⁶ On *I don't know* as a prepositioned epistemic hedge see Weatherall (2011) and as a claimer of no-knowledge see Lindström, Maschler and Pekarek Doehler (2016); Lindström and Karlsson (2016).

self-addressed (Wilson and Sperber 1988), not *other-addressed*, since its answer pertains to S0052's, not to S0109's, epistemic domain of knowledge. Only S0052 knows how much she used to drink.⁷

Therefore, such a self-addressed question can be completed either as a polar interrogative (*Did I drink three litres maybe?*) or as a declarative question (*I drank three litres maybe?*).

In our epistemic model, both types of question come from the Uncertain position: the only difference between them is that polar interrogatives are more uncertain than declarative questions, since the former are closer to the Not Knowing Whether pole of the uncertain epistemic continuum, and the latter to the Believing pole (see Figure 3, Chapter 5, section 5.5).

The second peculiarity of S0052's question is the presence of the epistemic adverb *maybe*, which conveys that S0052's question is a *dubitative* one. Dubitative questions will be treated in Part 3, Chapter 9. There we will see that the presence of *maybe* makes polar interrogatives *less uncertain* than their corresponding plain versions, while it makes declarative questions *more uncertain* than their corresponding plain versions, so that the difference in their degree of uncertainty changes (see Figure 1, Chapter 10, section 10.6.4): both dubitative polar interrogatives and dubitative declarative questions function as *suppositions*, the latter being stronger than the former.

In the context made by S0109's question (*How much did you drink?*) and S0052's two preceding TCUs, we think it more plausible to read *three litres maybe?* as a dubitative declarative question (*I drank three litres maybe?* Figure 4.1) than as a dubitative polar interrogative (*Did I drink three litres maybe?* Figure 4.2).

In any case, as we said above, from an epistemic point of view the difference between the two question types is very slight: both are suppositions (with different degrees of strength) and, as such, they correspond to a mitigated declarative sentence like *I drank three litres maybe*.

⁷ This question seems to be also an *outloud* question (Chapter 2, section 2.3.3). Outlouds are “delivered to no one in particular often with lower volume and do not appear to be designed to secure a response (e.g., ‘Now where are my keys’. while looking in a bag)” (Stivers and Enfield, 2010: 2623).

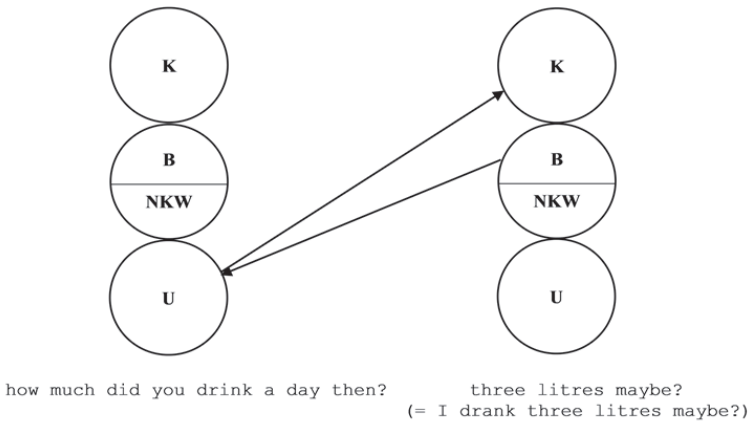


Figure 4.1. S0052's third TCU read as a (dubitative) declarative question coming from the Believing position. The arrows form a more acute angle than the one in Figure 3, indicating partial alignment

Differently from Figures 2 and 3, this third TCU, being understood as a (dubitative) declarative question, comes from the Believing pole of the Uncertain position, not the Knowing nor the Unknowing.

The arrows are no longer parallel as they are in Figure 2, they now form an acute angle that is narrower than the one in Figure 3 and indicates partial alignment. This angle would be almost identical (only a little wider) if the TCU were understood as a (dubitative) polar interrogative (*Did I drink three litres maybe?*), i.e., as coming from the Not Knowing Whether pole (Figure 4.2).

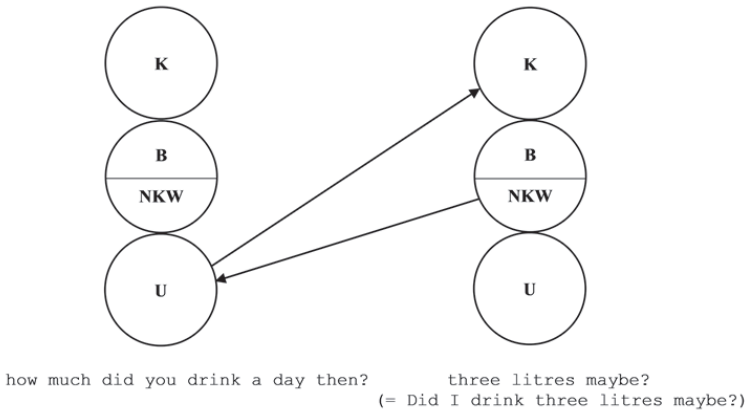


Figure 4.2. S0052's third TCU read as a (dubitative) polar interrogative coming from the Not Knowing Whether position. Also in this case, the arrows form an angle that is more acute than the one in Figure 3 and indicates partial alignment

In the field of Conversational Analysis, this type of answer containing *maybe* is considered to be a *non-answer response* (see Chapter 2, section 2.3.5) as was *I don't know* in the second TCU. Yet, in our view, they substantially differ from one another.

We agree that *I don't know* fails to directly answer the question, since it comes from the Unknowing position, while it was expected to come from the Knowing: it gives no information at all to the questioner and therefore it misaligns with the question.

Instead, an answer such as *three litres maybe?*, in our view, *partially aligns* with S0109's question, for the following reason: it is true that the supposition *three litres maybe?* does not answer S0109's question directly (as it would if it were simply a plain declarative sentence like *three litres*), but it is also true that it does not completely fail to directly answer it (as it would if it were *I don't know*).

The answer *three litres maybe?* does not give the questioner *certain* information, unlike information coming from the Knowing position (*three litres*), but neither does it give *unknown* information, i.e., information coming from the Unknowing position (*I don't know*); it gives *some* information, a *possible* amount of drinking, a *supposed* quantity, i.e., *uncertain* information. It is something, not nothing, even though it is not a fully aligned answer.

The problem, in our view, is to clarify what the adverb “directly” means in Stivers and Enfield’s (2010: 2624) definition of *answer-response* and *non-answer response* types (see Chapter 2, section 2.3.5).

From the perspective of our epistemic stance model, in the case of wh-questions, i.e., of questions coming from the Unknowing position (and addressed to the Knowing),⁸ a direct answer to the question is one that comes from the Knowing position and therefore *aligns* with the question. An answer that fails to directly answer the question is one that comes either from the Uncertain or the Unknowing position: the former *partially aligns* with the question, the latter *misaligns* with it.

The partial alignment to the question in Figure 3 and the misalignment in Figure 2 are shown by the arrows: they are no longer parallel as they were in Figure 1. In principle, the wider the angle formed by the two arrows, the greater the misalignment. Therefore, within the type of response known as *non-answer response*, we distinguish between a response which is *misaligned* (*I don’t know/ What?! etc.*), and a response which is only *partially aligned* (*Maybe/ Possibly /etc.*).

More generally, we can say that, in principle, an answer A aligns with a question Q when A comes from the same epistemic position at which Q is directed, as Figure 2 shows.

Fourth TCU: *But I had a lot and now I’m having about two litres a day (.)*
[Knowing]

Since TCUs 4.1 and 4.2 come from the same Knowing position, in order to facilitate the qualitative analysis, we consider them together as if they were a single TCU.

The initial *But* contrasts with the previous three TCUs and introduces the approximate expression *I had a lot*. The adversative conjunction and the plain declarative sentence can be paraphrased as *no matter how much the amount, I had a lot*, i.e., *even though I don’t know exactly how much I drank a day (maybe about three litres), anyhow I had a lot*.

I had a lot (TCU 4.1) can be thus considered as the closest answer to S0109’s expectations that S0052 is able to give (Figure 5). Bearing in mind the first TCU (*about*) and the third (*three litres maybe?*), *a lot* probably means *about three litres*.

⁸ We will see in Chapter 9 that wh-questions can also be addressed to the Uncertain position.

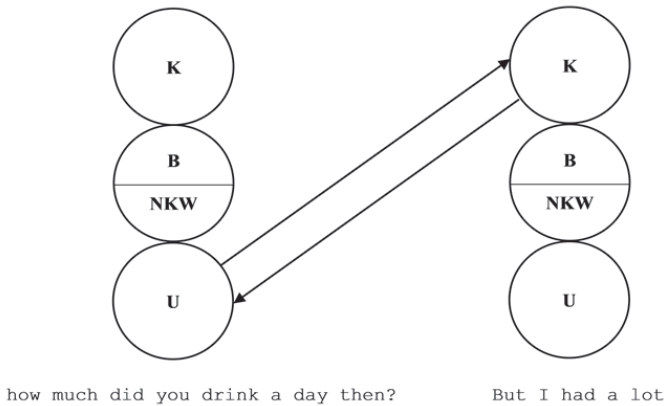


Figure 5. This Figure is similar to Figure 2, since both share the same epistemic positions and alignment. The parallel arrows show that this TCU is an answer-response type aligning with S0109's expectations

Can *a lot* be considered as an answer-response type to a *how much* question? More in general, what answers can be considered as answer-response types to wh-questions?

The interesting problem of “the nature of structural fit between content questions and their responses” is raised by Enfield (2010: 2661): “the working hypothesis is that for a response to a content question to be maximally fitted, it should supply a referent of the relevant ontological category (i.e., a thing for a ‘what’ question, a person for a ‘who’ question, etc.)”.

More specifically,

within those things that might count as an appropriate answer (i.e., one that supplies the asked-for referent and accepts the presuppositions inherent in the question), there needs to be a theory of what kinds of utterance will in fact count as an adequate instance of the referential category in question. This issue has been explored in the domain of person reference in Enfield and Stivers (2007). A proper analysis of the system for responding to content questions requires a general theory of referential formulation (or “word selection” as Schegloff 2006 puts it), for all the main categories: person reference, place reference, object reference, event reference, time reference, reason reference, and so on (*ibid.*: 2661).

Returning to *a lot* (= *about three litres*) in TCU 4.1, we can say that an *answer-response* to a *how much* question is usually a quantity, and a quantity is normally expressed

- (i) with a numeral, whether exact (*three litres*, for example) or approximate (*about three litres / hundreds...*);
- (ii) with indefinite quantifiers (*a lot / loads / a few litres...*).

We believe that an indefinite or approximate answer like *a lot* (= *about three litres*) can be considered as an answer-response, also because in the present case (drinking water) and context (two friends, a dinner conversation) the expected answer to the *how much* question is more likely to be approximate (*a lot / about three litres*) than exact (*three litres*).

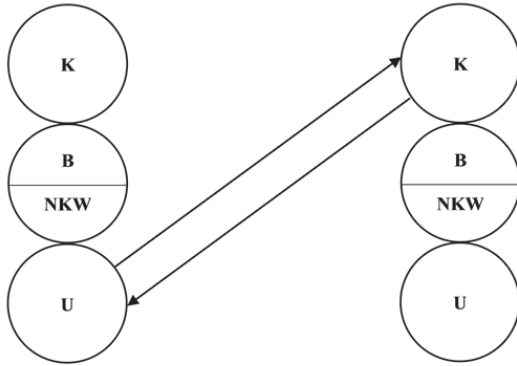
As said at the end of the analysis of the third TCU, from the perspective of our epistemic stance model, an answer-response to a question coming from the Unknowing position like a *how much* question is one that comes from the Knowing position and therefore *aligns* with the question (parallel arrows, Figure 1), independently of whether the quantity expressed is exact, approximate or indefinite.

In TCU 4.2, S0052 adds the amount she is drinking now, again approximately (*about two litres a day*).

As said at the beginning of section 3.2.4, TCU 4.2—unlike the previous ones—does not seem to be a direct answer to S0109's question *How much did you drink a day?*, since it concerns S0052's present, not past, drinking.

Yet indirectly, TCU 4.2 is useful to understand that S0052's past amount of drinking was more than her present two litres, probably the three litres mentioned in TCU 3, i.e., about one litre more than now.

For this reason, in our analysis we have also considered TCU 4.2 (and the following TCU 5) as a response to S0109's question (see in particular Figures 6 and 7).



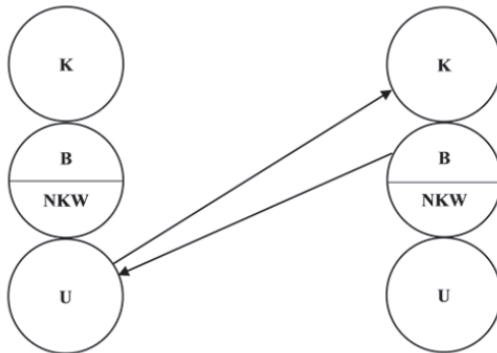
how much did you drink a day then?

and now I'm having about two litres a day

Figure 6. This Figure and the previous Figure 5 show that the whole fourth TCU (TCU 4.1 and 4.2) conveys the same epistemic positions and alignment

Fifth TCU: *which I think is more normal* [Uncertain, Believing]

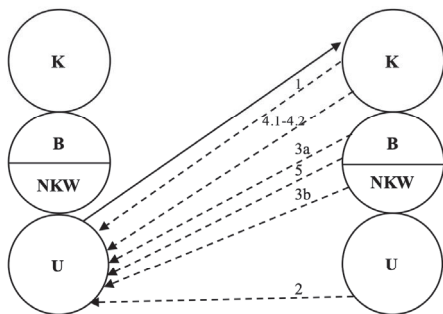
S0052's current amount of drinking (*about two litres a day*) is self-evaluated as being *more normal* than her past amount. The presence of the epistemic marker *I think* conveys S0052's Believing position.



how much did you drink a day then? which I think is more normal

Figure 7. TCU 5, being a mitigated declarative sentence, comes from the Believing position (partial alignment, as in Figure 4.1)

The complex epistemic dynamics involved in S0052's answer are shown in Figure 8.



- | | |
|------------------------------------|-------------------------------------|
| how much did you drink a day then? | 1 about (.) |
| | 2 I don't know |
| | 3a three litres maybe? |
| | (= I drank three litres maybe?) |
| | 3b three litres maybe? |
| | (= Did I drink three litres maybe?) |
| | 4.1 But I had a lot and |
| | 4.2 now I 'm having about two |
| | litres a day (.) |
| | 5. which I think is more normal |

Figure 8. Overview of S0052's six TCUs and four epistemic shifts. The third TCU has been illustrated as coming from either B or NKW

CHAPTER 4

ALTERNATIVE QUESTIONS

4.1 Definition

Alternative questions include “the proposal of a restricted set of alternative answers in their formulation (e.g., ‘Were you drunk or were you sober.’ or ‘Do you want corn or flour tortillas.’)” (Stivers and Enfield 2010: 2622), i.e., they are “designed to provide the recipient with two or more options to choose from for the answer” (Rossano 2010: 2758).

Normally the alternatives, joined by the conjunction *or*, are understood as mutually exclusive, since the *or* is taken as disjunctive (either one or the other alternative but not both, cf. Latin *aut aut*):

Excerpt 2 (SY2B 41-44)

S0311 is a 30 year-old female customer business manager; S0312 is a 32 year-old male senior design engineer:

- 1.S0311: → **does everyone wear suits or is it casual?**
- 2.S0312: >> no it’s all cas’
- 3.S0311: is it ?
- 4.S0312: yeah

In very few cases either the questioner and/or the answerer can take the *or* as inclusive (either one or the other alternative but also both, cf. Latin *vel vel*).

In our corpus there is one occurrence in which the questioner, after proposing two alternatives, adds *or both* as a third alternative including the previous two:

Excerpt 3 (SWPV 1288-1307)

S0251 is a 52 year-old female GCSE maths examiner; S0369 is her 82 year-old father:

1.S0251: → would you like coffee cake or some strawberries **or both?**
[...]

After a few turns,

19.S0369: oh yes yes fruit (.) ah strawberries --ANONnameF please

As explained in Chapter 2, section 3, all names which might allow the speakers to be identified have been anonymised or “de-identified”, hence --ANONnameF is a code corresponding to “anonymous name: female”. We have chosen to maintain this coding in all the reported extracts rather than adopt fictitious names.

In S0251’s question (line 1), the third inclusive alternative (*or both*) cancels the disjunctive meaning of the previous *or*.

In our corpus there are no occurrences in which the respondent transforms the questioner’s disjunctive *or* into a conjunctive one, but as an example of this we can tell the anecdote of the parish priest.

A rather plump food-loving parish priest is visiting a humble country family in order to bless their farmhouse. After the blessing—out of politeness—the farmer’s wife offers the priest something to eat from their farm: “Father, can we offer you cheese or pears?”. To which the priest replies: “Oh! How good cheese is with pears!”.

In addition to some grammars (Biber et al. 1999; Quirk et al. 1985), many studies have treated alternative questions (e.g., Bolinger 1957; Karttunen 1977; Hayano 2013; Antaki and O’Reilly 2014; Biezma and Rawlins 2012, 2015; Koshik 2005, 2008, 2010; Tsui 2013) but not so many have examined the relationship between such questions and epistemic stance. Notable exceptions include Koshik (2005), in her book on reversed polarity questions (i.e., rhetorical questions), Margutti (2006) in an article dealing with knowledge construction in primary-school classroom interaction, Heritage (2010), Paul (2014), Hamdani and Barnes (2018).

The linguistic design of alternative questions can be of different types, as we will see below: the most frequently analysed, and thus best known type in the literature, for obvious reasons, is the paradigmatic one in which two alternatives are lexicalised, as in excerpt 2. But there are at least three other types of alternative questions, one of which (*or not* questions, see this Chapter, section 4.6), though less frequent than the paradigmatic one, is also

interesting from a theoretical point of view, since it is strictly related to polar interrogatives (Chapter 5).

4.2 Search string: extracts from Spoken BNC2014

In the following discussion, we present a study we carried out using the Spoken BNC2014 to find out more about the possible linguistic designs of alternative questions, as well as to have quantitative data to refer to.

The first step was to query the corpus using the following regular expression:

```
<u>_{VERB} _{PRON} _{VERB} ***** or ***** \? </u>
```

This string allowed us to extract candidate alternative questions in which the main verb was affirmative, and returned 617 matches in 388 different texts which were then verified (manually) in order to check that all were indeed alternative questions: six were eliminated, leaving 611 (affirmative) alternative questions.

Extracting negative forms is a little more complex: one possibility is to insert the negative particle *not* between the verb and the pronoun. Doing so gave us a further 20 examples, 12 of which have as the final “alternative” the all-encompassing “or something” (e.g., *don't you need a blender or something?*) (see indefinite alternative questions below, section 4.5).

Alternatively, the negative particle can be positioned after the pronoun: this gave an additional 17 examples, of which 10 have “or something” at the end. Given the low frequency of negative alternative questions, we focus in this chapter on the affirmative forms.

The successive step was to analyse their linguistic design from a lexical and grammatical point of view, in order to answer the following three questions: (1) how many alternatives are present in each question (two, three, more?); (2) how are such alternatives expressed from a lexical and grammatical point of view, (3) how are such questions answered.

4.2.1 Four types of alternative questions

As a result of this analysis, we had four types of linguistic design, that we called *complete*, *incomplete*, *indefinite*, *negative*, as shown in Table 1:

Table 1. Four types of alternative question

Alternative questions		
Type of alternative question	Frequencies	Percentages
Complete	328	53.68
Incomplete	133	21.77
Indefinite	95	15.55
Negative	55	9
Tot.	611	100

Complete alternative questions are similar to excerpt 2 above (*does everyone wear suits or is it casual?*), in that the alternatives (two or more) are specified both lexically and grammatically, i.e., such questions *explicitly* and *fully* contain all the alternatives (at least two) they should contain. The answerer can *clearly* understand which alternatives are at stake. A further example is:

Excerpt 4 (SGAN 578-579)

S0315 is a 36 year-old female beauty therapist; S0255 is a 48 year-old female account manager.

- 1.S0315: → **did you have caesareans or natural births?**
 2.S0255: no no natural just popped them out

The rest of the alternative questions are characterised by their final alternative being

- either *incomplete* (...or?), i.e., immediately after the conjunction *or* the question is left suspended;
- or *indefinite*: the conjunction *or* is immediately followed by an indefinite pronoun (...or something? / ...or anything? / ...or what?, etc.);
- or *negative*, i.e., the second alternative is the negation of the first (...or not?).

Let us see these four types of linguistic design in more detail.

4.3 Complete alternative questions

4.3.1 Complete alternative questions with totally or partially different alternatives

From a lexical and grammatical point of view, complete alternative questions are either *totally* or only *partially different* in their alternatives (Table 2).

In excerpt 2 (*does everyone wear suits or is it casual?*), the alternatives totally differ from each other in all their words and grammatical components, i.e., their subjects (*everyone—it*), verbs (*wear—is*) and complements (*suits—casual*).

On the contrary, in excerpt 4 (*did you have caesareans or [did you have] natural births?*), the initial part of the first alternative (*did you have*, subject and verb) is implicitly present in the second as well, it remains unvaried in both alternatives. Only the final part of the question (*caesareans or natural births*) changes. The choice for the addressee is between the two direct complements of the same verb and subject *did you have*, i.e., between an unmodified noun (*caesareans*) and a modified one (*natural births*). The expression *partially different* thus means that only one part of the linguistic design, i.e., of the words and grammatical components, changes (in our excerpt 4, direct complements), while the rest of the linguistic design does not (in our excerpt 4, verb and subject). As we will see in section 3, any grammatical component can change, not only complements.

Table 2. Totally and partially different complete alternative questions

Complete alternative questions		
	Frequencies	Percentages
Totally different alternatives	41	12.5
Partially different alternatives	287	87.5
Tot.	328	100

The number of alternatives present in the complete alternative questions is shown in Table 3.

Table 3. Number of alternatives in complete alternative questions

Complete alternative questions				
	2 alternatives	3 alternatives	4 alternatives	Tot.
Totally different alternatives	41 (12.90%) <i>(100%)</i>	0 (0%) <i>(0%)</i>	0 (0%) <i>(0%)</i>	41 (12.5%) <i>(100%)</i>
Partially different alternatives	277 (87.10%) <i>(96.51%)</i>	9 (100%) <i>(3.13%)</i>	1 (100%) <i>(0.34%)</i>	287 (87.5%) <i>(100%)</i>
Tot.	318 (100%) <i>(96.95%)</i>	9 (100%) <i>(2.74%)</i>	1 (100%) <i>(0.30%)</i>	328 (100%) <i>(100%)</i>

The percentages in bold are to be read vertically; the percentages in italics are to be read horizontally

It is interesting to note that

- (1) all 41 totally different questions have only two alternatives (100%);
- (2) out of 287 partially different questions, 277 also have only two alternatives (96.51%);
- (3) if we sum the data ($41+277 = 318$), we have that, out of 328 complete questions, 318 have only two alternatives (96.95%), i.e., only 10 ($9+1$) partially different questions have more than two alternatives ($2.74 + 0.30 = 3.04\%$).

4.3.2 Complete alternative questions with totally different alternatives

In addition to excerpt 2, a further example of totally different alternatives is the following:

Excerpt 5 (S8Q3 209-210)

S0417 is a 45 year-old woman; S0416 is a 12 year-old male student:

- 1.S0417: → **do you get taught about other religions at your school or is it all about Christianity?**
- 2.S0416: no we get taught about other things

In the two alternatives, subjects (*you—it*), verbs (*get taught—is*) and complements (*about other religions—all about Christianity*) differ totally from each other.

In the answer, the initial *no* refers to the second alternative and is equivalent to *it is not all about Christianity*. The answerer excludes the second alternative, then he chooses the first alternative by wording something similar to it (*we get taught about other things*), where presumably *things* stands for *religions*.

4.3.3 Complete alternative questions with partially different alternatives

In the 287 complete alternative questions, the alternatives partially differ in some of their grammatical components (Table 4), much more in their complements (173) than in their verbs (51), verbs plus complements (47), and verbs plus subjects (15). In only one question in the whole corpus the alternative is found in the subjects (see section 4.3.3.5).

Table 4. Grammatical components of partially different alternative questions

Partially different alternative questions		
Grammatical components	Frequencies	Percentages
complements	173	60.28
verbs	51	17.77
verbs + complements	47	16.38
verbs + subjects	15	5.23
subjects	1	0.35
Tot.	287	100

Let us see these five differences in the grammatical components in more detail.

4.3.3.1 Complements

Out of 173 complete alternative questions differing in their complements, 133 differ in their nouns and pronouns, 26 in their adjectives, 13 in their adverbs, 1 in its prepositions (Table 5).

Table 5. Types of complement in partially different alternative questions

Partially different alternative questions		
Types of complement	Frequencies	Percentages
nouns and pronouns	133	76.88
adjectives	26	15.03
adverbs	13	7.51
prepositions	1	0.58
Tot.	173	100

Here are some examples of each type of complement.

4.3.3.1.1 Nouns

Excerpt 6 (S7JH 2224-2225)

S0199 is a 52 year-old learning and development female assistant; S0191 is a 5 year-old boy:

- 1.S0199: → **do you understand all of it or half of it or a little bit of it or nothing?**
- 2.S0191: half of it

It refers to a foreign language. Same subject (*you*) and verb (*understand*), different complements referring to different quantities. The questioner gives the addressee a scale of four possibilities, *all—half—a little bit—nothing*. The respondent chooses the second by repeating it and thus excluding the remaining three.

4.3.3.1.2 Adjectives

Excerpt 7 (S2KP 996-999)

S0192 is a 27 year-old female student; S0230 is a 57 year-old care female assistant; S0229 is a retired 69 year-old male:

- 1.S0192: → **are you light or heavy sleepers?**
- 2.S0230: well f- p-
- 3.S0229: >>>I'm light I am
- 4.S0230: pretty light but the alcohol helps you to be a bit heavier

In the question *Are you light* [sleepers] *or* [are you] *heavy sleepers?* the alternatives are between the adjectives *light* and *heavy*. The rest (verbs, subjects, nouns, *are you ...sleepers*) is identical. Both answerers repeat the chosen alternative (*I'm light—pretty light*).

4.3.3.1.3 Adverbs

Excerpt 8 (SUAB 1-2)

S0091 is a 90 year-old man; S0058 is a 23 year-old woman:

- 1.S0091: → **do you want tea now or later on?**
 2.S0058: um (.) I'll have some now if that's alright

The alternative is between the time adverbials *now* and *later on*. The rest (*do you want tea*, verb plus direct complement) is identical. The answerer repeats the chosen alternative (*now*).

4.3.3.1.4 Prepositions

Excerpt 9 (S4TV 1124-1125)

S0571 is a 46 year-old male operations manager; S0517 is a 47 year-old self-employed female:

- 1.S0571: → **were they laughing with you or at you**
--ANONnameM?
 2.S0517: Has it did he give you his number?

The alternative is between the prepositions *with* and *at*. The rest (verb, subject, indirect complement) is identical. To this question there is *no response*, in Stivers and Enfield's (2010) terminology: S0517 answers neither directly nor indirectly to the question, she initiates a new question that has nothing to do with S0571's original question.

4.3.3.2 Verbs

Excerpt 10 (SB6S 292-293)

S0619 is a 24 year-old female; S0618 is a 42 year-old female:

- 1.S0619: → **>>did you fire them or force them out or make them**
redundant?

2.S0618: >>erm people had the choice to get up to the standard or to go away

Subject (*you*) and direct object (*them*) are the same, the three alternatives concern the verbs (*fire—force out—make redundant*). The alternative chosen by the respondent would appear to be the second: *go away* in the answer seems to be a euphemistic paraphrase of *force out* in the question.

4.3.3.3 Verbs + Complements

Excerpt 11 (S38V 63-64)

S0198 is a 27 year-old female student; S0192 is a 28 year-old male English language instructor:

1.S0198: → >> **do we need glasses or do we just share from a bottle?**
 2.S0192: yeah we can have glasses would you prefer glasses?

Only the subjects (*we*) are identical, the rest is different. In the answer, *yeah* refers to the first alternative and is followed by a close repetition of it.

In the following three examples, complements are not made up only of nouns, as in the previous example (*glasses—bottle*), but also feature adverbs, adjectives and pronouns.

Excerpt 12 (S38V 2410-2411)

S0198 and S0192 are the same interlocutors as in the previous example:

1.S0198: → **are we staying in here or going to the balcony?**
 2.S0192: erm we could just sit in the lounge couldn't we and open a window?

Here the complements are both locatives: preposition plus adverb (*in here*) and preposition plus noun (*to the balcony*). The answer is a tag question whose function is to advance a proposal in favour of a third alternative (*sit in the lounge with an open window*). The extended context does not allow us to determine whether or not *here* and *the lounge* refer to the same place.

Excerpt 13 (SAB7 88-89)

S0104 is a 49 year-old female registered nurse; S0167 is a 24 year-old female copywriter:

- 1.S0104: → **can you do any conversations in Spanish -- ANONnameF or are you still very simplistic?**
 2.S0167: very simplistic

Here the difference in the complements is between noun plus adjective (*conversations in Spanish*) and adjective (*very simplistic*). The answer repeats the second alternative.

Excerpt 14 (SCG7 313-314)

S0417 is a 45 year-old woman; S0416 is a 12 year-old male student:

- 1.S0417: → **have you got to the end of it or are you just still reading it?**
 2.S0416: I'm still reading it there's a lot of information

It refers to a book. Here the difference in the complements is between noun plus pronoun (*to the end of it*) and pronoun (*it*).

4.3.3.4 Verbs + Subjects**Excerpt 15 (S8PW 2210-2211)**

S0455 is a 53 year-old female teacher; S0452 is a 54 year-old male manager:

- 1.S0455: → **do you want those --ANONnameF or shall I pass them on?**
 2.S0452: --UNCLEARWORD

Same complements (the extended context tells us that the pronouns *those* and *them* both refer to curtain liners), different subjects and verbs (*you want—I pass on*).

4.3.3.5 Subjects**Excerpt 16 (SVD4 206-207)**

S0689 is a 16 year-old male student; S0687 is a 21 year-old female student:

- 1.S0689: → **do you want it --ANONnameF or do you want it dad?**
 2.S0687: give it to dad or mum

In the whole corpus, this is the only example in which the alternatives are grammatically and lexically identical (*do you want it*), but, while the direct object *it* refers to the same thing (a slice of bacon), the two subjects (*you*) refer to different addressees, *S0687* and *dad*. They are offered the same slice of bacon.

4.4 Incomplete alternative questions

In *incomplete* alternative questions, one (or occasionally more) lexicalised alternative is followed by a *pending* disjunctive conjunction *or*.

Out of 611 total occurrences of alternative questions, 133 (22%) are incomplete (Table 1).

As shown in Table 6, in 123 of these 133, the incomplete alternative *or?* is the second, in 7 it is the third, in 1 it is the fourth, in 2 it is the fifth (we considered the *or?* as an alternative, even though unlexicalised).

Table 6. Number of alternatives in incomplete alternative questions

Incomplete alternative questions		
Number of alternatives	Frequencies	Percentages
1 alternative + <i>or</i>	123	92.48
2 alternatives + <i>or</i>	7	5.26
3 alternatives + <i>or</i>	1	0.75
4 alternatives + <i>or</i>	2	1.50
Tot.	133	100

Although the conjunction *or* normally anticipates a further lexicalised alternative, in such questions this is absent, so they appear as cut-off questions. Stivers and Enfield (2010: 3) do not code such questions as alternative questions because “(1) the prosodic contour of these questions is recognizable as a discrete way of asking a question, and (2) they are routinely treated as a practice for asking a polar question as evidenced by regularly receiving answers (cf. Lindström, 1996)”.

By studying a corpus of Dutch conversations, Englert (2010: 2672) also notes that in many cases the “recipients treat these alternative questions like polar questions, answering the first alternative before the second one gets fully articulated by the speaker”.

In our view, the absence of an alternative subsequent to the conjunction can be due to the questioner’s choice:

- (1) to leave his/her turn suspended (especially if s/he is listing a series of similar alternatives),

- (2) to his/her temporary inability to find words to conclude or to continue,
- (3) to the speed of the answerer's response; s/he can reply by overlapping the questioner's ongoing turn or by waiting his/her own turn.

Actually, only under a fifth of the total replies (i.e., 25 occurrences, 18.79%) are uttered while the questioner is still finishing his/her turn (Table 7).

Table 7. Incomplete alternative questions with and without overlap

Incomplete alternative questions with and without overlap		
	Frequencies	Percentages
without overlap	108	81.20
with overlap	25	18.80
Tot.	133	100

Linguistically, such questions seem to be properly neither *polar interrogatives*, since they feature the conjunction *or* after a lexicalised alternative (which is absent in polar interrogatives), nor *alternative questions*, since they are lacking the second (or third and so on) lexicalised alternative after the conjunction.

Nonetheless, they seem to be *alternative* in the questioners' intention (otherwise the use of the disjunctive conjunction would be nonsensical) and *polar* in most of the respondents' reactions: they answer soon after the lexicalised alternative(s), by replying frequently with a *yes* or a *no* (the most common and frequent responses to polar interrogatives), to which sometimes they add further content.

In other words, in answering soon after the lexicalised alternative, the respondents often seem to *process* such questions *as if* they were polar interrogatives, although the questioners' intention to close them with a further alternative is clear, given the presence of the conjunction.

Obviously, it is impossible to know whether the respondent interprets the incomplete alternative question as a polar interrogative or not, i.e., whether s/he prefigures the missing alternative and replies taking into account this one as well. The only evidence we have is the answer that follows the lexicalised alternative and is communicated before the second alternative is made explicit, as it is the case in polar interrogatives.

As said above, respondents mainly reply to incomplete alternative questions (both with and without overlap) with a *yes* or a *no* (plus optional further content).

Table 8. Types of answer to incomplete alternative questions

Answers to incomplete alternative questions		
Types of answers	Frequencies	Percentages
no	46	34.59
yes	32	24.06
further alternative	19	14.29
uncertain answer (<i>I think, I hope, probably...</i>)	13	9.77
repetition of alternative	13	9.77
no answer or request for specification	10	7.52
Tot.	133	100

As shown in Table 8, more than 50% of responses are indeed *yes* or *no* (24.06% + 34.58%). They reach almost 70% if we also add the *uncertain answers* (9.77%).

In 19 answers (14.29%), the respondents propose a new alternative to those listed by the questioners (e.g. excerpt 17):

Excerpt 17 (S263 693-694)

S0590 is a 74 year-old woman; S0616 is a 54 year-old man:

- 1.S0590: → **do they eat them or strangle them or?**
 2.S0616: just suffocate them or

In 10 answers (7.52%), the respondents do not reply explicitly (e.g. excerpt 18):

Excerpt 18 (S3TD 29-31)

S0247 is a 61 year-old woman; S0248 is a 65 year-old man:

- 1.S0247: → **do you cross your fingers or?**
 2.S0248: I tell you what actually u- I kept winning and I I give to beggars anyway
 3.S0247: yeah

Alternatively, the respondents ask for specification (e.g. excerpt 19):

Excerpt 19 (S5EM 544-547)

S0351 is a 20 year-old male student; S0187 is a 21 year-old male student:

- 1.S0351: → **was it posted or?**
 2.S0187: mm?
 3.S0351: did someone have to get it from the door or was it just posted through?
 4.S0187: I just came home and saw it and I thought I'll leave it there so you see it when you come through

Only in 13 answers (9.77%), do the respondents reply

- by repeating the lexicalised alternative in order to choose it, i.e., to reply affirmatively (e.g. excerpt 20):

Excerpt 20 (SKDA 981-982)

S0198 is a 27 year-old female student; S0230 is a 57 year-old female care assistant:

- 1.S0198: → **does it cover all of the South East or?**
 2.S0230: >> it covers all of the South East¹

- or by rejecting the lexicalised alternative in favour of the opposite (e.g. excerpt 21):

Excerpt 21 (S5XD 277-278)

S0192 is a 28 year-old male English language instructor; S0196 is a 31 year-old female recruitment consultant:

- 1.S0192: → **do you have a cup and a teabag or?**
 2.S0196: >> I don't have a cup no I was hoping that you would have a cup

Now we present the qualitative analysis of five excerpts, four of which are examples of questions with *1 alternative + or* with *yes* and *no* responses: excerpts 22 and 23 are with no overlap, excerpts 24 and 25 with overlap. Excerpt 26 is an example of question with *4 alternatives + or* and an overlapping *repetition* response.

¹ For repetitional answers, see Lee (2014).

Excerpt 22 (S263 412-413)

In the following excerpt, a 59 year-old self-employed male carpenter (S0616) and a 74 year-old female headmistress (S0590) are talking about a TV programme which is to be broadcast later the same night, on Greece's desperately impoverished conditions and drowning immigrants:

- 1.S0616: → **are you going to watch it then or?**
 2.S0590: no I'll watch it on iPlayer when I go back home

S0616, with an incomplete alternative question, asks S0590 if he is going to watch the report. The pending conjunction *or* sounds like a lead for a second, negative alternative (*or not*), which, however, S0616 does not lexicalise.

Before S0616 has the chance to complete the question, S0590—perhaps interpreting it as a polar interrogative or prefiguring the second, negative alternative—answers negatively (with *no*) and goes on by adding an explanation: *I'll watch it on iPlayer² when I go back home*.

His negative reply can be either

- the answer to a question understood as a polar interrogative or
- the choice between two alternatives: i.e., the one lexicalised by S0616, *you watch it then*, and the one not lexicalised, but easily inferred, *you don't watch it (are you going to watch it then or not?)*.

If S0616 had asked *Are you going to watch it then?* (i.e., without adding the conjunction), the linguistic design of her question would have been that of a plain polar interrogative. If she had asked *Are you going to watch it then or not?*, the linguistic design of her question would have been that of a negative alternative question (see section 4.6). By lexicalising only one alternative and adding the conjunction *or*, i.e., leaving the second alternative implicit, her question becomes an incomplete alternative question, i.e., a hybrid between a polar and a complete alternative question.

Excerpt 23 (S3M9 1150-1151)

The following excerpt is taken from a conversation between four friends, who are cooking and eating after a trip abroad. The fragment reported below involves two of them: S0326, a 20 year-old male student, and S0328, a 29 year-old female baker:

- 1.S0326: → **have you tried this one or?**
 2.S0328: yeah that's a good one

Using an incomplete alternative question, S0326 asks S0328 whether she

² *iPlayer* is an internet service to download or watch BBC programmes.

has ever tasted the food they are cooking. Before S0326 can add the second alternative (e.g. *or not, that one*, etc.), S0328 replies affirmatively to the lexicalised one and adds an evaluation: *that's a good one*. S0328's affirmative reply can be either:

- the answer to a question understood as a polar interrogative, or
- the choice between two alternatives: i.e., the lexicalised *you have tried this one*, and the unlexicalised, but easily inferred *you have not tried it*.

In the cases in which there are no overlaps, as in those analysed above, it is impossible to decide whether the respondent replies to what s/he understands as a polar interrogative or to what s/he prefigures as being the content of the unlexicalised alternative. On the contrary, in the cases in which the respondent overlaps the questioner's ongoing turn before the conjunction *or*, it is probable that s/he is answering what has been understood as a polar interrogative.

Sometimes the respondent begins to answer while the questioner still has the floor, i.e., before s/he has signalled that s/he is ready to leave the speakership to the other participant (Jefferson 1973; Sacks, Schegloff and Jefferson 1974), so that questioner and respondent overlap briefly.

Normally, after the respondent's overlap, the questioner stops, leaving the floor to the respondent with the *or* pending.

Excerpts 24 and 25 are examples of incomplete alternative questions in which the respondent overlaps with the questioner³.

Excerpt 24 (S5XD 277-278)

This excerpt (which is the same as excerpt 21 above) is taken from a conversation between three cousins meeting up for the first time in 2 years. The fragment reported below takes place between two of them: S0192 (a 28 year-old man working as an English language instructor) and S0196 (a 31 year-old woman working as a recruitment consultant). They are talking about the health risks of defrosting foods too quickly and, while waiting for the kettle to boil, indicate that the water is ready for the tea:

- 1.S0192: → **do you have a cup and a teabag or?**
 2.S0196: >>I don't have a cup no I was hoping that you would have a cup

S0192 asks S0196 both for a cup and a teabag. S0196 probably interprets the first part of S0192's question as a polar interrogative (*do you have a*

³ Since in the Spoken BNC2014 the overlaps are not indicated with precision, we can only suppose where they occur on the basis of the content of the respondent's reply.

cup?), so that she overlaps the second part (*and a teabag*) and negatively replies only to the first part (*I don't have a cup no*), without answering the second one. While S0192 stops, leaving his turn suspended, i.e., leaving the conjunction *or* pending, S0196 goes on by adding new information: she was hoping that S0192 had a cup.

In S0192's question the pending *or* functions as a forerunner indicating a second unlexicalised alternative (perhaps the negative one, *or not*, perhaps something else).

Excerpt 25 (SAZY 51-52)

The fragment reported below takes place between a mother (S0391, a 55 year-old teacher) asking her son (S0392, a 15 year-old student) if he will have his bath before he does his piano practice and homework:

- 1.S0391: → **are you gonna have your bath first or?**
 2.S0392: >>yes I will do

S0391's question remains incomplete probably because of S0392's overlap and S0391's simultaneous decision to leave the floor. It is possible to imagine that the conjunction *or* would be followed by an opposite, for instance, *or after?/ or not?*. However, the boy overlaps and quickly replies to the first lexicalised alternative as if the question were a polar interrogative. Indeed, his answer means *yes, I will have my bath before doing my piano and homework*.

As shown in Table 6, two of the incomplete alternative questions state four alternatives before *or* is mentioned. One of these is interesting since it seems to be a *never-ending question*. It appears in the following excerpt (26) where two women (a 48 year-old accounts manager, S0255, and a 30 year-old marketing manager, S0316) are enjoying a relaxing break:

Excerpt 26 (SMW8 3791-3794)

- 1.S0255: → **would you like a coffee or a tea or a water or a squash or a?**
 2.S0316: >> erm (.) a squash would be lovely thank you
 3.S0255: → >> **chocolate soya milk or?**
 4.S0316: no thank you just a squash would be nice thank you

S0255 asks S0316 whether she wants something to drink by a question that is split over two lines of the transcription and made up of 4 alternatives (line 1) plus 1 alternative + the pending conjunction *or* (line 3). After the first four alternatives (*a coffee or a tea or a water or a squash*), S0316 answers by choosing her preferred alternative (*erm (.) a squash would be lovely*

thank you), overlapping S0255's ongoing speech as she adds a fifth alternative (*a chocolate soya milk*) and the pending conjunction *or*, meaning that she could go on proposing further alternatives. In other words, S0316's response overlaps S0255's fifth alternative. When the overlap is concluded, S0316 repeats her preference (*just a squash would be nice thank you*) after explicitly rejecting (*no*) the fifth option (*a chocolate soya milk*).

Unlike the previous examples (made up of 1 alternative + *or*), here the respondent cannot answer with a simple *yes* or *no* as if the question were a polar interrogative. Since there are several alternatives, the respondent has to reply by explicitly lexicalising her choice, i.e., by repeating one of the alternatives proposed by the questioner.

This example raises doubts about whether excluding *all* the incomplete alternative questions from their own category and treating them as polar interrogatives as suggested by Stivers and Enfield (2010) is necessarily the best course of action. We can agree with the authors in the case of incomplete questions with only one alternative, but incomplete questions having two or more alternatives suggest a different questioner intention and a correspondingly different addressee response.

4.5 Indefinite alternative questions

In *indefinite alternative questions* the conjunction *or* is immediately followed by an indefinite pronoun. In about half of such questions the pronoun is *something* and *somewhere*, in just over a quarter *anything*, and in under a fifth *what* and *whatever* (Table 9).

Table 9. Types of pronoun in indefinite alternative questions

Pronouns		Indefinite alternative questions		
		Frequencies	Percentages	
or something	or something	47	} 53	55.79
	or something like that	5		
	or somewhere	1		
or anything	or anything	23	} 28	29.47
	or anything like that	4		
	or anything else	1		
or what	or what	11	} 14	14.74
	or whatever	3		
Tot.		95	95	100

The questioner uses such indefinite pronouns to indicate that s/he is referring generally and vaguely to something similar to what s/he has just mentioned in the previous alternative(s).

In this way, the addressee has therefore two options: to choose one of the lexicalised alternatives or to specify the possible referent of the indefinite pronoun in the final alternative.

4.5.1 *Or something*

Table 10 shows the number of alternatives found in such questions:

Table 10. Number of alternatives in or something questions

Or something			
	2 alternatives	3 alternatives	Tot.
or something	43 (91.49%) <i>(89.58%)</i>	4 (8.51%) <i>(80%)</i>	47 (100%) <i>(88.68%)</i>
or something like that	4 (80%) <i>(8.33%)</i>	1 (20%) <i>(20%)</i>	5 (100%) <i>(9.43%)</i>
or somewhere	1 (100%) <i>(2.08%)</i>	0 (0%) <i>(0)</i>	1 (100%) <i>(1.89%)</i>
Tot.	48 (90.56%) <i>(100%)</i>	5 (9.43%) <i>(100%)</i>	53 (100%) <i>(100%)</i>

The percentages in bold are to be read horizontally; the percentages in italics are to be read vertically

Excerpt 27 (S6JL 640-641)

S0529 (20 years old) and S530 (19 years old) are two female student flatmates:

- 1.S0529: → >>**do you want me to like tidy your room or something?**
 2.S0530: >>no no I said help help yourself and you'll be helping me

The answer rejects both alternatives, definite and indefinite, linking back to an earlier phase of the conversation.

4.5.2 *Or something like that*

Excerpt 28 (SWY3 234-237)

S0391: (a 55 year-old female teacher) and S0545 (a 54 year-old man) are two friends:

- 1.S0391: → **would you like a hot drink with that or a whisky or something like that**
 2.S0545: >>no er
 3.S0391: → >> --ANONnameM?
 4.S0545: I've had enough alcohol --ANONnameF

The woman offers 2 alternatives + *something like that* to the man who, overlapping her at the end of the question, rejects all alternatives, as in the previous example.

4.5.3 *Or somewhere*

Excerpt 29 (S6SH 96-100)

Here we have a grandfather (S0579, 91 years old) and his granddaughter (S0454, 36 years old); *her* and *she* refer to a mutual friend:

- 1.S0579: we haven't haven't seen her for some years have you --ANONnameF?
 2.S0454: no she's abroad isn't she?
 3.S0579: → **did she go to Italy or somewhere?**
 4.S0454: yes that's right is oh she's in Seville isn't she?
 5.S0579: Oh yes yeah that's in Seville

We read the first part of S0454's answer in turn 4 (*yes that's right*) as equivalent to *yes she went to Italy or somewhere* and the second part as an attempt to specify a possible referent of *somewhere* (*Seville*) by advancing a proposal through a tag question (*she's in Seville isn't she?*), taking for granted that both interlocutors know that Seville is in Spain and not in Italy.

4.5.4 *Or anything*

Table 11 shows the number of alternatives found in such questions.

Table 11. Number of alternatives in or anything questions

Or anything			
	2 alternatives	3 alternatives	Tot.
or anything	20 (86.96%) <i>(80%)</i>	3 (13.04%) <i>(100%)</i>	23 (100%) <i>(82.14%)</i>
or anything like that	4 (100%) <i>(16%)</i>	0 (0%) <i>(0%)</i>	4 (100%) <i>(14.29%)</i>
or anything else	1 (100%) <i>(4%)</i>	0 (0%) <i>(0)</i>	1 (100%) <i>(3.57%)</i>
Tot.	25 (89.29%) <i>(100%)</i>	3 (10.71%) <i>(100%)</i>	28 (100%) <i>(100%)</i>

The percentages in bold are to be read horizontally; the percentages in italics are to be read vertically

Excerpt 30 (S5XD 2791-2792)

S0194 is a 34 year-old female dental practitioner; S0192 is a 28 year-old male English language instructor:

- 1.S0194: → **have you seen well er do you speak to him or email him or anything?**
- 2.S0192: >>I'm in contact with him yeah (.) he erm he rang me the other day so we chatted for a bit

The first part of S0192's positive answer is generic (*I'm in contact with him yeah*), the second specifies the type of communication (*chatting on the telephone*) S0192 had with the third person the two interlocutors are talking about.

4.5.5 Or anything like that

Excerpt 31 (SB4D 2421-2422)

S0192 is the same interlocutor as in the previous example; S0197 is a 51 year-old male buyer; *he* refers to a little boy:

- 1.S0192: → **does he get asthma or anything like that?**
- 2.S0197: no

The answer denies both alternatives, definite and indefinite.

4.5.6 *Or anything else*

Excerpt 32 (SVKH 230-232)

S0190 is a 55 year-old female activity co-ordinator, S0192 is the same interlocutor as in the above excerpts 30 and 31:

- 1.S0190: → **do you want any toast or anything else?**
 2.S0192: do you have an apple?
 3.S0190: yes

In turn 2, S0192 answers S0190's offer with a polar interrogative that we read as a response to *anything else* and equivalent to *I would like an apple, if you have it*, i.e., a proposal of an alternative to *toast*.

4.5.7 *Or what*

Table 12 shows the number of alternatives found in such questions.

Table 12. Number of alternatives in or what questions

	Or what		
	2 alternatives	3 alternatives	Tot.
or what	9 (81.82%) <i>(81.82%)</i>	2 (18.18%) <i>(66.67%)</i>	11 (100%) <i>(78.57%)</i>
or whatever	2 (66.67%) <i>(18.18%)</i>	1 (33.33%) <i>(33.33%)</i>	3 (100%) <i>(21.43%)</i>
Tot.	11 (78.57%) <i>(100%)</i>	3 (21.43%) <i>(100%)</i>	14 (100%) <i>(100%)</i>

The percentages in bold are to be read horizontally; the percentages in italics are to be read vertically

Excerpt 33 (SC4J 245-246)

S0037 is a female research manager (age range 19-29); S0115 is a male PhD student (age range 30-39); *them* refers to the lobsters they are cooking:

- 1.S0037: → **>>shall I turn them over or leave them or what?**
 2.S0115: yeah flip them over and then salt the back

Since *turn over* in the question and *flip* in the answer can be read as synonymous, we can say that in the first part of his answer (*yeah flip them over*) S0115 confirms the first alternative asked by S0037 (*shall I turn them over*); in the second part he adds further information (*and then salt the back*) that can also be read as a specification of *or what?*

4.5.8 *Or whatever*

Excerpt 34 (SXR9 10-11)

S0405 is a 17 year-old male student, S0556 is an 18 year-old female student:

- 1.S0405: → **do you think you guys could get (.) like sleep over or whatever?**
 2.S0556: yeah I can

In the question the pronoun *you* includes a friend of S0556, who does not answer. In his response, S0556 confirms S0405's first alternative, *sleep over*.

4.6 Negative alternative questions (*or not* questions)

All 55 of the negative alternative questions have only two alternatives, the first in the affirmative, the second in the negative (*or not*): since the second is the opposite of the first, there cannot be more than two alternatives.

We are therefore now in a position to state the number of alternatives in all four types of alternative questions (Table 13). Almost 95% of them have only two alternatives.

Table 13. Number of alternatives in each type of alternative question

	Number of alternatives					Tot.	%
	2	3	4	5			
Types of alternative question							
complete	318	9	1		328	53.68	
incomplete	123	7	1	2	133	21.77	
negative	55				55	9.00	
or what	11	3			14	2.29	
or anything	25	3			28	4.58	
or something	48	5			53	8.67	
					611	100	
Tot.	580	27	2	2	611		
%	94.93	4.42	0.33	0.33	100		

In the following four examples of negative alternative questions the difference is in the answer, affirmative in the first two and negative in the others. Another difference is that in excerpts 35 and 37 the addressee answers only with *yes* and *no*, respectively (a terse answer), while in excerpts 36 and 38 s/he adds further information after the *yes* and *no*.

Excerpt 35 (SE88 888-889)

S0084 is a female production controller (age range 19-29); S0083 is a woman (age range 60-69):

- 1.S0084: → **do you want it washed up or not?**
 2.S0083: yes

Excerpt 36 (S5XD 1515-1516)

S0194 is a 34 year-old female dental practitioner; S0192 is a 28 year-old male English language instructor:

- 1.S0194: → **was she caught out or not?**
 2.S0192: yeah she was quite surprised she was really surprised

Excerpt 37 (SEM7 499-500)

S0557 (23 years old) and S0539 (24 years old) are both female students:

- 1.S0557: → **did they like it? or not?**
 2.S0539: no

Excerpt 38 (S7LN 47-48)

S0136 is a female IT administrator (age range 19-29); S0065 is a female German language teacher (age range 30-39):

- 1.S0136: → **did you find it in the end or not?**
 2.S0065: no no I gave her a packet of crips and that seemed to em fix the problem

4.7 Question designs of alternative questions and type-conforming answers

The linguistic design of the four types of question found in our corpus can be represented as follows (for simplicity's sake, here we discuss only two alternatives, which represent the vast majority of forms observed):

(1) Complete alternative questions:

positive alternative or positive alternative?

More formally,

p₁ or p₂?

Type-conforming answer: repetition of the chosen alternative (*yes* or *no* are optional).

(2) Indefinite alternative questions:

positive alternative or positive (indefinite) alternative?

More formally,

p₁ or p₂?

Type-conforming answer: repetition of the first alternative (when the alternatives are two as in this paradigmatic case) or specification of the indefinite alternative (*yes* or *no* are optional).

The only difference between the question designs of complete and indefinite alternative questions is that the *content* of the second alternative is either definite or indefinite in the sense seen in the previous sections.

As a result, if we choose not to consider such a difference in content as being part of their formal structure, their linguistic design can be represented in one and the same way:

p₁ or p₂?

(3) Negative alternative questions:

positive alternative or negative alternative?

More formally

p₁ or non p₁?

since the second alternative is the opposite, i.e., the negation, of the first (*non p₁ = or not*).

Type-conforming answer: *yes* or *no* (repetition of the chosen alternative is optional).

(4) Incomplete alternative questions:

We must distinguish between those incomplete alternative questions composed of *one alternative + or* (123 occurrences, Table 6) and those composed of *two or more alternatives + or* (10 occurrences).

(4.1) One alternative + or:

positive alternative or?

More formally:

p₁ or?

Type-conforming answer: whether with or without the respondents' overlap, such questions are answered with a simple *yes* or *no* in more than 50% of occurrences.

Given that the second alternative is missing, their design is similar to that of polar interrogatives.

(4.2) Two (or more) alternatives + or:

positive alternative + positive alternative + or

More formally:

p_1 or p_2 or?

This question design is similar to that of complete alternative questions above (p_1 or p_2 ?), so the **type-conforming answer** is the same: repetition of the chosen alternative (*yes* or *no* are optional).

Question designs of alternative questions and their type-conforming answers are summarised in Figure 1:

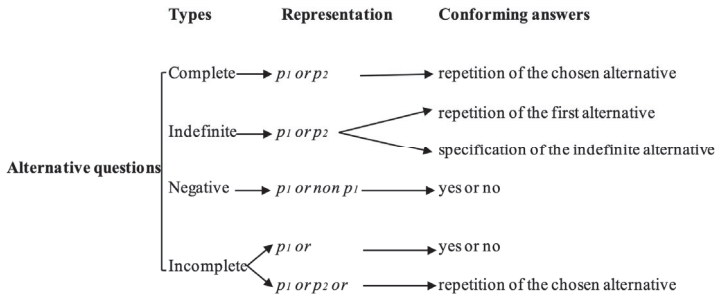


Figure 1. Question designs of alternative questions and their type-conforming answers

In this way, we have three question designs for alternative questions:

- (1) p_1 or p_2 ?
- (2) p_1 or non p_1 ?
- (3) p_1 or?

However, the third type of question design p_1 or? lies in between that of polar interrogatives (p ? Chapter 5) and that of alternative questions proper (p_1 or p_2 ? / p_1 or non p_1 ?).

For this reason, it can either be excluded from the above list of alternative questions, if considered to be a polar interrogative, or reduced to one of the other two, if considered to be an alternative question.

The data resulting from our corpus research (in which four types of alternative questions are found) allow us to assume that in the incomplete alternative questions *p₁ or?* the second alternative, if lexicalised and not left suspended, would be either *p₂* (whether definite or indefinite) or *non p₁* (i.e., *or not*).

So, the question design of incomplete alternative questions *p₁ or?* could be reduced to the other two, i.e., either *p₁ or p₂* or *p₁ or non p₁*, both of which represent the *basic designs* or *types* of alternative questions:

alternative questions of the first type = *p₁ or p₂?*

alternative questions of the second type = *p₁ or non p₁?*

We have seen above that these two different question designs determine a further relevant difference in the kind of response they expect, i.e., in their type-conforming answer.

In answering *p₁ or p₂* questions, the answerer must repeat the alternative s/he chooses, s/he cannot answer with a simple *yes* or *no*.

On the contrary, in answering *p₁ or non p₁* questions, the answerer can, in principle, answer only *yes* or *no*, without adding any other word, i.e., without repeating the alternative s/he chooses, since *yes* means *I choose the positive alternative* (i.e., *the positive alternative is the true one*) and *no* means *I choose the negative alternative* (i.e., *the negative alternative is the true one*).

This difference is interesting from a theoretical point of view as well, in two respects.

Firstly, since alternative questions of the second type (*p₁ or non p₁?*) can be answered by a simple *yes* or *no*, they rightfully fall into the category of *yes-no* questions, i.e., polar questions (polar interrogatives, tag questions, declarative questions); alternative questions of the first type (*p₁ or p₂?*) do not, since they cannot be answered with a simple *yes* or *no*.

These fall into the category of content questions, similar to *wh*-questions, even though the content of answers to *wh*-questions is new, specifying the identity of the *wh*-word present in the questions, whereas the content of answers to alternative questions of the first type is a repetition of the chosen alternative or a specification of the indefinite pronoun.

Secondly, since alternative questions of the second type (*p₁ or non p₁?*) are *yes-no* questions, they have a close relationship with these, mostly with one particular type, i.e., polar interrogatives, to the point that some authors claim that polar interrogatives, e.g., *is it still snowing outside?*, can be considered as a special type of alternative question in which the second alternative (*or not*) has been suppressed and thus remains implicit, not

lexicalised: *is it still snowing outside (or not)?* We will discuss this topic in Chapter 5.

4.8 Epistemic design of alternative questions

All four types of alternative questions (complete, incomplete, indefinite, negative) have the same epistemic design.

For simplicity's sake, we limit ourselves to showing the epistemic design of the two basic types of alternative questions, *p₁ or p₂?* and *p₁ or non p₁?*, through the analysis of two excerpts.

In the following extract (39) there are two alternative questions: the first is an offer from the point of view of social action, while the second is a proper information-seeking question.

Among other things, we want to show that alternative questions have one and the same epistemic design, independently of their social action.

Excerpt 39 (SBVQ 1167-1171)

S0018 is a female language teacher (age range 30-40); S0049 is a female small business owner (age range 20-30). They are talking about the development of S0049's business, when S0018 makes an offer to S0049 via the following polar interrogative:

- 1.S0018: do you want do you wanna cuppa tea?
 2.S0049: A cuppa tea
 3.S0018: → **shall I put the kettle on or would you prefer coffee?**
 4.S0049: → I dunno (.) I might have a coffee actually (.) **do you wanna make it or do you want me to make it?**
 5.S0018: no no no (.) I'll make it

4.8.1 *Shall I put the kettle on or would you prefer coffee?*

In line 2, S0049 repeats the last three words (*A cuppa tea*) of S0018's polar interrogative in line 1 (*do you wanna cuppa tea?*). Without any support from the audio and intonation, it is not possible to establish whether *A cuppa tea* is uttered with an affirming tone or a non-committal one, i.e., whether S0018's offer is fully accepted by S0049 or left doubtful.

Probably because S0018 interprets S0049's turn as doubtful, in line 3, through an alternative question, she makes a second offer adding coffee to tea: *shall I put the kettle on* (in order to make you the cup of tea I offered you in my previous turn) *or would you prefer coffee?*

The alternative is between tea and coffee, as if S0018's question were something like *Do you really want [a cup of] tea or do you prefer coffee?*

As said, this question is an offer, a social action that is somewhat different from information seeking, but the epistemic design is the same in both question types (see sections 4.8.3 (Third TCU) and 4.8.4). We chose to analyse this excerpt also because both S0018's question in line 3 and S0049's answers in line 4 are particularly interesting from the epistemic stance perspective.

Let's call the first alternative provided to the recipient (*I shall put the kettle on*) p_1 and the second (*you would prefer coffee*) p_2 .⁴

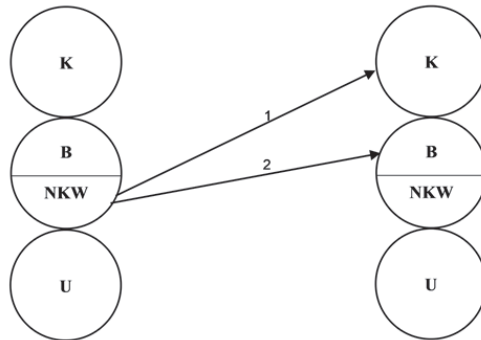
In the linguistic design no indication is given of whether the questioner considers one of the options as being more (or less) likely to be true than the other; both options are equally probable.

This proportion (each alternative has an equal probability of being true) represents the maximum degree of uncertainty (Chapter 1, section 1.3.1). Alternative questions can therefore be seen as coming from the *Not Knowing Whether* pole of the Uncertain position.

The questioner's expectations concerning the interlocutor's response are *neutral* (both alternatives are expected to be true to the same degree), not oriented in favour of either p_1 (*I shall put the kettle on*) or p_2 (*you would prefer coffee*).

Peculiar to this question is its twofold epistemic destination (Figure 2): the first alternative, given the presence of the modal *shall*, is directed at the Knowing; the second alternative, given the presence of the modal conditional *would*, is directed at the interlocutor's Believing position, not the Knowing (this topic will be treated in Chapter 9). *Would you prefer coffee* is a mitigated offer comparable to *do you prefer coffee* but somewhat more polite than the latter. As Kamio (1997, Chapter 7) suggests, sometimes the speaker can use an *indirect* (mitigated) form instead of a *direct* (non mitigated) one in order to appear less assertive.

⁴ The two alternatives are joined by the disjunctive *or* which means that any alternative is possible, but not both, i.e., only one alternative is true (you either want tea or you want coffee).



- (1) shall I put the kettle on or
 (2) would you prefer coffee?

Figure 2. Origin and twofold destination of S0018's alternative question

If we transform the direct question *Shall I put the kettle on or would you prefer coffee?* into the corresponding indirect one, again using the introducing verb *to know*, as we did for wh-questions (Chapter 3, section 3.2.3), from an epistemic perspective we have:

(a) *I do not know whether* I shall put the kettle on *or* you would prefer coffee

Formally, the epistemic design of alternative questions may be represented as follows:

(a₁) *I do not know whether* + p₁ *or* p₂

The expression *I do not know whether...or* makes explicit the questioner's epistemic position of uncertainty between the two alternatives that s/he is faced with and it gives rise to a grammatically acceptable sentence.

On the contrary, if we place the expression *I don't know*, as in the case of wh-questions, we would give rise to a grammatically unacceptable sentence:

* I do not know *I shall put the kettle on or you would prefer coffee*

The expression *I do not know* suits wh-questions only, it does not suit alternative questions (nor does it suit polar interrogatives, tag and declarative questions, as we will see), which instead require *I do not know whether*.

4.8.2 A linguistic test for unknowing and uncertain questions (*I don't know* versus *I don't know whether*)

The transformation from direct to indirect questions with their suitable epistemic complement (*I do not know* vs *I do not know whether*) can be considered as a “linguistic test” aimed at checking whether a question is unknowing or uncertain.

From an epistemic stance perspective, there is a great difference between *not knowing* and *not knowing whether*, as much as between *un-knowledge* and *un-certainty*: information communicated as *unknown* involves *absence of knowledge*; information communicated as *not known whether* involves *doubt*.

In this sense, alternative questions can be thought of as *uncertain*: they express a *lack of certainty* concerning two alternatives. Wh-questions, on the other hand, communicate *lack of knowledge* concerning the referent of a wh-word.

In wh-questions, the questioner aims to find out an unknown element, a point (*how much* did you drink a day ?) within a state of affairs presupposed to be true, i.e., as known (you drank a given amount a day).

In alternative questions the questioner aims to solve a doubt concerning which of at least two states of affairs, mutually exclusive and presupposed to be possible, is true.

Wh-questions aim to fill an empty space in knowledge, one specific content void, a single gap, a cognitive blank within a single proposition; alternative questions try to dispel doubt on the truth of two alternative propositions.

Wh-questions address *one specific element of ignorance*; alternative questions are concerned with *two structured wholes of uncertainty*.

Unlike wh-questions, where questioners adopt an Unknowing position, alternative questions do not seem to involve “groping in the dark”, since they ask the interlocutors from a Not Knowing Whether position to choose between two alternatives advanced by the questioners.

Therefore, as for their social action, such questions are information-seeking, in that (1) their question design is *neutral*, not oriented in favour of either p_1 or p_2 , and (2) the recipient's response is expected to let the questioner know which possibility is actually true, by specifying the alternative chosen.

In this sense, alternative questions of the first type (p_1 or p_2 ?) are information seeking just like wh-questions. Both expect a content response, not a *yes* or a *no*: wh-questions request the answerer to specify the identity

of a wh-word, alternative questions require the answerer to specify which is the true alternative.

4.8.3 *Do you wanna make it or do you want me to make it?*

S0049's answer to S0018's alternative question in line 4 comprises three TCUs: *I dunno/ I might have a coffee actually/ Do you wanna make it or do you want me to make it?* This final one is itself a new alternative question.

First TCU: *I dunno* = I do not know [whether I prefer coffee to tea]

We already encountered the verbal expression *I don't know* in Chapter 3, section 2.4, S0052's second TCU.

There, *I don't know* was an answer to an immediately preceding wh-question (*How much did you drink a day?*), therefore it was completed as *I don't know how much I drank a day*, i.e., as corresponding to a declarative sentence coming from the Unknowing position.

Here, *I dunno* is an answer to an immediately preceding alternative question, thus it is plausible to complete it as *I do not know whether you shall put the kettle on or I would prefer coffee*; in brief, *I do not know whether I [would] prefer coffee to tea*, i.e., as a declarative sentence coming from the Uncertain position, specifically from the Not Knowing Whether pole. In Stivers and Enfield's (2010) terminology, this is a non-answer response that misaligns with the question (Figure 3).

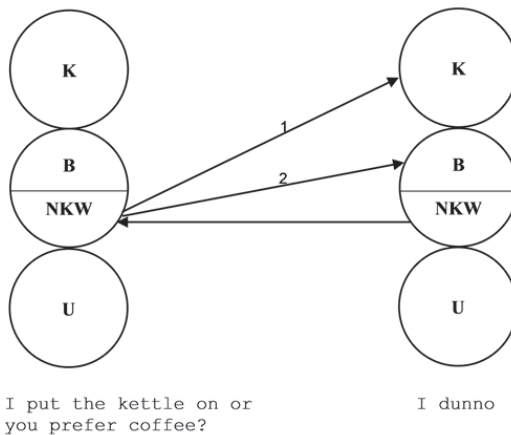
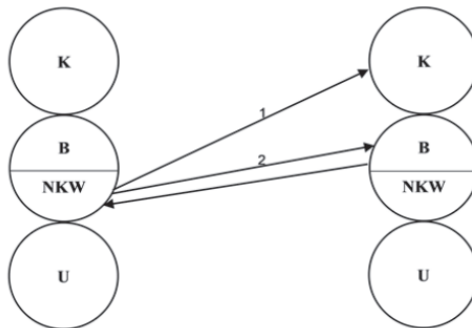


Figure 3. Origin and destination of S0018's alternative question and S0049's first TCU. This latter is a non-answer response that misaligns with the question (wider angle)

Second TCU: I might have a coffee actually

S0049 adds *I might have a coffee actually*, where the verb *might* is an epistemic marker of possibility and subjectivity (see Chapter 1, section 1.3), which makes the TCU equivalent to the explicit expression of a personal opinion (*I believe that I might have a coffee actually*) coming from the Believing pole of the Uncertain position. The adverb *actually* seems to function as a discourse marker of agreement with S0018, so that the whole TCU can be read as *Yes, I believe you are right, I might have coffee instead of tea*.

I might have a coffee actually, given the presence of the modal conditional *might*, is a mitigated answer to S0018's offer. In particular it is a mitigated acceptance of S0018's second alternative *...or would you prefer coffee?*. Both offer and acceptance include a modal conditional: the acceptance (*I might...*) is as polite as the offer (*...or would you...?*). Thus the acceptance perfectly aligns with the offer, not only from an epistemic stance perspective (B→B, Figure 4) but also from a politeness perspective.



(1) shall I put the kettle on or I might have a coffee actually
 (2) would you prefer coffee?

Figure 4. Origin and destination of S0018's alternative question and S0049's second TCU. This latter is a non-answer response that partially aligns with the question (acute angle)

Figure 5 combines TCUs 1 and 2, i.e., the two answers given to the question, in order to show the respondent's *epistemic shift* from the Not Knowing Whether to the Believing pole of the Uncertain position, from misalignment to partial alignment.

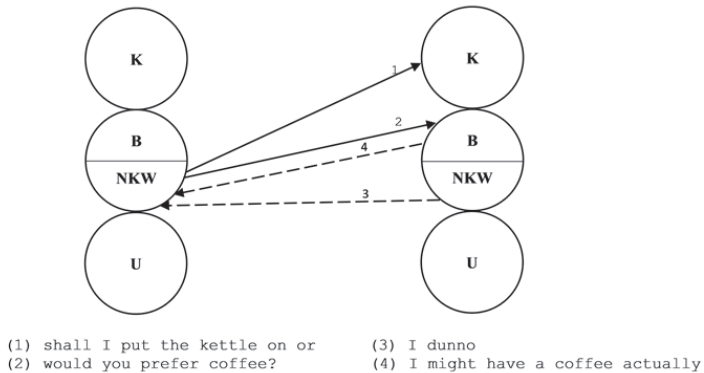


Figure 5. The respondent's epistemic shift from NKW to B, from misalignment to partial alignment

That the second TCU is equivalent to something like *Yes, I would prefer coffee*, i.e., to an acceptance of the second alternative provided by S0018 in line 3, is reinforced by the third TCU.

Third TCU: *do you wanna make it or do you want me to make it?*

S0049 closes her turn with an alternative question (*do you wanna make it or do you want me to make it?*) where *it* refers to *coffee*: such a question presupposes that one of them is going to make coffee, so it implicitly conveys *I prefer coffee to tea*, i.e., it confirms with certainty what she has just said in the second TCU in a mitigated way (*I might have a coffee actually*).

The implicit sense of *I prefer coffee to tea* functions as a final answer to S0018's question in line 3 *shall I put the kettle on or would you prefer coffee?* and, unlike the previous two TCUs, it totally aligns with that question (Figure 6).

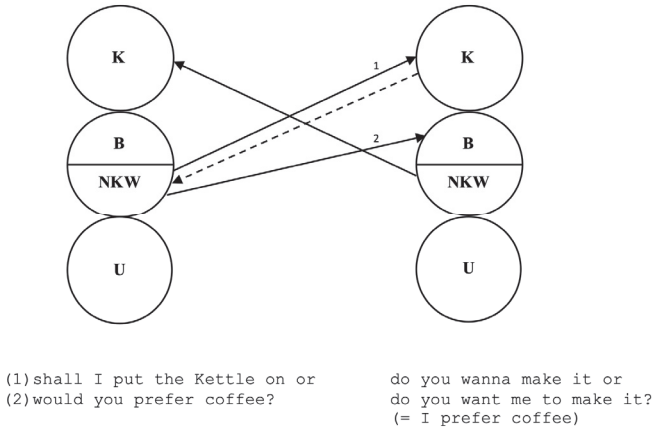


Figure 6. Origin and destination of S0049’s alternative question and S0018’s third TCU: this latter consists of an explicit question $K \rightarrow NKW$ (continuous arrow) and an implicit answer $K \rightarrow NKW$ (*I prefer coffee*, dotted arrow). The intersection of the two continuous arrows indicates that a question is answered by another question. The dotted arrow, being parallel to the continuous one, signals that S0018’s implicit answer is in fact an answer-response that totally aligns with S0049’s question

In line 5, S0018’s answer to S0049’s question *do you wanna make it or do you want me to make it?* comes from the Knowing position (*no no no* (= I do not want you to make it). *I’ll make it*) and totally aligns with S0049’s question, thus being clearly an answer-response (Figure 7).

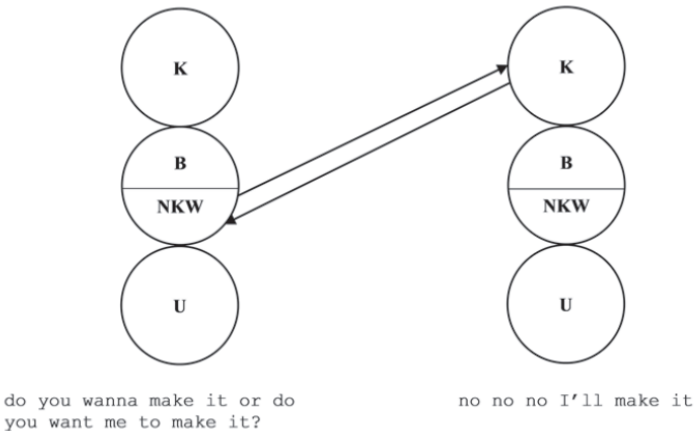


Figure 7. Origin and destination of S0049’s alternative question and S0018’s answer

The epistemic design of S0049's question is identical to that of S0018's *shall I put the kettle on or would you prefer coffee?*:

- (b) *I do not know whether you wanna make it or you want me to make it*

More formally, we have again

- (b₁) *I do not know whether + p₁ or p₂*

Also

* *I do not know you wanna make it or you want me to make it*

is a grammatically unacceptable sentence.

4.8.4 *Did you find it in the end or not?*

As for the alternative questions of the second type (*or not?*), we present the analysis of the following extract:

Excerpt 40 (S7LN 45-48)

Two women are talking about their children and related topics (illness, doctors, child-minders, education, etc.). S0136 is a reprographer (age range 19-29); S0065 is a modern foreign languages teacher (age range 30-39). At a certain point, through a wh-question, S0136 asks S0065:

- 1.S0136: how's your day been today?
 2.S0065: eh it's been good cos today is an easy day for me I only teach two lessons (.) so I have three frees to get loads of work done (.) usually I'm taken for a couple but today I wasn't (.) but my day started badly because --ANONnameF had a tantrum at the child-minders (.) because when we got out of the car she'd lost her bracelet (.) she was wearing a little pink you know silly little jewellery thing and she just went mad completely mad (.) and I had to actually call school to say I may not be in on time because she ran up the road and you know I had to go chasing after her (.) I've got the one year old in the car and the school bags

- 3.S0136: → **did you find it in the end or not ?**
 4.S0065: no no (.) I gave her a packet of crisps and that seemed to em fix the problem

In line 2, in answering S0136's wh-question (*how's your day been today?* Unknowing position), S0065 reports from the Knowing position on her elder child's tantrum for having lost a bracelet on the way to the child-minder's and on the consequences for S0065 of that anger: running after her child on the road, leaving the younger child alone in the car, having to call school, etc.

In line 3, S0136 asks S0065 an *or not* question (*did you find it in the end or not?*) coming from the Not Knowing Whether pole of the Uncertain position and addressing S0065's Knowing position.

The alternatives are *you found it (p)* and *you did not find it (non p)*. Both are equally likely to be true. The expected answer is either a *yes* or a *no*.

S0018 replies with an aligned answer from a Knowing position: *no no (.) I gave her a packet of crisps and that seemed to em fix the problem* (Figure 8).

The first TCU is in favour of the negative alternative: *no no = I did not find it*. In the second TCU S0018 reports on the solution she found to distract her elder child.

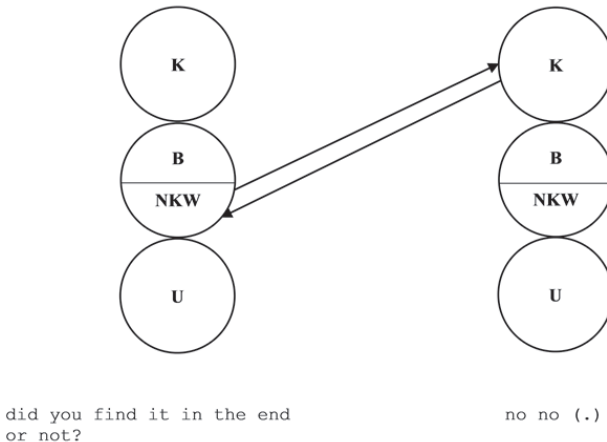


Figure 8. Origin and destination of S0049's or not question and S0018's answer-response

The epistemic design of S0136's question is identical to that of S0018's and S0049's above:

(c) *I do not know whether you found it or you did not find it*

More formally, we have again

(c₁) *I do not know whether + p₁ or non p₁*

Also

* *I do not know you found it or you did not find it*

is a grammatically unacceptable sentence.

4.8.5 Responses to alternative questions: alignment, misalignment, partial alignment

From the perspective of our KUB model, in the case of alternative questions, i.e., of questions coming from the Not Knowing Whether pole of the Uncertain position, an answer-response that directly answers the question (when addressed to the recipient's Knowing position) is one that comes from the Knowing position and therefore *aligns* with the question (Figure 6, parallel arrows, no angle).

A non-answer response that fails to directly answer the question is one that comes from either the Believing pole or the Not Knowing Whether: the former *partially aligns* with the question (Figure 3, acute angle), while the latter *misaligns* with it (Figure 2, more open acute angle).

In principle, as we saw with wh-questions (Chapter 3, section 3.2.4), the wider the angle formed by the two arrows, the greater the misalignment.

Therefore, within the type of response known as *non-answer response*, for alternative questions (as for wh-questions), we also distinguish between a non-answer response coming from the Not Knowing Whether pole which is *misaligned* (*I don't know whether p*), and a response coming from the Believing which is only *partially aligned* (*I believe that p*).

CHAPTER 5

POLAR INTERROGATIVES

5.1 Polar questions: definition and sub-types

A polar question is any question that makes relevant affirmation/confirmation or disconfirmation. It contains a proposition with two possible answers in semantic terms: *true/the case* versus *not true/not the case*. The question might involve a question particle, inversion, or a tag. It did not necessarily involve formal interrogative marking (as in a declarative question). It could be positive or negative (Stivers and Enfield 2010: 2621).

This means that, unlike *wh-* and alternative questions of the first type (p_1 or $p_2?$), polar questions must be answered with a *yes* or a *no*, explicitly or implicitly, like alternative questions of the second type (*or not* questions). Polar interrogatives, tag and declarative questions are the main sub-types of polar questions (Stivers 2010: 2773). In this chapter and the following two, we present and discuss each of the three sub-types.

5.2 Polar interrogatives

5.2.1 Definition

With a polar question—e.g., *Is it still snowing outside?*—a speaker makes reference to a complete proposition (in this case, “It’s still snowing outside”), and expresses a lack of knowledge as to the truth of this proposition. A typical communicative function of a question is to induce the addressee to state whether the proposition is true (*yes* or equivalent) or false (*no* or equivalent) (Enfield, Brown and de Ruiter 2012: 193).

In the above definition, the example *is it still snowing outside?* shows that with the expression *polar question* the authors are specifically referring to *polar interrogatives*; furthermore, the adjective “complete” referred to “proposition” is probably used to differentiate polar interrogatives from *wh-*questions, which express a lack of knowledge as to the identity of one element of the proposition they include (Chapter 3). Differently from

alternative questions, which refer to two propositions, polar interrogatives refer to just one proposition (p).

Rather than “a lack of knowledge”, as stated in the above definition, we would prefer to say that polar interrogatives convey “a lack of certainty” as to the truth/falseness of p (*It is still snowing outside*): the uncertainty here regards whether p is true or false. It is as if the question were: *Is it true or false that p*, i.e., that *it is still snowing outside*?

5.2.2 Presuppositions

Unlike the doctor who asks the patient the wh-question *What kind of contraception do you use?* (Chapter 3, section 3.2.2), which presupposes *you are using contraception*, the polar interrogative asked by another physician *Are you using any contraception?* is more cautious, since it conveys the doctor’s view “that the patient *might* be using contraception but does not presuppose it” (Heritage 2010: 47).

In other words, the question design does not presuppose that the proposition p *you are using contraception* is true but conveys that it is *possibly* true. If it is possibly true, it is also possibly false.

Thus, the question design leaves two possibilities open, i.e., two alternatives, that p is true or that p is false. The patient’s response is expected to let the doctor know whether p is true or false and is open to both *yes* and *no* as a response.

If the patient’s reply is *yes*, which means *I am using contraception*, then p is true. Conversely, if her reply is *no*, which means *I am not using contraception*, then p is false.

Since *I am not using contraception* is the negative opposite of p, the alternatives in polar interrogatives, besides being thought of as *p is true* or *p is false*, may also be thought of as *p or non p*, as in *or not* alternative questions, with the only difference that in polar interrogatives the negative alternative *non p* remains implicit: *p (or non p)?*

In other words, it is as if the question were: *are you using contraception or are you not using contraception?* The negative alternative can be abbreviated as *or not (are you using contraception or not?)* and can be made implicit, since it is the negative opposite of p: *are you using contraception (or not)?* In this sense, the doctor’s polar interrogative expresses his uncertainty about which of the two propositions is true: *p (or non p)?*

5.3 Coleman's and Bolinger's views on polar interrogatives

Possibly for the above mentioned or similar reasons, in the linguistic literature there are two opposite views on the design of polar interrogatives: some authors (Coleman 1914; Palmer 1922; Dietrich 1937; Katz and Postal 1964; Stockwell, Schachter and Hall Partee 1968; Harris 1968; Langacker 1970; Karttunen 1977, etc.) suggested that a polar interrogative is nothing but an incomplete alternative question, i.e., a special type of alternative question in which the second alternative (*or not*) has been suppressed and remains implicit, not lexicalised.

“By its nature such a question expects one of two answers; it is therefore an alternative question; the alternative *or not* is in such cases always present to the mind” (Coleman 1914: 22), i.e., it is present at a *mental, logical* level or, as generative linguists claim, it is present in the deep structure of the question (Katz and Postal 1964; Langacker 1970).

If so, the design of the above two examples would be

Is it still snowing outside (or is it not)?

Are you using any contraception (or are you not)?

In a more formal way, the design of polar interrogatives would be

p (or non p)?

and their deep structure would be something like the corresponding indirect question

I ask you whether p (or non p)

Bolinger (1978) discusses two main arguments and many examples contrary to Coleman's and the others' view.

As a first argument, he shows that the absence or presence of *or not* in a question may change its meaning and social action: *Do you want some?* (to a friend who is admiring the questioner's oranges) can function as an invitation, *Do you want some or not?* cannot. *Are you still around?* can express surprise at a self-evident fact, *Are you still around or not?* cannot (*ibid.*: 88).

As a second argument, Bolinger claims to replace *whether* (or *not*) with *if* in representing the underlying structure of polar interrogatives,¹ since in some contexts *whether* and *if* are not interchangeable, as in the following example:

He admired my oranges and I asked him if he wanted some.

? He admired my oranges and I asked him whether he wanted some.

Whether spoils the invitation. It is as if I were only interested in the facts (*ibid.*: 97).

As Bolinger himself claims, *whether*, differently from *if*,

seems to treat the facts as something that really has to be found out. [...] seems to treat with equal seriousness the possibility of a *yes* and the possibility of a *no*, [...] is impartial, [...] appears to imply something about laying hold of information. The speaker has already taken the alternative possibilities under consideration and wants to make up his mind about them (*ibid.*: 96).

It poses alternatives that are already in mind. [...] *Whether* presupposes that there are alternatives [...]; *whether* always implies contrasted propositions, hence an intellectual content of some sort (*ibid.*: 99).²

The author's general conclusions are that "*if* rather than *whether* is the true embedder of questions" (*ibid.*: 95) and that a yes-no question³ advances a *hypothesis* for confirmation: it "hypothesizes that something is true and confirmed, amended, or disconfirmed by an interlocutor" (*ibid.* 102).

The design of polar interrogatives would simply be

p?

and not

¹ "If you want to take the indirect question route as a way of establishing the underlying structure there is another way to go—not by way of *whether* but by way of *if*" (Bolinger 1978: 92).

² What Bolinger says about the function of *whether* supports our choice to use in section 5.5 *whether* rather than *if* in the epistemic design of neutral polar interrogatives as well as the Not Knowing Whether pole of the Uncertain position: Not Knowing Whether allows for equal probability and a contrast between alternatives; Not Knowing If would suggest that the options are only potentially viable and may neither be possible.

³ In his paper Bolinger uses the expression *yes-no question* rather than *polar interrogative*, but almost all the examples he gives are in fact polar interrogatives.

p (or non p)?

and the underlying structure would be

I ask you if p

and not

I ask you whether p (or non p)

The dispute between Bolinger and Coleman, etc. is not an idle one, since the different way of reading the linguistic design of polar interrogatives reverberates on the type of *social action* assigned to them and thus on their *epistemic design* as well.

5.4 Neutral (information seeking) and non-neutral (confirmation seeking) polar interrogatives

The question design being equivalent, in Coleman's view the social action of polar interrogatives is information seeking and the preference organization is *neutral* towards a *yes* or a *no* as an answer, while in Bolinger's view the social action is confirmation seeking and the preference organization is *non-neutral*, i.e., it is in favor of either a *yes* or a *no* answer, depending on whether the question is in the affirmative or negative form (Raymond 2003).

For instance, reading the question design of Enfield, Brown, and De Ruiter's (2012) example *Is it still snowing outside?* as Coleman and the others claim (*I ask you whether it is still snowing outside (or not)*) means considering it as an implicit *or not* alternative question *seeking information* and thus *neutral* in respect to a *yes* or a *no* as a response: either of them is expected in equal measure, since each of the two possibilities (*it is still snowing outside* and *it is not snowing outside any longer*) has the same likelihood (50%-50%) of being true. The questioner is advancing no hypothesis.

On the contrary, reading the design of the same question as Bolinger claims (*I ask you if it is still snowing outside*) means considering it as a hypothesis *seeking confirmation* and thus as *non-neutral* with respect to a *yes* or *no* response: being an affirmative question, it anticipates a *yes* (= *it is still snowing outside*), not a *no* (= *it is not snowing outside any longer*) because now the positive and negative possibilities are *not* assigned the same probability (50%-50%) of being true: the positive lexicalised

possibility that *it is still snowing outside*, being the hypothesis to be confirmed, is assigned a higher probability of being true than the negative (implicit) possibility that *it is not snowing outside any longer*.

In other words, the notion of hypothesis, supposition and the like involves two propositions, one of which is given more chance to be true than the opposite: its truthfulness has not yet been verified, so in the here and now of communication the questioner does not know whether that proposition is true or false, but s/he believes it to be true. The answerer's response is expected to confirm such a supposition.⁴

In this sense, not only Coleman's but also Bolinger's readings imply the questioner's uncertainty between two contrasting alternatives, although the degree of uncertainty is different: neutral questions (both alternatives are assigned the same probability of being true) are more uncertain than non-neutral questions (the lexicalised alternative is assigned greater probability than the non-lexicalised one is).

5.5 Epistemic design of neutral and non-neutral polar interrogatives

By applying the same test of transforming direct into indirect questions used in the two previous chapters, the *epistemic design* of neutral polar interrogatives may be represented as:

- (a) *I do not know whether* it is still snowing outside (*or not*)

Since *or not* is the abbreviation of *or non p*, the *epistemic design* of neutral polar interrogatives may be represented in a more formal way as:

- (a₁) *I do not know whether* + p (or non p)

In this case too, as in alternative questions of both types, the suitable expression to be placed before *p* is *I do not know whether*. If we placed *I do not know* before *p*, we would end up with a grammatically unacceptable sentence, as it was with alternative questions:

* *I do not know* it is still snowing outside

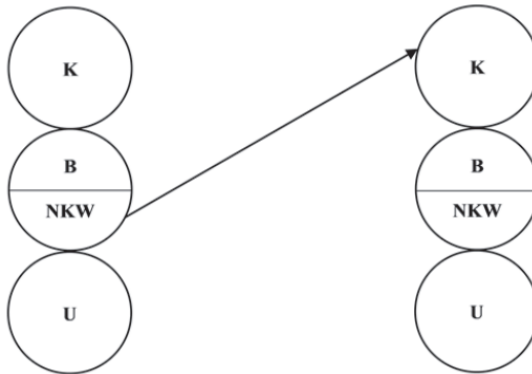
⁴ In the scientific field, a hypothesis is a proposition (e.g., *it is snowing outside*) that can be falsified (Popper 1935/1959). If it proves to be false (or true), then the opposite proposition (*it is not snowing outside*) is true (or false). See the notions of null hypothesis (H₀) and alternative hypothesis (H₁).

Analogously to alternative questions, what the above representations (a and a₁) have in common is the expression *I do not know whether... or...*, which conveys a sense of epistemic uncertainty between the two alternatives that the questioner is faced with.

In this respect, *neutral* polar interrogatives and *or not* alternative questions are similar, but they differ in terms of (i) explicitation (lexicalisation) of the alternatives, and (ii) obligation to feature polar opposites: in *or not* questions the alternatives p_1 and $non\ p_1$ are both explicit, lexicalised; in polar interrogatives, only one alternative is made explicit, lexicalised.

The epistemic design that we outlined above following Coleman's reading shows that neutral polar interrogatives, like alternative questions, come from the Not Knowing Whether pole of the Uncertain position, the maximum uncertainty (Chapter 1, section 1.3.1): they convey that, for the questioner, either of the two alternatives is *equally possible* (fifty-fifty probability to be true), i.e., that the questioner is *equally uncertain* between them.

The answerer's response is expected to let the questioner know which one is true and is open to both *yes* and *no* as a response (Figure 1).



Is it still snowing outside?

Figure 1. A polar interrogative read as neutral (information seeking) comes from the Not Knowing Whether pole of the Uncertain position and expects either a yes or a no as a response

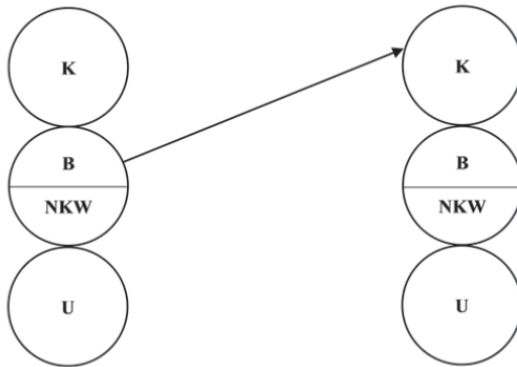
This reading of polar interrogatives is in line with Enfield, Brown and de Ruiter's (2012) above-quoted definition of polar interrogatives, where no mention is made about hypotheses.

On the other hand, following Bolinger, the epistemic design of non-neutral polar interrogatives (Figure 2) is somewhat different and can be represented as:

- (b) *I do not know whether it is still snowing outside (or not), but I am inclined to believe that it is*

The expression *I am inclined to believe that...* indicates that the questioner is advancing a hypothesis, a supposition, coming from the Believing pole of the Uncertain position. More formally, the epistemic design of non-neutral polar interrogatives may be represented as follows:

- (b₁) *I do not know whether + p (or non p) but I am inclined to believe that p*



Is it still snowing outside?

Figure 2. A polar interrogative read as non-neutral (confirmation seeking) comes from the Believing pole of the Uncertain position and expects a confirmative response of the supposition advanced in the question

In the epistemic continuum of the Uncertain position, non-neutral polar interrogatives come from a point between neutral polar interrogatives, on the one side, and tag questions, on the other (Figure 3). They convey that, for the questioner, the lexicalised alternative is more likely to be true than the not lexicalised. The answerer’s response is expected to confirm such a supposition.

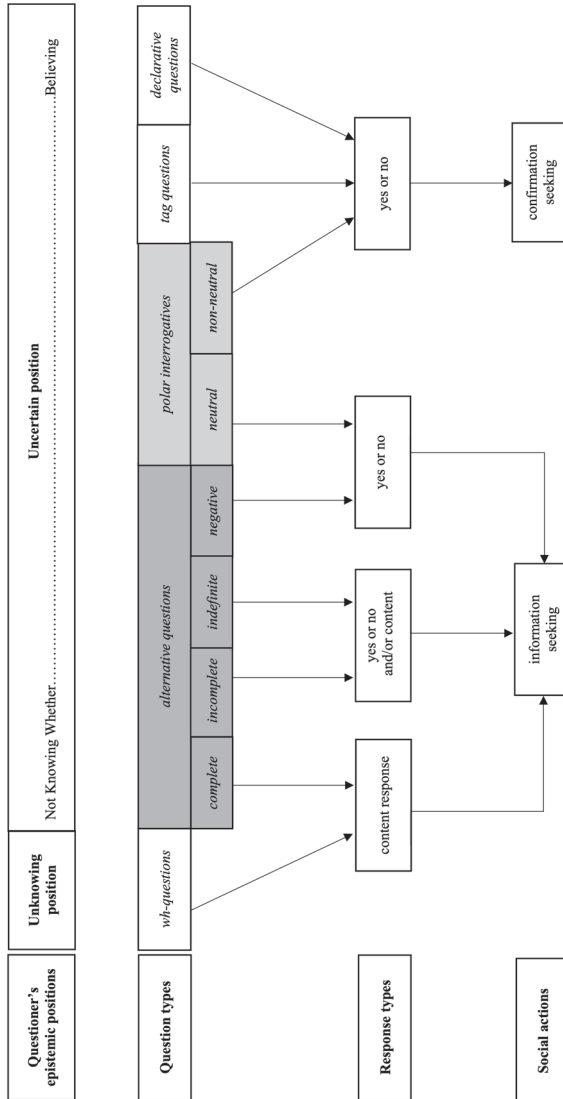


Figure 3. Questioner's Unknowing and Uncertain position, question types, response types and social actions. While wh-questions come from the Unknowing position, alternative questions and the three sub-types of polar questions come from the Uncertain position. All questions are situated in different points along the epistemic continuum that goes from the Unknowing to the Uncertain position, this latter ranging from the Not Knowing Whether to the Believing pole

5.6 An ambiguous question design

The presence in the literature of the two aforementioned readings of polar interrogatives, which in our view are both plausible in principle, can perhaps be due to their linguistic design, where usually nothing lexical or grammatical indicates whether a hypothesis is being advanced or not.

The question design of polar interrogatives appears somewhat ambiguous in this respect, i.e., ambivalent, not univocal, in the sense that it lends itself to both readings, Coleman's and Bolinger's.

On the contrary, the design of the other question types under analysis in the present book is not ambiguous: the presence of the tag element in tag questions and the absence of the subject-verb inversion in declarative questions clearly show that the questioner is advancing a hypothesis seeking confirmation.

Wh- and alternative questions of both types are also clearly information-seeking, as we have seen in Chapters 3 and 4.

The design of polar interrogatives seems instead to be open to both readings, at least in English.

In our view, apart from prosody, only the context, turn sequential position and propositional content of a polar interrogative can *sometimes, but not always*, help establish with certainty whether it is information or confirmation seeking, and therefore neutral or non-neutral.

Indeed, in our corpus, due to the context in which they occur, their turn sequential position and propositional content, some polar interrogatives among those we have analysed *seem* to fit Coleman's reading better, i.e., a neutral and information-seeking reading, while some others *seem* to fit Bolinger's reading better, i.e., a non-neutral and confirmation-seeking reading.

We say *seem* because, in principle, establishing whether a polar interrogative is neutral or non-neutral is almost always a complex matter, as we will see below. Evidence for these two different readings is given by Stivers's quantitative results from her American English corpus (2010: 2776, Table 3) where, out of 68 polar interrogatives, 58 are informative, 6 confirmative, 4 repairs.

Considering the intersection of question type and social action, we can first see that speakers rely on all main question types to request information, whereas for other actions they rely much more heavily on polar questions. Within polar questions [...] information requests rely much more heavily on interrogatives. Thus, the view that interrogatives are a standard way to ask a question in English appears to be true for information requests, though not for other sorts of action types. Declarative questions remain more common

for initiations of repair and confirmation requests. Nearly all of the tags in the corpus were used to request confirmation (Stivers 2010: 2776-77).

Unfortunately, neither Stivers nor the researchers who studied the other nine languages in Enfield, Stivers and Levinson's (2010) special issue make explicit the common criteria they all followed in distinguishing not only informative from confirmative *interrogative questions* but also, more in general, informative from confirmative *tag* and *declarative questions*. The problem of how often and why such a distinction is difficult is not raised. This difficulty can reverberate on the reliability of the quantitative results as far as social actions of questions are concerned.

Even the definitions of the two social actions given in the coding scheme (Stivers and Enfield 2010) do not help.

As far as *request for information* is concerned, "questions were coded as requesting information only if it seemed that there was no other primary action to be coded" (Stivers and Enfield 2010: 2623). The verb *it seemed* (to the coder, of course) signals that the process of assigning social action to a question is somewhat *subjective* and *interpretive*, thus problematic and uncertain, as we said above.

As far as *request for confirmation* is concerned, "questions (usually declarative though this was not criterial) that asserted a proposition for confirmation such as 'So you're coming tomorrow night' were coded as requests for confirmation" (Stivers and Enfield 2010: 2623).

But the example, and the definition of requesting confirmation as well, are self-evident: declarative questions, especially those introduced by an adverb like *so*, are not problematic in respect to their social action, neither are tag questions (*You are coming tomorrow night, aren't you?*), since the question design of both is clearly confirmative. The problem still remains with polar interrogatives: *Are you coming tomorrow night?* is an ambiguous question design, as said above.

We believe that giving an explicit and definite criterion is almost impossible, since the neutrality or non-neutrality of every individual polar interrogative can only be decided in the context of its utterance. Even in context it is not always possible to ascertain neutrality or non-neutrality but, when such ambivalence persists, one can ask the questioner, when possible, for more detail, and thus ascertain which social action is at stake. Such disambiguation is clearly not possible *post-hoc*, i.e., when analysing transcribed occurrences, although it is usually possible to reconstruct the listener's interpretation on the basis of his/her response.

As an example of this difficulty we analyse four polar interrogatives in the following two excerpts (41 and 42) in order to show that sometimes not even the context, turn sequential position or propositional content can help

establish whether a polar interrogative is neutral (information seeking) or non-neutral (confirmation seeking), or something else.

5.7 Search string: extracts from Spoken BNC2014

In other chapters we report on questions retrieved using strings which specified that question at the start of a new speaker turn. This choice was purely practical, given the amount of data a complex search string retrieves (here, <u>_{VERB} _{PRON} _{VERB} ***** \? </u>).

In this section—simply to illustrate that such questions need not be restricted to turn-initial position—we discuss an example of a polar interrogative occurring (shortly) after the start of a new speaker turn.

5.7.1 Excerpt 41 (S32W 503-527)

S0007 is a 19-29 year-old male bar tender; S0018 is a 30-39 year-old female language teacher.

- 1.S0007: [...] but I always said that I wanted to have a a career that I enjoy and that I don't m- I've never been a money motivated person until
- 2.S0018: no
- 3.S0007: recently
- 4.S0018: me either (.) hm
- 5.S0007: → **so um did you say you lived in Barcelona?**
- 6.S0018: yeah
- 7.S0007: Cos my my girlfriend she's sh- pretty much she doesn't say she's fluent in Spanish but for
- 8.S0018: uh-huh
- 9.S0007: for my opinion I think she's really good um like (.) and um
- 10.S0018: mhm
- 11-S0007: we're talking about going to Barcelona for like a little get-away and
- 12.S0018: brilliant (.) yeah (.) definitely
- 13.S0007: I've never been I've I've never been to mainland Spain so I'd love to
- 14.S0018: mm
- 15.S0007: to check that out
- 16.S0018: do it
- 17.(.) S0007: → **have you been anywhere else in Spain?**

- 18.S0018: yeah (.) I lived in Barcelona for eight years (.) and Murcia for six years (.) Murcia's down south near
- 19.S0007: yeah
- 20.S0018: Alicante
- 21.S0007: yeah
- 22.S0018: but Barcelona's definitely a fantastic place to visit
- 23.S0007: oh huh
- 24.S0018: yeah
- 25.S0007: yeah (.) yeah I'd love to go there (.)

In this extract there are two polar interrogatives *did you say you lived in Barcelona?* (line 5) and *have you been anywhere else in Spain?* (line 17) Let us start with the analysis of the former.

5.7.2 *Did you say you lived in Barcelona?*

The two interlocutors have been talking in many turns about sport, work, their job, when, after S0018's short pause in turn 4, S0007 asks the polar interrogative *so um did you say you lived in Barcelona?* How can we establish whether it is information- or confirmation-seeking, or something else entirely?

In the propositional content, nothing in the lexis or grammar indicates whether a supposition is being made or not.

As for the turn sequential position, S0007's question has no content relationship with the immediately preceding turns, at least with none that appear in the recording. Indeed, S0018's affirmative answer to the question in line 6 tells us that it is true that she said she lived in Barcelona at some previous point in this (or a former) conversation.

In his subsequent turns, S0007 says that his girlfriend speaks Spanish (lines 7 and 9), they are planning to go to Barcelona for a short holiday (line 11), he has never been there and *would love to check that out* (lines 13 and 15). All these TCUs are introduced at the beginning of turn 7 by the conjunction *cos* (= because), which allows us to understand that he is stating the explanation for the question he has just posed, i.e., he is giving the reason why he has asked about S0018's living in Barcelona. Thus, turn 7 can be completed by inserting before the conjunction *cos* something like *I asked you if you said you lived in Barcelona because...* All S0007's turns from 7 to 15 can therefore be paraphrased as "I asked you if you said you lived in Barcelona because I want to talk about Barcelona, since me and my girlfriend, who speaks Spanish, are planning to go there for a holiday, so I want to know more about the place".

This is also confirmed by the second polar interrogative that S0007 asks in line 17, *have you been anywhere else in Spain?*

For the above reasons, which all concern S0007's previous and subsequent turns to his question in line 5, this latter seems to lend itself more to a confirmative than an informative reading.

We can imagine that the questioner *does not remember well*, i.e., *does not know with certainty, whether or not* S0018 said she lived in Barcelona, *but he is inclined to believe* that she did: asking for confirmation of a supposition seems here to be more plausible than simply asking for information. Thus the expected answer is *yes*, not either a *yes* or a *no* in equal measure (Figure 4).

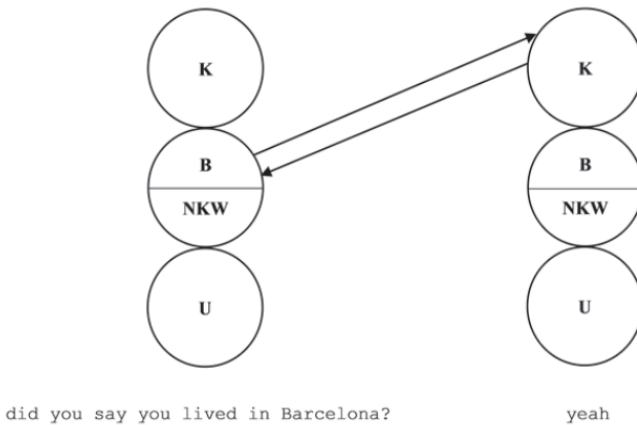


Figure 4. S0007's first polar interrogative read as confirmative

But we can go even further. By resorting to the difference made by Heritage (Heritage and Raymond 2005; Heritage 2012a; Heritage 2012b) between *epistemic status* and *epistemic stance*, we can imagine that S0007 *remembers very well*, i.e., *knows* (epistemic status), that S0018 has said she lived in Barcelona but, for politeness' sake, he chooses to use, among many other linguistic devices at his disposal, an uncertain question (epistemic stance) in order to have his recollection confirmed, so that he can talk to her of what he has closest to heart, a holiday in Barcelona with his girlfriend.

In other words, we can imagine that he uses a question coming from the Uncertain position just as a polite way to change the subject of their conversation and introduce a new topic, a matter that he is longing to talk about with her.

All S0007's turns from 7 to 15 could be paraphrased as follows: "*I know* (epistemic status) that you said you lived in Barcelona (that's why I expect your positive answer to my question), but through a non-neutral polar interrogative *I tell you that I only believe* (epistemic stance) that you did, since I want to introduce a new topic for conversation politely. Being certain that you will answer *yes* to my question, I am also certain that after your positive answer I will be able to introduce the subject that I most want to talk about".

If so, S0007's question could be read as a kind of *pre-announcement*, i.e., a turn *previous to an announcement* of news (Terasaki 2004).

The minimal Announcement Sequence is composed of two turns, i.e., two adjacent pair parts:

- 1) the Announcement of the news by the Deliverer (first pair part);
- 2) the Assessment of the news by the Recipient (second pair part).

The Expanded Announcement Sequences include two *optional* adjacency pairs, *Pre-Sequences* prior to the Announcement turn, i.e., *Pre-Announcements*, and *Insertion Sequences* between the Announcement turn and its Assessment.

Such a sequential organization can be found in our example:

pre-announcement 1 st pair pt.	5-S0007: so um did you say you lived in Barcelona?
pre-announcement 2 nd pair pt.	6-S0018: yeah
announcement 1	7-S0007: Cos my my girlfriend she's sh- pretty much she doesn't say she's fluent in Spanish but for
back channel	8-S0018: uh-huh
announcement 1	9-S0007: for my opinion, I think she's really good um like (.) and um
back channel	10-S0018: mhm
announcement 1	11-S0007: we're talking about going to Barcelona for like a little get-away and
assessment of 1	12-S0018: brilliant (.) yeah (.) definitely

announcement 2	13-S0007: I've never been I've I've never been to mainland Spain so I'd love to
back channel	14-S0018: mm
announcement 2	15-S0007: to check that out
assessment of 2	16-S0018: do it

S0007's two announcements spread over turns 7, 9, 11 and 13, 15 respectively.⁵ S0018 assesses the announcements of the news twice, first in line 12 and then 16. Turns 5 and 6 are the adjacent pair parts which form the Pre-Announcement Sequence.

There is no Insertion Sequence: S0018's turns 8, 10, 14 are back-channels.

5.7.3 *Have you been anywhere else in Spain?*

In line 13, S007 asks a further polar interrogative (*have you been anywhere else in Spain?*), probably because he wants to know more about Spain from a person who lived in Barcelona.

In this case, the propositional content of the question tells us something about its social action: as Heritage (among many others) claims, questions that include "indefinite pronouns or adjectives like 'any', 'no', 'some', etc. [...] suggest that an answer of a particular type is expected" (Heritage 2010: 51).

In S0007's question, the presence of the indefinite adverb *anywhere else* (instead of *somewhere else*) suggests that S0007 expects as an answer either yes or no in equal measure, thus making his question neutral and information seeking (Figure 5). If there had been the adverb *somewhere else* instead, this would have suggested that the question was non-neutral and confirmative of the questioner's supposition.

⁵ "Announcements regularly occur in a highly attenuated simplex (declarative) sentence form in conjunction with features of design and placement in the conversation which mark them as instances of a news delivery" (Terasaki 2004: 175).

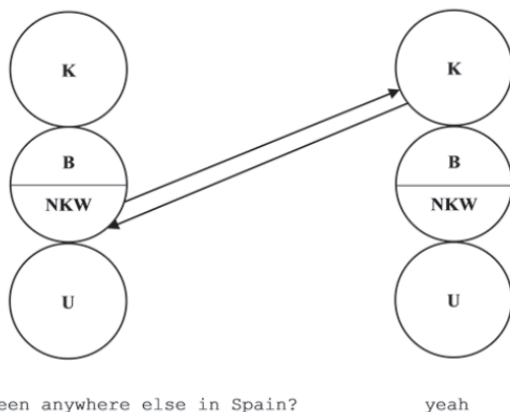


Figure 5. S0007's second polar interrogative read as informative (NKW → K)

Yet, just to play devil's advocate, we could emphasize that this second question comes soon after the Expanded Announcement Sequences 5-16, where S0018 confirmed that she lived in Barcelona (turn 6, Pre-Announcement 2nd pair part). For this reason, we could claim that the turn sequential position of S0007's second question suggests that he is not seeking information but advancing a supposition.

We can imagine his reasoning: since S0018 lived in Barcelona, S0007 supposes that she is more likely to have been somewhere else in Spain, visited some other city or place, than not to have. Therefore, notwithstanding the presence of *anywhere else*, S0007's question would be non-neutral and expecting a *yes*. In fact, S0018's answer (turn 18) confirms S0007's supposition (Figure 6).

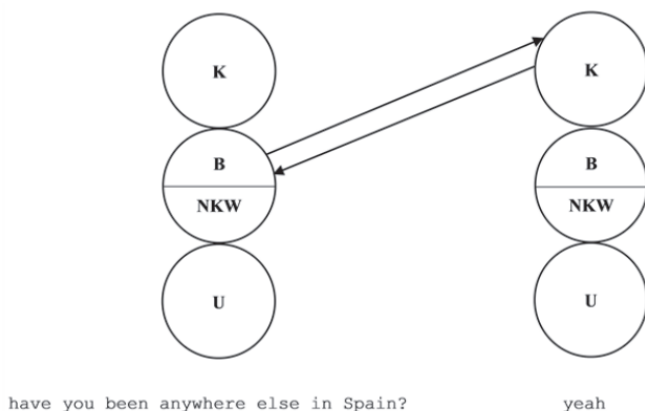


Figure 6. S0007's second polar interrogative read as confirmative (B→K)

5.7.4 Excerpt 42 (S28F 2670-2678)

S0315 is a 36 year old female beauty therapist; S0255 is a 48 year old female account-sales manager. They are in S0315's beauty treatment room:

- 1.S0255: [...] I was going to the doctor at nine o'clock going to the doctor yeah going to the doctor and I kept thinking
- 2.S0315: >> so you went there first before here
- 3.S0255: yeah yeah and I thought (.) right I need to go to John Lewis cos I've got a new iPad Air and I need a new cover thing for it
- 4.S0315: oh yeah
- 5.S0255: so I kept thinking right yeah I can take my stuff and I go to the doctor and I go straight up town -- UNCLEARWORD and then I but now I've ac- I actually think (.) I'd better er just check what else I'm doing today and I looked on the calendar
- 6.S0315: → >> **do you put it all in your diary?**
- 7.S0255: everything yeah and I looked on the calendar and thought no I'm not going to John Lewis afterwards because I'm going to --ANONnameF because that's booked in my diary and I'm going there
- 8.S0315: → >> **are you gonna go John Lewis now?**
- 9.S0255: no I'm gonna go home and I'm gonna have some lunch and chi- and I might go today or tomorrow

5.7.5 Do you put it all in your diary?

In line 1, S0255 starts by saying what she did (*I was going to the doctor at nine o'clock*) and thought (*I kept thinking*) in the morning, when S0315 (line 2) overlaps her with the declarative question *so you went there first before here?*

As we will see in Chapter 7, declarative questions have no subject-verb inversion, their social action is usually confirmation seeking for a supposition which has the lowest degree of uncertainty among all the uncertain questions.

In particular, in the case of S0255's question, the initial *so* suggests that she is seeking confirmation.

In line 3, after confirming S0315's supposition, S0255 goes on to say what she thought in the morning using direct reported speech, actually moving from the past (*I thought*) to the present tense (*I need to go to John Lewis...*, etc.), probably in order to make the story more vivid.

After S0315's backchannel (*Oh yeah*, line 4), S0255 (line 5) continues, this time moving first from the past (*I kept thinking*) to the present tense (*I can take my stuff...*, etc.) and then back again to the past tense (*and I looked on the calendar*). Since she probably did not remember or was uncertain about what her next appointments were after going to the doctor and straight up town, she thought she would better check them on her calendar, so she did.

At this point, S0315 overlaps S0255 (line 6) again with a question, this time a polar interrogative (*do you put it all in your diary?*), which receives a positive answer in line 7 (*everything yeah*). Is this question neutral, non-neutral or something else?

In the propositional content, there are no lexical or grammatical cues to tell us whether the question seeks information (*I do not know whether you put it all in your diary or not*) or confirmation of a supposition (*I believe that you put it all in your diary*).

However, if we take into consideration the overlap and the turn sequential position, the question seems to be more confirmative of a supposition (Figure 7) than informative of the interlocutor's habitual behaviour. We can imagine what S0315's reasoning might be: since S0255 looks at the calendar (line 5) to check what she has to do next, it is probable that she puts it all in her calendar, i.e., the proposition *she puts it all in her calendar* is considered by S0315 as more likely to be true than its negative opposite *she does not put it all in her diary*.

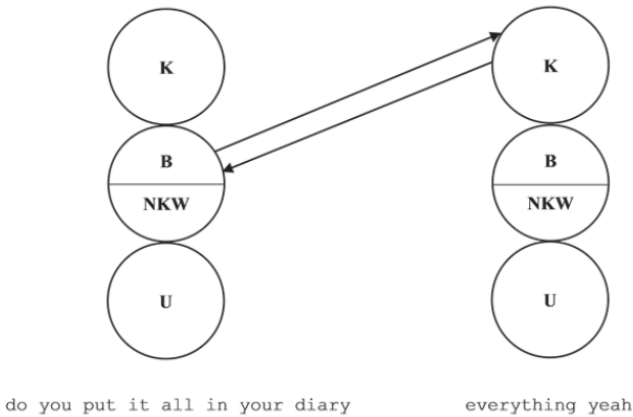


Figure 7. S0315's first polar interrogative read as confirmative and S0255's answer-response

A second reading of the question, which does not exclude the former, could be that it is a *surprise question* in the sense of Celle (2018; see also DeLancey 2001; Aikhenvald and LaPolla 2007; DeLancey 2012; Celle and Lansari 2014): S0315 seems to be surprised at what she probably considers a bizarre habit.

5.7.6 *Are you gonna go John Lewis now?*

In line 7, S0255 continues by saying what she thought in the morning after looking at the calendar again using direct reported speech: *No I'm not going to John Lewis afterwards because I'm going to ANONnameF because that's booked in my diary and I'm going there*. Such TCUs can be paraphrased in the following way: my next appointment is with ANONnameF, so I can't fit in a visit to John Lewis, as I hoped I might be able to do: so now I am going to ANONnameF.

In line 8, S0315 overlaps S0255 again with a polar interrogative *are you gonna go to John Lewis now?* which receives a negative answer in line 9.

Here again, nothing in the propositional content tells us whether the question seeks information (*I do not know whether you are going to John Lewis now or not*) or confirmation of a supposition (*I believe that you are going to John Lewis now*) or anything else.

But the overlap and the turn sequential position of the question seem to fit it better into a confirmation seeking reading (Figure 8). We can imagine what S00315's reasoning might be: since you told me that *this morning you*

were going to ANONnameF and not to John Lewis, I suppose that you are going to John Lewis now; through my question, I am seeking confirmation of this.

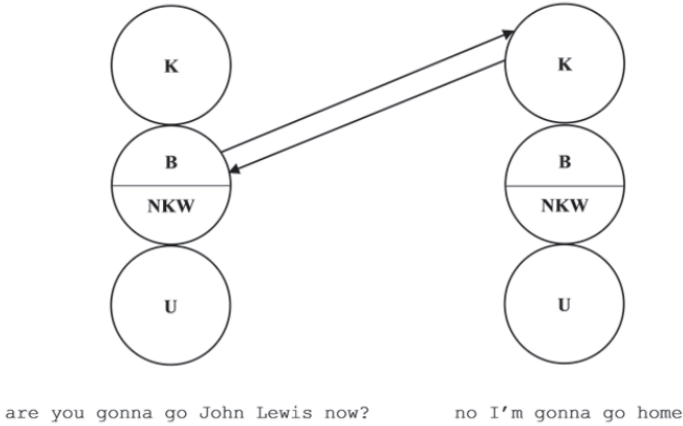


Figure 8. S0315's second polar interrogative read as confirmative and S0255's disconfirming answer

In any case, there is nothing to stop us reading the same question as simply informative (*I do not understand if you are going to John Lewis now or not*, Figure 9).

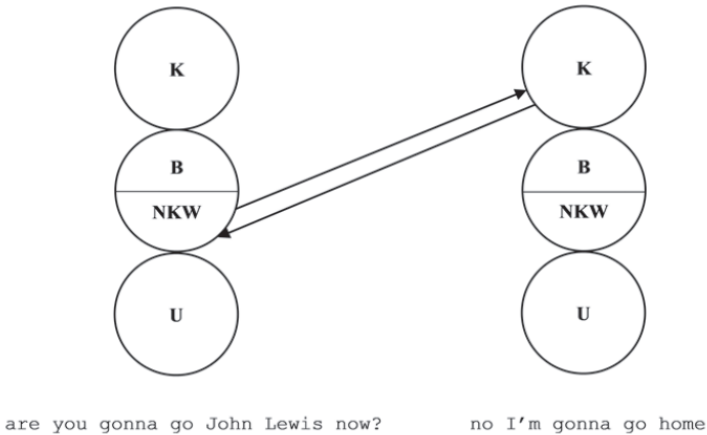


Figure 9. S0315's second polar interrogative read as informative and S0255's negative answer

CHAPTER 6

TAG QUESTIONS

6.1 Definition

Tag questions are

declaratively formatted turns that assert a proposition and add a “turn-final element” that marks questionhood: these turn-final elements include question particles (e.g., Japanese *ka*), lexical items (e.g., “Right” or “Yeah?”) or “tag” type clauses (e.g., “Don’t ya think?” or “Did she?”) (Stivers and Enfield 2010: 2622).

Indeed, a tag question is typically “a way of requesting information, normally confirmation of the assertion made in the declarative component of the utterance” (Heritage 2012a: 14). In comparison with a polar interrogative, a tag question “conveys a strong hunch as to the likelihood of a particular response and a shallower K- to K+ epistemic gradient” (Heritage 2010: 48).

6.2 Search string: extracts from Spoken BNC2014

In order to look specifically at tag questions with a negative declarative component, we formulated the search string `_ {VERB} not ***** is it \?` `</u>` which returned 572 matches in 373 different texts.

6.2.1 Excerpt 43 (S7GJ 2640-2647)

The interlocutors in this example are two women, both between 19-29 years old; S0041 is a conference and events co-ordinator, S0084 is a production controller; they are looking at a photograph.

- 1.S0041: [...] oh this is --ANONnameM (.) this is my first first ever
 boy (.) you can’t see him very good cos the
2.S0084: mm
3.S0041: glue’s coming through

- 4.S0084: aw
 5.S0041: yep (.) this is what we needed
 6.S0084: so this this is people that you aspire to? But not him presumably?
 7.S0041: → not him (.) just er well if he's got a hot bod now and he was a chubby then **that's not very fair is it?**
 8.S0084: oh I see (.)

6.2.2 *That's not very fair is it?*

S0041's question, like all tag questions, is formed by a declarative component (*that's not very fair*) and a tag component (*is it?*). S0084's answer (*oh I see*) can be understood as equivalent to *Yes*.

Taken alone, the declarative component (*that's not very fair*) is an assertion coming from the Knowing position. In particular, since it includes the verb *to be* plus an adjective, the assertion is an evaluation, concerning a matter that is subject to opinion. To be clear, such an assertion is different from Heritage's example *You talked to John, didn't you?* (Chapter 2, section 2.1.2), where the assertion is factual, not evaluative.

The tag component *is it* (plus the implicit *very fair*)? is a question in itself (*is it very fair?*), the very "question part" of the whole tag question: in isolation, it would be a polar interrogative and its epistemic design would be *I do not know whether (or not) it is very fair* (Uncertain position).

The global meaning of the whole tag question is somewhat different from the simple sum of the two component parts (an assertion and a polar interrogative), it is something more.

Indeed, the tag element, placed immediately after the assertion, retrospectively colours it with a tinge of supposition.

The assertion no longer comes from the Knowing position: if it came from the Knowing position, the result would be a tag question like (*I know that*) *it is not very fair, is it?* which would be incongruous.

The assertion, when followed by the tag component, becomes a supposition: (*I think that*) *it is not very fair, is it?* This reading of the assertion as a supposition is bolstered by the fact that the assertion is evaluative.

At the same time, the tag component appeals to the interlocutor soliciting her opinion on the subject.

The question design conveys that, between the *possible* alternatives *non p* (it is not very fair) and *p* (it is very fair), S0041 is inclined to believe that *non p* is more *likely* than *p*.

The lexicalised negative alternative *it is not very fair*, i.e., the alternative that S0041 makes explicit, is the one she is more inclined to believe true.

Being a supposition, she asks for confirmation, which means that S0041 wants to know whether S0084 shares her supposition (or not), i.e., whether S0084 also considers it not very fair.

The expected, preferred response is *no, that's not very fair*. S0041 hopes that S0084 shares her view. By answering affirmatively (*oh I see*), S0084 confirms this, her response aligns with S0065's expectations.

The whole question-answer pair can be paraphrased as follows:

S0041: I think that it is not very fair, and I do not know whether you think the same way, that it is not very fair, or whether instead you think, differently from me, that it is very fair.

S0084: Yes, I share your supposition, I think, like you, that it is not very fair.

For this reason, it is possible to say that, along the uncertainty epistemic continuum going from pole NKW to pole B, S0065's tag question comes from a point near to the questioner's Believing pole, i.e., after non-neutral polar interrogatives and before declarative questions (see Figure 3, Chapter 5, section 5.5), and it is addressed to an equivalent point in S0136's Believing position.

S0084's answer functions in the same way. Therefore, the question-response pair is aligned (B-B) and S0084's response is S0041's preferred one: questioner and answerer share the same opinion (Figure 1).

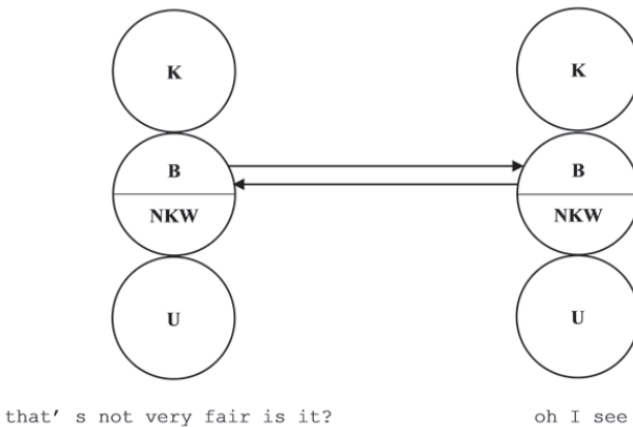


Figure 1. Origin and destination of S0041's question and S0084's response: epistemic alignment and content agreement

Our epistemic reading of tag questions is thus different from Heritage's: as said above, in his example *You talked to John, didn't you?* the assertion in the declarative component is factual, while in our example *it is not very fair, is it?* the assertion is evaluative. In Heritage's model both kinds of tag questions come from K- and are addressed to K+.

In our model, both questions come from the questioner's Believing position (since s/he is advancing a supposition), but, while the factual question is addressed to the answerer's Knowing position (the answerer *knows* whether s/he talked to John or not), the evaluative one is addressed to the Believing position (the answerer *believes* that it is or is not very fair, like the questioner).

Thus, the type-conforming answer is also different: while the factual question expects an answer from the Knowing position, i.e., un-knowledge seeking knowledge, the evaluative question expects an answer from the Believing position (belief seeking belief), because what is at stake here is agreement with suppositions, opinions, evaluations, etc. (see Chapter 8).

6.3 Epistemic design of tag questions

If we transform S0041's direct question into an indirect one, the epistemic design of S0041's question can be represented as:

- (a) *I do not know whether it is not very fair (or it is), but I am inclined to believe that it is not*

As in non-neutral polar interrogatives, the expression *I am inclined to believe...* indicates that the questioner is advancing a supposition. More formally, the epistemic design of tag questions (in which the declarative component is in the negative and the tag component is in the affirmative) may be represented as follows:

- (a₁) *I do not know whether + non p (or p) but I am inclined to believe that non p*

This epistemic design is therefore the same as that of non-neutral polar interrogatives (Chapter 5, section 5.5), but there the degree of uncertainty was higher than it is here: the presence of the tag makes it clear that the questioner is advancing a hypothesis seeking confirmation.

Our reading of evaluative tag questions that, like S0041's one, are addressed to the interlocutor's Believing position is more evident in this

second example, since both the tag element and the interlocutors' responses include the verb *to think*.

6.4 Search string: extracts from Spoken BNC2014

The following example of a “don't you think” tag question was one of 350 examples retrieved from the Spoken BNC2014 using the search string `{do/V} (n*t)? _{PRON} think \? </u>`.

6.4.1 Excerpt 44 (S6W8 1557-1585)

S0493 (a 31 year-old man) and S0492 (a 33 year-old woman) are both teachers; S0496 is a 30 year-old nurse. They are talking about proper names.

- 1.S0493: Sophia is the fucking posh Sophie
 2.S0492: erm
 3.S0493: isn't it?
 4.S0496[??]: I much prefer Sophie to Sophia
 5.S0493: >> Sophia Sophia with it's Sophie with pretension
 6.S0496[??]: erm
 7.S0492: >> I don't like Sophia at all (.). I've noticed that coming back again seems to be people go really back to basics like Emma
 8.S0496: yeah
 9.S0492: >> and Sophie and Charlotte and Jessica and
 10.S0493: → **they're all quite posh though don't you think?**
 11.S0492: → **oh I don't think they're posh I think they're just quite**
 12.S0493: >> one of those names that you --UNCLEARWORD
 13.S0492: → >> **just really normal**
 14.S0493: very English
 15.S0496: → >> **I think they can be** I think if you're from a posh family you'd think yeah yes that's --UNCLEARWORD
 16.S0493: >> Emma Emma Soph-
 17.S0496: >> but Emma Em-
 18.S0493: >> Sophie's quite even Sophie's quite posh
 19.S0496: >> not Em- I don't see Emma as a posh name
 20.S0492: oh I don't think
 21.S0496: I see like Charlotte and
 22.S0493: >> Charlotte's quite posh
 23.S0496[??]: Jessica
 24.S0492: >> do you think Charlotte's a posh name?

- 25.S0496[??]: I think
 26.S0493: >> Jessica
 27.S0496: >> it can sound posh
 28.S0493: it's like a nice little English rose type of name
 29.S0496[??]: yeah

6.4.2 *They're all quite posh though don't you think?*

There are two evaluative tag questions in this extract, both by S0493: the first starts in line 1 and ends in line 2 (*Sophia is the fucking posh Sophie, isn't it?*), the second is in line 10 (*they're all quite posh though don't you think?*). The difference between them is that in the tag component of the former we have the verb *to be*, as in the earlier excerpt 43 (*that's not very fair is it?*), while in the latter we have *to think*, which is more interesting for us to analyse now.

For our purposes, the presence of the adverb *though* in the declarative component *they're all quite posh though* is superfluous; for simplicity's sake, we may take it away and use in the following the *clean* version *they're all quite posh*.

The embedded clause [*that*] *they're all quite posh* is implied in *don't you think*, this turn-final element being properly defined as an “imputation” (Bolinger 1957: 18) rather than a tag proper as Stivers and Enfield (2010) suggest in their definition, as cited at the beginning of this chapter. Imputations, unlike tag questions featuring auxiliary verbs, are subordinate to a superordinate clause and may “be inverted with little change in meaning” (Bolinger 1957: 18-19). In other words, *they're all quite posh don't you think?* is equivalent to *don't you think [that] they're all quite posh?*, the only perceptible difference being that fronting the superordinate clause makes it more prominent.

The epistemic design of S0493's question can be represented as:

I do not know whether you do or do not think [that] they're all quite posh, but I am inclined to believe that you do

Such a representation shows that the real alternatives are two opposite opinions (*you think that p* vs *you do not think that p*) and that the questioner is advancing a supposition in favour of the positive one.

As in excerpt 43, here too the tag element, on the one hand, contributes a nuance of supposition to the declarative component (*They're all quite posh, don't you think?* = *I think they're all quite posh*) and, on the other, appeals to the interlocutor soliciting her opinion on the subject (*Don't you*

think that they're all quite posh, i.e., Don't you think as I do? = Do you think as I do or not?).

The question design conveys that, between the two *possible* alternatives, S0493 is inclined to think that the lexicalised (positive) one *they're all quite posh* is more *likely* to be true than the implicit (negative) alternative *they aren't* and he hopes that S0492 and S0496 will also share his supposition. S0493's whole question can be paraphrased as follows:

I think that they're all quite posh, and I do not know whether you also think so or whether instead you think, differently from me, that they are not all quite posh. Thus, I ask you for confirmation of my supposition, i.e., for your agreement.

The expected, preferred answer (Pomerantz 1984a; Pomerantz and Heritage 2014) from S0492 and S0496 would be "Yes! I think, as you do, that they're all quite posh".

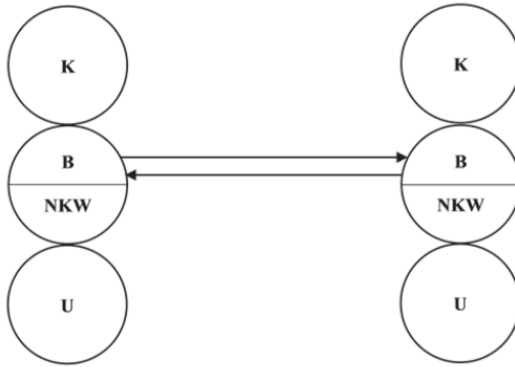
S0492 disagrees with S0493: her answer (lines 11 and 12) is negative (*I don't think they're posh I think they're just quite just really normal*), while S0496's response (line 15) is positive (*I think they can be I think if you're from a posh family you'd think yeah yes that's --UNCLEARWORD*): she partially agrees with the questioner. Why partially? Because she does not say *they are posh* as the questioner does. If she did, she would totally agree with him. Instead, she uses the modal verb *can*, she says *they can be posh* (= it is possible that they are posh), i.e., a hedged assertion. Then she adds an *if clause* of the type *simple present + conditional*, probably as an example of the possibility of being posh. The presence of the unclear word prevents us from stating it with certainty.

Both S0492's and S0496's answers, like S0493's question, include the verb *to think*, which explicitly communicates that all three interlocutors are expressing their opinions (Believing position).

From the perspective of the uncertain epistemic continuum (see Figure 3, Chapter 5, section 5.5), S0493's question, as in excerpt 43, comes from a point near to the *Believing* pole of her Uncertain position, between non-neutral polar interrogatives and declarative questions, and it is addressed to an equivalent point in S0492's and S0496's Uncertain position. So are S0492's and S0496's answers. Question and answers are thus formally aligned from the epistemic point of view (B-B), but there is no agreement between the questioner S0493 and the first answerer S0492: the content of S0492's answer is not what S0493 wants to hear, i.e., it is the dis-preferred reply (Pomerantz and Heritage 2014). Between the questioner S0493 and

the second answerer S0496 there is only a partial agreement (*they can be posh* versus *they are posh*, see above).

The corresponding Figure 2 is formally similar to Figure 1 (parallel arrows B-B), i.e., both figures show epistemic alignment. The difference lies in the content of the answers: while there is agreement between the two interlocutors in the first example, in the second, the three speakers totally or partially disagree.



S0493: they're all quite posh
though don't you think?

S0492: I don't think they're
posh

S0496: I think they can be

Figure 2. Origin and destination of S0493's question and S0492's and S0496's responses: epistemic alignment but content disagreement (total disagreement in one case, partial disagreement in the other)

CHAPTER 7

DECLARATIVE QUESTIONS

7.1 Definition

These utterances can be considered questions because of what they are about and because they make relevant a yes or no answer after their production [...]. In these cases, if the speaker “states” something s/he cannot know as well as the recipient, confirmation or disconfirmation by the recipient is relevant and the latter typically treats the utterance as a question (Rossano 2010: 2762).

Grammatically speaking, in English the difference between a polar interrogative such as *Are you married?* and a declarative question such as *You are married?* (Heritage 2010: 48) is that in the former there is subject-verb inversion, in the latter there is no inversion.

In this respect, a declarative question (*You are married?*) is identical to an assertion (*You are married*). The difference between them lies in the epistemic position they come from: assertions come from the Knowing position, declarative questions from the Believing.

Indeed, if we return to Heritage’s epistemic gradient in Figure 1 (Chapter 2, section 2.1.2), the declarative question Q4 *You talked to John?* is the farthest from the questioner’s K- position and the nearest to the answerer’s K+ position. Q4

asserts a possible answer to the question with some degree of certainty, and thus embodies a much smaller (or flatter) epistemic gradient. In general, declarative questions claim a more nearly equal epistemic footing with the respondent than do interrogatives,¹ and are more frequently used to seek confirmation for information that is already “in play” (Heritage and Raymond 2012: 181).

¹ With the term “interrogatives” Heritage is here referring to the other types of question: Q1 (wh-questions), Q2 (polar interrogatives) and Q3 (tag questions).

This latter format is predominantly used when the speaker has already been told (or independently knows) the information requested and merely seeks to reconfirm or alternatively to convey inferences, assumptions, or other kinds of “best guesses” (Heritage 2010: 48-49).

7.2 Search string: extracts from Spoken BNC2014

Any attempt to extract declarative questions from a corpus will inevitably be “contaminated” by many declarative affirmations and will consequently involve far too large a number of occurrences to analyse by hand. In order to offset some of this interference, we decided to use the advanced search options to limit the query to conversations including only two participants. The search string `<u> you _{VERB} ***** \? </u>` reduced to such conversations returned a manageable 815 examples, which were analysed individually, with all affirmations (not question-related) being discarded at this second stage. The following extended example features two declarative questions within the same brief section of the conversation.

7.2.1 Excerpt 45 (S7RW 1084-1103)

S0540 is a Japanese woman, 38 years old. She has lived in London for over 10 years. S0541 is a 47 year-old English woman who works as a writer. They are talking about S0540’s relationship with her family.

- 1.S0540: --ANONnameF the thing is I’m dreading to go home every time I go home I have (.) such a (.) difficult time (.) it’s not that I don’t get on with my family but it’s always quite intense because I haven’t seen them for a long time
- 2.S0541: mm
- 3.S0540: so it’s a lot of catching up to do (.) or not catching up to do because I’m so exhausted
- 4.S0541: >> are you not in contact with them a lot on the phone?
- 5.S0540: no (.) but I of course you know I see my brother a lot
- 6.S0541: but your parents?
- 7.S0540: no I don’t really
- 8.S0541: really?
- 9.S0540: no
- 10.S0541: → **you don’t ring them?**
- 11.S0540: mm
- 12.S0541: why not?
- 13.S0540: I never did
- 14.S0541: how strange

- 15.S0540: I never did
 16.S0541: → **and they don't ring you?**
 17.S0540: not necessarily
 18.S0541: that's interesting
 19.S0540: but I see them when I go home
 20.S0541: oh okay

7.2.2 *You don't ring them?*

In lines 1 and 3, S0540 describes her own relationship with her family (*I haven't seen them for a long time*). After three negative polar interrogatives

are you not in contact with them a lot on the phone? (line 4)

but [don't you see] your parents? (line 6)

[don't you] really [see them]? (line 8)

which all receive a negative answer, in line 10 S0541 follows up with a negative declarative question (*You don't ring them?*) that communicates what she has inferred from S0540's previous turns and can be interpreted as a request for confirmation of the validity of her inference, since the content of such inference concerns the answerer's epistemic domain of knowledge: S0541 supposes that S0540 does not ring her parents.

In isolation or in a different turn sequence, *You don't ring them* would be an assertion coming from the Knowing position, since it includes no uncertainty markers, whether lexical or morphosyntactic, and does not feature subject-verb inversion. It can be paraphrased as: I am telling you that *I know* that you don't ring them.

However, given its rising intonation, its particular place in the turn sequence (after S0540's three negative responses to S0541's polar interrogatives) and its specific propositional content (S0540's telephone contact with her parents), a territory over which only S0540 has epistemic primacy (Heritage and Raymond 2005; Raymond and Heritage 2006), the assertion sounds more like a "best guess" (Uncertain position).

If the same sequence of words *You don't ring them* (= *non p*) is functioning as a declarative question and not simply as an assertion, the questioner must have at least a minimum degree of uncertainty. Such a question can be paraphrased as: I am telling you that *I am almost certain* that *non p*, I strongly suppose that *non p*, but I am not completely sure, therefore I am asking you for confirmation.

In this sense, declarative questions come from the Uncertain position, specifically from the Believing pole, which represents the minimum

uncertainty, and is the closest to the Knowing position, i.e., to knowledge/certainty. S0541 cannot be sure about S0540's telephone contact with her parents, but she has a strong hunch in this respect.

Compared to the corresponding tag question *You don't ring them, do you?*, the declarative question *You don't ring them* "proposes a still stronger commitment to the likelihood that the respondent [...]" does not call her parents "and a correspondingly shallow K- to K+ epistemic gradient" (Heritage 2010: 48).

In other words, S0541's epistemic commitment towards the truth of *You don't ring them* is very high, close to certainty, i.e., to her Knowing position. This is why S0540 interprets S0541's turn as a declarative question, i.e., as a request for confirmation of the validity of S0541's "best guess", despite the lack of a tag component (as in the case of a tag question). As a result, in line 11 S0540 confirms from the Knowing position that she does not ring her parents (Figure 1).

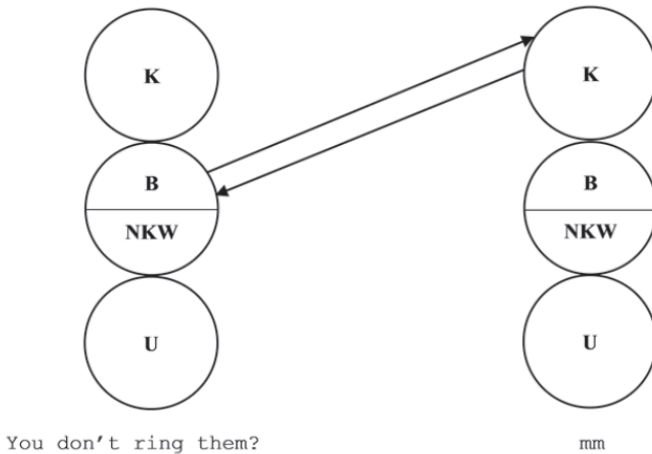


Figure 1. Origin and destination of S0541's declarative question and S0540's answer. The parallel arrows show that the latter is a response aligning with the question

Analogous comments hold for the second declarative question present in this extract, line 16, *and they don't ring you?*

7.3 Epistemic design of declarative questions

The epistemic design of declarative questions is similar to that of non-neutral polar interrogatives (Chapter 5, section 5.5) and tag questions (Chapter 6, section 6.3), but there the degree of uncertainty was higher than it is in this case:

- (a) *I do not know whether you do not ring them (or you do), but I am inclined to believe that you do not*

More formally:

- (a₁) *I do not know whether + non p (or p) but I am inclined to believe that non p*

CHAPTER 8

BORDERLINE QUESTIONS BETWEEN UNKNOWING AND NOT KNOWING WHETHER

8.1 The Uncertain continuum

In Chapters 4-7, uncertain questions were presented as lying along an epistemic continuum ranging from the Not Knowing Whether pole (alternative questions of the first and second types plus neutral polar interrogatives) to the Believing pole (non-neutral polar interrogatives, tag and declarative questions).

These six question types gradually shift from left to right or vice versa (Figure 3, Chapter 5, section 5.5) and they transition by steps, from one position to the neighbouring one: each transition, whether within the same pole or from one pole to the other, is of interest from both a theoretical and practical perspective.

In particular, within the same Not Knowing Whether pole, the transition from alternative questions of the second type (*or not* questions) to neutral polar interrogatives was explored in Chapters 4 and 5 together with the transition from the Not Knowing Whether pole to the Believing, i.e., from neutral to non-neutral polar interrogatives.

Now that we have this panoramic view we are ready to return to the Unknowing position to show that this position too is a continuum rather than a fixed pole; this chapter discusses the transition from the Unknowing to the Not Knowing Whether position, i.e., from *wh*-questions to alternative questions.

8.2 The Unknown continuum

In Chapter 3 we saw that *wh*-questions are information seeking in the sense that they aim to establish the identity, i.e., the referent, of the *wh*-word featured in the question. For this reason, they expect a content response that provides information on that *wh*-word.

By asking *how much did you drink a day?*, the questioner aims to find out the amount of water, i.e., to establish the referent corresponding to *how much*.

In section 3.2.4 we touched upon the problem of the relationship between *wh*-questions and their appropriate responses (Enfield 2010): what amount of water might normally count as an adequate, acceptable answer to that *how much* question?

In excerpt 1, a 32 year-old woman is now drinking less water than before. This appears to be a *normal* context, in which the amount of water is likely to be determined relative to a norm (e.g., eight glasses a day, or about 2 litres). The amount of water she might have been drinking in the past must have exceeded this norm yet still fall within a range that is physiologically viable, i.e., no more than four litres a day.

It is plausible to think that the answer must range more or less between two and three litres, including fractions, e.g., two and a half litres. Thus, in this context *how much* refers to a closed set of possible measurable quantities (i.e., of possible answers) and the questioner already has an idea of what the answer will be.

On the contrary, in a question like *where did they sell the ticket that won the last Italian national lottery?*, the *wh*-word *where* refers to an open set of possible places (a finite but unknowable number of cities, towns, villages, rest stops, etc.): more than 6 million tickets were sold throughout Italy and any one of them can be the winner. The questioner has no idea of the answer, s/he is groping in the dark.

The two examples above aim to underlie that, in principle, all seven *wh*-words (*what, where, when, why, how, who* and *which*) can refer to either an *open* or a *closed* set of referents (i.e., of possible answers), depending on the context of their occurrence as well as the propositional content of the question.¹

When the set is open (*where did they sell the ticket that won the last Italian national lottery?*), the referents (the possible answers) are undefinable and unquantifiable (let us colloquially say *many*) and, for this reason, usually *unknown* to the questioner; this makes it impossible for

¹ In other words, a question denotes (refers to) the set of propositions that correspond to all possible answers to it. The major contributions to this topic come from philosophy of language and formal semantics, see for example Hamblin (1973), Karttunen (1977), Groenendijk and Stokhof (1984), Groenendijk and Roelofsen (2009), Ciardelli (2009, 2016), Ciardelli and Roelofsen (2011), van Benthem and Minica (2012), Roelofsen (2013), van Gessel (2016), etc. For an up-to-date overview, see Cross and Roelofsen (2018).

him/her to form an idea of the possible answer. Let us call the corresponding questions *open wh-questions*. This is the prototype of wh-questions.

When the set is closed (*how much did you drink a day?*), the referents (i.e., the possible answers) are definable and quantifiable (let us colloquially say *few*) and, for this reason, usually *known* to the questioner, who therefore already has some idea of the possible answer. Let us call the corresponding questions *closed wh-questions*.

The smallest closed set of reference consists of *two* referents: for example, suppose Gill is holding up two pairs of shoes and asks Ilaria *which pair of shoes should I wear with this skirt and shirt?* (referring to the ones she has on). Let us call such questions *dual wh-questions*. The possible answers in this example are in principle *this pair* or *that pair* (or *neither of them*, meaning that neither pair matches her clothes).

Therefore, from the point of view of their possible sets of reference, wh-questions seem to place themselves along a continuum: they gradually range from open sets of *many* and *unknown* referents (answers) to closed sets of *few* and *known* referents, up to a minimum of *only two* referents (Figure 1).

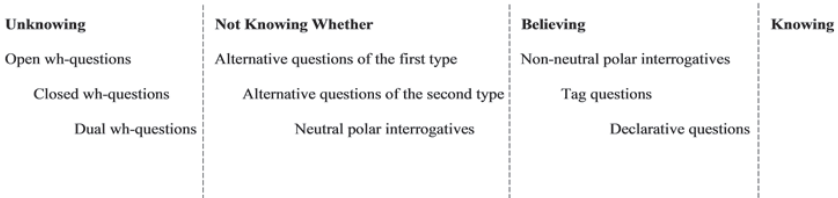


Figure 1. The Unknowning continuum within the whole epistemic continuum

8.3 Dual wh-questions and alternative questions of the first type

Dual wh-questions (usually beginning with *who* or *which*) are particularly interesting since they border on alternative questions, the first question type at the beginning of the Uncertain position along the epistemic continuum that goes from the Unknowning to the Believing.

As a matter of fact, dual wh-questions (*which pair should I wear?*) correspond to alternative questions of the first type (*should I wear this pair or that one?*) in the sense that the former can be transformed into the latter

and vice versa, with the result that they are usually interchangeable in the same context of occurrence.²

Both dual wh-questions and alternative questions have the same social action, they are information seeking. Both expect a content response, the same content response, i.e., an answer between two alternatives (*this pair* versus *that pair*), and the questioner *perfectly knows* what these alternatives are: by asking *which pair of shoes should I wear?*, the questioner is not groping in the dark (as usually happens with open wh-questions), she has already a precise idea of the possible answer (as normally happens with alternative and polar questions).

Since uncertainty by definition implies a doubt between (at least) two alternatives, dual wh-questions (and their interchangeability with corresponding alternative questions) pose the problem of whether they still convey an unknowing stance or, instead, an uncertain one.

The dilemma is: are all wh-questions (open, closed and dual) unknowing or is this true of only the open ones, while closed and dual wh-questions are uncertain?

We are inclined to prefer the first alternative, i.e., that all wh-questions are unknowing, and we will argue in favour of this from both a theoretical and practical perspective with the help of some examples.

Suppose that Ramona, Ilaria and Andrzej go to dinner in a restaurant: in the morning they were informed that a paper co-authored and submitted has been accepted for publication with minor revisions, so they want to celebrate.

After eating, Andrzej asks for the bill and the waiter tells him that it has already been paid. Andrzej turns to Ilaria and Ramona and says: “Oh, no! That’s not fair! *Who was it?*”.

The question *Who was it* [to pay the bill instead of me]? presupposes *someone paid the bill* and aims to know who this someone is. In that context, the wh-word *who* refers not to *someone* among *many* possible *unknown* referents (*who was it to win the last Italian national lottery?*); it refers to one of *two* possible *known* referents, the questioner’s colleagues: he does not know which one of them paid the bill, he is uncertain, but he knows that it was one of the two possible people, or possibly both.

Therefore, the wh-question *Who was it?* corresponds to the alternative question *Was it you Ramona or you Ilaria or both?*, in the sense that the former can be developed or expanded into the latter. The conjunction *or* is inclusive in this case: not only either one or the other alternative but also

² In section 8.3.2 we will see that in principle all wh-questions, even the open type, can be transformed into their corresponding alternative questions.

both are possibly true, cf. Latin *vel vel* (Chapter 4, section 4.1). So the wh-question *Who was it?* and the alternative question *Was it you Ramona or you Ilaria or both?* are interchangeable in that context.

As said above, uncertainty by definition implies a doubt between (at least) two alternatives, thus dual wh-questions, in our opinion, lend themselves very well to possible misunderstandings, i.e., to think that they convey an Uncertain rather than an Unknowing stance.

In favour of the view that all wh-questions convey an Unknowing stance we advance three arguments: two theoretical and one practical.

8.3.1 First argument

We appeal to what we stated in Chapter 1, section 1.5.1: epistemic stance is a linguistic, communicative notion, not a mental one.

We must distinguish and treat separately the *interior, private world* of a person (made up of what s/he sees, hears, thinks, remembers, feels, etc.) and her/his *behaviour* (what s/he does and says) in the *outside, public world*.³ Usually knowledge, uncertainty and unknowledge as mental states coexist in a person's inner world (in her/his mind), even with reference to one and the same topic.

In the bill example, Andrzej does not know who paid it, he knows that it was one of his two colleagues or both, he is uncertain about which alternative is true among the three, he can even suppose that one alternative (it was both of them) is more likely to be true than the other two. This is what is happening in his inner world, in his mind.

But, if Andrzej in that situation wants to open his mouth to ask a question, he cannot *simultaneously* ask as many questions as he has overlapping and competing mental states, because linguistic communication is linear, sequential, and a single speaker cannot utter more than one question at the same time. He must choose *one* question type among those at his disposal (here, at least five); he can add a second question after the first (multiple questions, see section 8.4 below), but always and only *one* question *at a time*.

This means that instead of *Who was it?*, he could ask the alternative question:

Was it you Ramona or you Ilaria or both?

³ In our previous book on epistemic stance (Zuczkowski, Bongelli and Riccioni 2017) Chapter 1 is entirely devoted to this topic.

or any one of the other possible alternative questions

Was it you Ramona or you Ilaria?
Was it both of you or only one?
Was it both of you or only you Ramona?
Was it both of you or only you Ilaria?
Was it you Ramona or not?
Was it you Ilaria or not?
Was it both of you or not?

In point of fact, he could ask any other of the uncertain question types, i.e., any polar question, since all of them involve an (implicit) alternative (the opposite one, as seen in Chapters 5-7). For example, he could ask (we take into consideration only affirmative questions):

Was it you Ramona?
Was it you Ilaria?
Was it both of you? (polar interrogatives)

It was you Ramona, wasn't it?
It was you Ilaria, wasn't it?
It was both of you, wasn't it? (tag questions)

It was you Ramona?
It was you Ilaria?
It was both of you? (declarative questions)

What is the difference between all such questions and in particular between the dual wh-question *Who was it?* and the corresponding alternative question *Was it you Ramona or you Ilaria or both?*

Their linguistic design, clearly, and their epistemic stance: if Andrzej asks the wh-question *Who was it?*, he uses the linguistic design of an unknowing question, and conveys the epistemic stance that *he does not know which* alternative is true: *he does not know, of his two colleagues, who paid the bill.*

Since in this case, for obvious reasons, we have the possibility to know what Andrzej's mental states are, we might say that the wh-question conveys the mental state of his that does not know.

But, for the aims of those who are interested in studying the speakers' epistemic stance in natural conversational sequences, it is really not necessary

(and normally impossible) to enter their mind(s). It is sufficient to stop at language.

So, if in the same context provided for the bill example, Andrzej asks an alternative question instead of a wh-question, it is enough to say that he uses the linguistic design of an uncertain question (Not Knowing Whether pole) and in doing so *conveys* that *he does not know whether* the first, second or third alternative is true.

Not knowing which alternative is true (wh-question, Unknowing position) and *not knowing whether* the first, second or third alternative is true (alternative question, Uncertain position) are two different *linguistic* means of obtaining the same piece of information from the respondent(s): the former makes use of the Unknowing position, the latter of the Not Knowing Whether—so much so that a wh-question can be immediately followed by an alternative or polar question, thus resulting in what has been called *multiple question* (Davidson 1984; Gardner 2004) or *cascade of questions* (Heritage and Roth 1995; Clayman and Heritage 2002a, 2002b; Auburn et al. 2016; Russell, Johnson and Stewart 2020; Robinson 2020) or *multi-question* (Heinemann 2010): *Who was it? [Was it] you Ramona or you Ilaria?* (wh-question + alternative question); *Who was it? Both of you?* (wh-question + polar interrogative), etc. (see section 8.4).

8.3.2 Second argument

The second argument in favour of considering all wh-questions as unknowing is again theoretical. Let us return to Gill's example: while holding up two pairs of shoes, she asks Ilaria *Which pair of shoes should I wear with this skirt and shirt?*

The difference with the previous example is that now there are only two alternatives, not three: the questioner knows (and the respondent too) that s/he can wear only one of the two pairs, *not both* at the same time. Therefore, the wh-question *Which pair of shoes should I wear?* corresponds to the alternative question *Should I wear this pair or that one?*, the alternative *or both* being excluded.

Actually, the conjunction *or* is disjunctive in this case, the two alternatives being mutually exclusive: either one or the other alternative (but not both) are possibly true, cf. Latin *aut aut* (Chapter 4, section 4.1).

Now suppose a different context for the same wh-question, suppose that Gill opens her shoe rack (where there are a dozen pairs of shoes) and asks Ilaria *which pair of shoes should I wear?*

This wh-question can also, in principle, be transformed into a corresponding alternative question (*should I wear this one or this one or*

this one or this one and so on, up to the twelfth pair), but to ask such a question would be senseless and a violation of Grice's (1975) maxims of quantity and manner (be brief, avoid unnecessary prolixity).

To use an unknowing question instead of an uncertain one in front of her shoe rack is more economical for Gill, she saves time and breath.

But those who support the view that closed and dual wh-questions convey uncertainty might say that even in the *shoe rack* context, not only in the *two* pairs context, the wh-question *which pair of shoes should I wear?* conveys that Gill is *uncertain* about which pair of shoes she should wear *among her dozen*.

So, can uncertainty concern as many as a dozen pairs of shoes? Can it range from two to twelve? And if so, why not twenty, fifty, one hundred, etc.?

This is the core of the problem. Since in principle *any* wh-question, even the open type, can be transformed into a corresponding alternative question.⁴ The point to clarify is: with *up to how many alternatives* can we properly talk of uncertainty and express uncertainty with a question? Two, three, four, five, thirty, how many? And *from how many alternatives onwards* can we properly talk of unknowledge and express unknowledge with a question?

Is there anybody who can establish *where* uncertainty ends and unknowledge begins or vice versa? And on what grounds?

Remember that in our corpus of 611 alternative questions extracted from the Spoken BNC2014, almost 95% have only two alternatives (Chapter 4, section 4.6, Table 13); the highest number of alternatives encountered is five, but five alternatives occur only in 2 questions (0.33%). So, on the basis of such linguistic quantitative data, should we say that all open wh-questions and those closed wh-questions corresponding to more than *five* alternatives convey unknowledge, while closed wh-questions corresponding to a maximum of five alternatives and dual wh-questions convey uncertainty?

This too, in our view, would be peculiar! It would mean that even a closed wh-question like *how much water did you drink a day?* would convey uncertainty, since (as we have seen in section 8.2) it corresponds, roughly speaking, to *did you drink more or less two litres or two and a half litres or three litres of water?*, i.e., to an alternative question with less than five alternatives.

⁴ In principle, the open wh-question *where did they sell the ticket that won the last Italian national lottery?* can be transformed into a corresponding alternative question including as many alternatives as the places in Italy are where the tickets were sold.

We find it more reasonable to claim that *any* wh-question displays unknowledge, even in *contexts* that in themselves communicate uncertainty (like those described in the bill and shoes examples): even though the *situation* (one or two persons paid the bill) or *non-verbal behavior* (Gill is holding up two pairs of shoes) communicate uncertainty, Andrzej's and Gill's language allows them to use two different *tools* to obtain the same piece of information from the respondent: one employs the Unknowing position, the other the Uncertain.

8.3.3 Third argument

The last argument in favour of this view is strictly *practical*: during the qualitative analysis of natural conversational sequences, it is sometimes easy to establish whether the set of reference of a wh-question includes more or less than *five* alternatives (see previous section) or whatever number someone has established as the watershed between unknowledge and uncertainty.

The shoes and bill examples show that contextual information can sometimes help in determining *with precision* the number of alternatives (two, three, a dozen) included in a wh-question. In other cases, during the qualitative analysis of natural conversational sequences, it is impossible to be precise: it is only possible to give an *approximate* number, as in the case of *how much water did you drink?* By appealing to the notion of *normal context* we were able to assume that the possible alternatives range up to a likely maximum of three litres of water.

But it is more often impossible to decide what kind of a wh-question (open, closed, dual) the one that we are faced with is. As a matter of fact, one and the same wh-question can have either an open or a closed or a dual reading, depending on its context of occurrence, on how much the questioner knows and/or supposes about the respondent, etc.

For example, *where did you go last night?* can be an open question when the questioner does not know much about the respondent and supposes that s/he could have gone *anywhere* last night.

The same question could be a closed one, when the respondent (a colleague of the questioner, for example) is known to be one who likes going out at night, usually to the movie or theater, art-exhibitions and the like.

Finally, *where did you go last night?* can be a dual question, when questioner and respondent are friends and the latter was uncertain the day before about whether to go to the football or the tennis match in the evening. Should we say that such a wh-question conveys the questioner's uncertainty?

In these three last examples, the set of reference of the same wh-question, i.e., the number of possible answers to it, is in the questioners' mind, which we cannot enter. Thus, when we cannot establish whether a wh-question is open, closed or dual, we cannot establish whether it is unknowing (open wh-question) or uncertain (closed and dual wh-questions).

For all the above reasons, it is theoretically more reasonable and in practice more convenient, in our view, to cut the Gordian knot and consider *all* wh-questions, dual included, as unknowing: even in contexts that in themselves communicate uncertainty (as when the questioner is holding up two pairs of shoes), our language allows us to use two different *tools* to obtain the same piece of information from the respondent, the one employs the Unknowing position, the other the Uncertain.

8.4 Multiple questions: search string and extracts from Spoken BNC2014

Above we said that *Not knowing which* alternative is true (wh-question, Unknowing position, *Who was it* [to pay the bill]?) and *not knowing whether* the first, second or third alternative is true (alternative question, Uncertain position, *Was it you Ramona or you Ilaria or both?*) are two different *linguistic* means of obtaining the same piece of information from the respondent(s): the former employs the Unknowing position, the latter the Not Knowing Whether.

This is probably one of the reasons why a wh-question like *Who was it?* can be immediately followed by an alternative or polar question, thus resulting in a *multiple question* (abbreviated to *multi-question* from here on): *Who was it? [Was it] you Ramona or you Ilaria?* (wh-question + alternative question); *Who was it? Both of you?* (wh-question + polar interrogative), etc.

In order to have real linguistic data about wh-questions followed by alternative questions *with two alternatives* (which tell us that the wh-questions are dual) we queried the Spoken BNC2014 with the following search string:

```
<u> (What | Which | Where | How | Who | Why |When) ***** or
***** \? </u>
```

which returned 249 matches in 200 different texts. Of the 249 matches there are *complete*, *incomplete* and *indefinite* questions but no *or not* alternative questions.

Here are some examples and comments for each of the seven wh-words.

8.4.1 *Who*

Excerpt 46 (SNNG 466-468)

- 1.S0518: so he's got this pint so he said I've been to see my dad and
 it's erm (.) it's been really difficult and he really needed a
 hug and I got I just felt
- 2.S0517: >>**who needed a hug ? --ANONnameM or his dad ?**
- 3.S0518: >>no his dad

S0518's sentence *he really needed a hug* seems to leave S0517 doubtful about the referent of the pronoun *he* (dad or son?) and gives rise to the multi-question that can be paraphrased as *I do not know to whom the 'he' refers plus I do not know whether the 'he' refers to ANONnameM or his dad.*

The context of occurrence of S0517's who-question, i.e., S0518's previous turn in line 1 where the reported speech is about a son visiting his father, makes it clear that the who-question is *dual*, i.e., its set of reference is made up of only two people. In other words, the wh-question *who needed a hug?* focuses on the identity of *who*, being already clear to both questioner and answerer that *who* refers to either ANONnameM or his father. On the contrary, the alternative question *ANONnameM or his dad?* makes the identity of *who* explicit and asks the respondent to choose between two alternatives.

The epistemic shift is from the Unknowing to the Not Knowing Whether position. In a sense, the second question is a repetition of the first one from a different epistemic position. For this reason, the who-question and the alternative question are interchangeable in that context: instead of using a multi-question, S0517 could have used only the first question *who needed a hug?* or only the complete version of the second: *did ANONnameM need a hug or his dad?*

From the grammatical point of view, the answer *no his dad* does not fit the wh-question *who needed a hug?* because of the presence of the "no" (only *his dad* would fit) but, for the same reason, it does fit the alternative question *ANONnameM or his dad?* Yet, from a semantic and pragmatic point of view, *no his dad* is an answer to both questions (Figure 2) and can be paraphrased as *no, it was not ANONnameM who needed a hug, it was his father.* In other words, the same response can be pursued and achieved from both an Unknowing position (*who needed a hug?*) and an Uncertain (*did ANONnameM need a hug or his dad?*). There is no need to reduce dual questions to the Uncertain position.

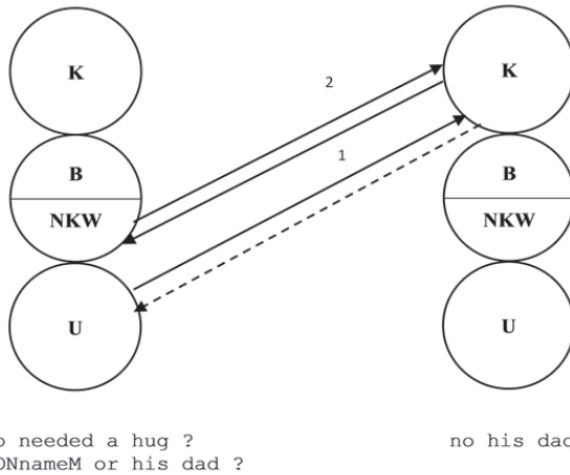


Figure 2. Origin and destination of S0517’s questions and S0518’s answer

Excerpt 47 (SNCP 929-935)

- 1.S0556: **who’s buffer Rihanna or Beyoncé?**⁵
- 2.S0402: Beyoncé
- 3.S0554: Beyoncé
- 4.S0556: go on
- 5.S0405: she’s got a better body
- 6.S0556: said whose buffer I didn’t ask whose body was
- 7.S0405: >>I’m sorry I’m sorry please don’t kill me

Even before reading the alternative question *Rihanna or Beyoncé?*, the comparative *buffer* in the who-question clearly anticipates that the set of reference of this latter is limited to two “entities” and that a (qualitative) comparison is at stake. In this case the propositional content, not the context of occurrence, reveals that the who-question is dual.

Excerpt 48 (SDFL 1052-1053)

- 1.S0024: **who has more bones a baby or an adult?**
- 2.S0154: baby

⁵ “Who’s” in line 1 is a mis-transcription of “whose”, as can be ascertained in line 6.

The presence of *more*, analogously to that of *buffer* in the previous example, signals that a (quantitative) comparison is at stake. In this case too, the alternative question makes explicit the set of reference of the who-question: a generalised baby and a generalised adult.

8.4.2 Which

Excerpt 49 (SXCB 1575-1579)

- 1.S0328: where are we staying tonight
 2.S0383: Premers Innus
 3.S0328: Premers
 4.S0383: **which is better Premier Inn or Holiday Inn?**
 5.S0326: Premier Inn man

The presence of *better*, analogously to that of *buffer* and *more* in the previous two examples, signals that a (qualitative) comparison is at stake.

8.4.3 Where

Excerpt 50 (SDJL 542-546)

- 1.S0198: remember where we're parked dad?
 2.S0229: yeah
 3.S0198: **where are we crossing then? this one or the next one?**
 4.S0229: this one right here innit?
 5.S0198: yeah I think so testing you that's all

The complete alternative question following the where-question narrows the possibilities for responding to two (a doubt coming from the Not Knowing Whether position), thus making the where-question dual.

Excerpt 51 (SAVN 3-6)

- 1.S0690: **where's the microphone? underneath or on top?**
 2.S0689: under
 3.S0687: >>I think it's underneath but --ANONnameM says it's on top
 4.S0689: >>no I I said it was underneath

The possible closed set of reference of the where-question (the possible places in the room where the microphone can be) is reduced to two places by the complete alternative question, which again appears to be an attempt to resolve a doubt coming from the Not Knowing Whether position.

8.4.4 *When*

Excerpt 52 (SKJQ 165-166)

- 1.S0198: **when is that? on a Saturday or Sunday?**
 2.S0229: >>Sunday morning ten o'clock

The interlocutors are talking about a fair (with goods, amusements and games). The alternative question narrows the possible time when the fair takes place. If Saturday and Sunday, not being work days, are when a fair usually takes place, the alternative question is a simple request for information.

In all the above excerpts, the social action of the *complete* alternative question following the *wh*-question is clearly information-seeking (a doubt to be dispelled), as expected. The questioner's epistemic shift is from Unknowing (*wh*-question) to Not Knowing Whether (alternative question).

In almost all the next excerpts, on the contrary, the alternative questions seem to be tinged with supposition, and the questioner's epistemic shift (as far as the Uncertain position of the alternative question is concerned) seems to be from the Not Knowing Whether (doubt, information seeking) towards the Believing pole (supposition, confirmation seeking). The transition from a doubt (Not Knowing Whether) to a supposition (Believing) is probably favoured by the fact that these alternative questions are not *complete* but rather either *incomplete* or *indefinite*, thus functioning as single non-neutral polar interrogatives more than as alternative questions proper.

8.4.5 *Why*

Excerpt 53 (SVUC 1188-1191)

- 1.S0013: and we reckon she got struck off
 2.S0012: yeah
 3.S0008: **why cos she was no good or?**
 4.S0012: she weren't very good

The *why*-question is followed by an *incomplete* alternative question beginning with *because*: the questioner is advancing a possible reason why *she got struck off*, thus narrowing the possibilities for responding by providing a candidate answer (*she got struck off because she was no good or because...*), which S0012's answer *confirms* as being true. The incomplete alternative question seems to function as a non-neutral polar interrogative advancing a supposition and seeking confirmation.

If this is so, it would mean that, when the set of reference of the wh-question is strictly dual (as in the above seven excerpts) and the subsequent alternative question is *complete*, the latter is information seeking, as expected (it comes from the Not Knowing Whether); when instead the set of reference can be supposed to be more than dual (as in the present excerpt: the possible reasons why she got struck off can be numerous) and the subsequent alternative question is either *incomplete* or *indefinite*, this latter is tinged with supposition: the epistemic shift is from Unknowing (wh-question) toward Believing (the alternative question functions as a non-neutral polar interrogative).

Excerpt 54 (SVNL 792-799)

- 1.S0018: where are they again?
 2.S0019: Bahamas
 3.S0018: oo la la
 4.S0019: for two months
 5.S0018: how very nice
 6.S0019: I know
 7.S0018: **why have they got friends out there or something?**
 8.S0019: no (.) they've been there before and they liked it

The question *why (are they in the Bahamas)?* is followed by an *indefinite* alternative question which, as in the previous example, can be read as a supposition about their motive for being in the Bahamas, which is *disconfirmed* by the respondent.

8.4.6 What

Excerpt 55 (SVXT 202-204)

- 1.S0525: **what are you teaching tonight? maths or English?**
 2.S0623: er a bit of both erm we're doing the Argos catalogue
 3.S0525: oh yeah

The what-question here is followed by a *complete* alternative question, thus this latter can be read as a simple request for information. This reading requires that (the questioner S0525 knows that) the respondent S0623 teaches *only* maths and English.

Excerpt 56 (SY8B 553-554)

- 1.S0588: **what were you doing? were you singing or something?**
 2.S0589: >>I was singing

The what-question here is followed by an *indefinite* alternative question that, *qua* indefinite, can be read as non-neutral polar interrogative advancing a supposition: the set of reference of the what-question seems to be more than dual.

Excerpt 57 (SVKF 223-224)

- 1.S0115: **what's her name is it Sarah Lancaster or something?**
 2.S0037: no (.) Sarah Lancaster's no that's not her

The questioner may be trying to remember *her name* (open set of reference, probably) and through the *indefinite* alternative question advances a supposition, that is disconfirmed.

Excerpt 58 (SRU7 113-115)

- 1.S0588: not quite because if you do the right sort of exercise you don't have to exert yourself too much it only takes ten minutes a day to keep it all together really
 2.S0613: **what are you talking about aerobic exercise or?**
 3.S0588: >>yeah yeah or weights are really important cos that kind of makes everything come together again but erm resistance a little b- a little bit of resistance exercise and a tiny bit of aerobic but not whole cos that's actually really ageing if you do the whole really going for it thing or jogging that's really ageing

The *incomplete* alternative question, which is overlapped and confirmed by S0588, ranges between a request for information and the advance of a supposition.

8.4.7 How

Excerpt 59 (SAVN 810-814)

- (...)1.S0689: it was so funny
 2.S0687: **how old were you? about eight or nine?**
 3.S0689: probably
 4.S0688: ten
 5.S0687: ten

The interlocutors are talking about their youth, so the how-question refers to a relatively closed set of years, which is further restricted to two by the *complete* alternative question. Unfortunately, the Spoken BNC2014 has no

transcription of the speakers' intonation, which in this case could make it clear whether the alternative question should be read as information or confirmation seeking. Actually, in our view, if there were two intonation pitches—one on the word *eight*, the other on the word *nine*—the question would correspond to *I do not know whether you were about eight years old or about nine years old* and it would be information seeking. If instead there were only one intonation pitch—on the final word *nine*—the question would correspond to *I believe that you were about eight or nine years old* and it would be confirmation seeking.

CHAPTER 9

QUESTIONS ADDRESSED TOWARD THE BELIEVING POSITION

9.1 Introduction

In this chapter we attempt to achieve the *third aim* of the present book (Chapter 2, section 2.2), i.e., to show that questions are not addressed to an undifferentiated K+ position but to two distinct epistemic positions, which are not only the Knowing but also the Uncertain.

According to the KUB model, a distinction analogous to that made within the questioner's K- position between the Unknowing and the Uncertain (questions come from either the former or the latter) should be made within the respondent's K+ position between the Knowing and the Uncertain: questions are addressed to either the former or the latter.

Once again the difference between Heritage's model and ours basically lies in the inclusion, or otherwise, of the Uncertain position: epistemic stance is not simply a matter of knowing more or less (K+ or K-) than the interlocutor, i.e., of knowing and unknowing, in our terminology, but also of being uncertain, possible, probable, of not knowing whether, and believing.

In Chapters 3-7 we saw that both unknowing questions (wh-questions) and uncertain ones (alternative and polar questions) are usually directed toward the Knowing position, i.e., the respondent is expected to know the answer.

In the present chapter, again through the qualitative analysis of extracts from the Spoken BNC2014 corpus, we will see that such questions can also be directed at the Uncertain position, i.e., to a respondent who is not expected to know the answer but is expected to be able to advance a hypothesis, supposition, opinion, and so on.

As a consequence, the expected answer also comes from the Uncertain position, not the Knowing.

For instance, suppose that Ramona and Gill are waiting for Ilaria, they have a work meeting at nine, now it is a few minutes past nine; Ramona and

Gill know that Ilaria is normally very punctual, that if anything she tends to arrive early; if she couldn't come to the meeting or were running late, she would already have called to let them know.

So Gill asks Ramona "What might have happened?" and Ramona answers, "Maybe the traffic".

Then Gill's phone rings: it is Ilaria, and Gill asks her "What's happened?" and she "Oh, sorry, it took me ages to find a parking space!".

Gill cannot ask Ramona "What's happened?", and equally, she cannot ask Ilaria "What might have happened?", since Gill knows that Ramona can only suppose what happened (she is not a clairvoyant, she has no crystal ball), while Ilaria is the only one of the three of them who does know.

9.2 Search strings and extracts from Spoken BNC2014

The following 23 extracts from the Spoken BNC2014 include examples of wh-, alternative, tag and declarative questions as well as polar interrogatives in which the presence of either a modal like *would*, *could*, *should*, *might*, *can* or the expression *do you think / don't you think* indicates that all these questions are directed at the Uncertain position.

9.2.1 Wh-questions including a modal verb

The five excerpts below were extracted from the Spoken BNC2014 using the following search string:

(who | where | what | when | which | why | how) (could | can | may | should | might | ought | would) _{PRON} *** ?**

This matched a total of 2074 matches in 781 texts, which we classified by co-occurrence of each pronoun and modal verb. The examples we discuss below reflect the most frequent patternings observed.

Excerpt 60 (SJDM 548-549)

- 1.S0018: **but when would you go if you went?**
 2.S0019: em probably March I think (.) em February it's probably
 still rather warmer than your father likes (.) so March (.)

In this example, S0018 (female, 30-39 years) is asking her mother S0019 (60-69 years) about her parents' plans to visit relatives in Australia.

The wh-question *when would you go?*, originating in the Unknowing position (= *I don't know* when you would go), is couched within the condition *if you went* and is therefore an *explicit conditional* question (Speer

2012; Bongelli et al. 2020) of the form *simple past + simple conditional* since it includes both the main clause *when would you go* (apodosis) with the modal *would*, and the conditional clause *if you went* (protasis) with the past form *you went*.

If the question had been simply *when would you go?*, this would have been an *implicit conditional* question, in which the conditional clause *if you went* is implied but not articulated.

From the epistemic perspective, the conditional clause *if you went* conveys that the questioner does not know whether the answerer will go to Australia or not: it is likely that S0019 is also undecided.

For this reason, the questioner cannot pose a question directed towards the respondent's Knowing position (such as *when will you go?*); she can only pose a question directed towards the Uncertain position, specifically to the Believing (*when would you go?*): the presence of the conditional *would* shows that the questioner wants the respondent to give her *opinion* or *supposition* about a *possible* date (*when*) of her going to Australia.

The question predicts an answer relating not to a precise, specific date but to an identifiable set, i.e., seasons or months of the year. Indeed, the mother's response specifies the months February and March, tentatively indicating a preference for March justified by the assumption that February in Australia is still likely to be too hot for her husband.

That the response is a supposition coming from the Believing position is shown by the presence of the lexical markers of uncertainty *probably* and *I think*. In this way, S0019's answer fully satisfies the request for information, filling S0018's information void with both the anticipated answer and a reason (Figure 1).

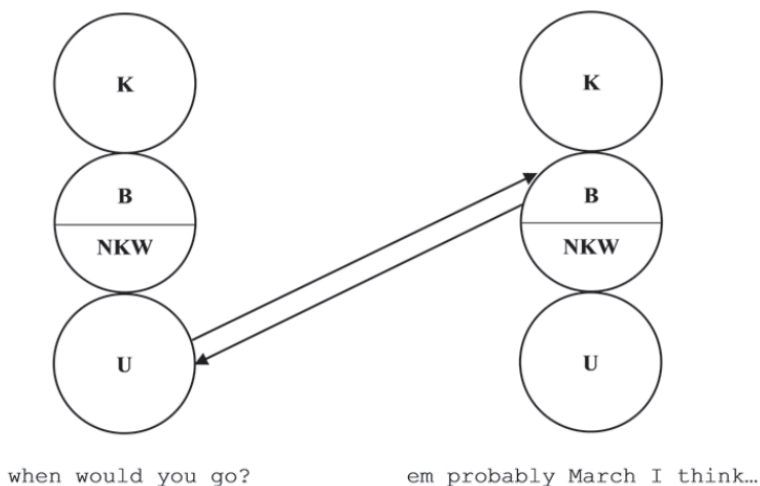


Figure 1. The answer to the wh-question comes from the Believing position to which the question is addressed

Excerpt 61 (S38F 192-197)

- 1.S0441: it's not okay
 2.S0439: no no it's not
 3.S0441: it's so weird how er I can't ever imagine looking at an animal and being like hey
 4.S0439: how's it going? hey bunny rabbit
 5.S0441: the thing is though I don't know why cos but animals don't do it for pleasure do they? so **why would they do that?**
 6.S0439: apparently dolphins have sex for pleasure

In this conversation, two young women are discussing bestiality, an issue featuring in an international news item around the time of the recording. After concurring that the practice is definitely *not okay*, and *weird*, the conversation veers into the imaginary sphere, humorously exploring some of the “practicalities” that might be involved.

In line 5, after a hesitant start, S0441 (a 24-year old mental health nurse) asks two questions one after the other.

Firstly, she asks a tag question (*animals don't do it for pleasure do they?*) in order to seek confirmation of her personal opinion (= I think that animals do not have sex for pleasure). Her question comes from her Believing position and it is addressed to the respondent's Believing position.

Secondly, she asks a conditional question, made up of:

- a conditional clause (i.e., a hypothetical component), that is represented by the opinion conveyed by the previous tag question, and implicitly assumed to be true: *if, as I suppose, they do not do sex for pleasure...* plus
- a question component (i.e., the interrogative part), that is represented by the lexicalised question *why would they do that?* This component can be paraphrased as *...I wonder why they do that (= I do not know why they do that).*

In epistemic terms, while the first part (*If, as I suppose, they do not have sex for pleasure*) comes from the Believing pole of the questioner’s uncertain position, the second one (*why would they do that?*) comes from the Unknowing position and is directed at the Believing, given the presence of *would*.

In line 6, S0439 replies (from a Believing position) by disconfirming S0441’s supposition (*apparently dolphins have sex for pleasure = contrary to what you think, I think that dolphins have sex for pleasure*) and, at the same time, questioning the hypothesis of the conditional question.

In other words, by disconfirming the premise (S0441’s hypothesis, expressed in the implicit conditional clause) S0439 does not need to reply to the question *why would they do that?* (Figure 2).

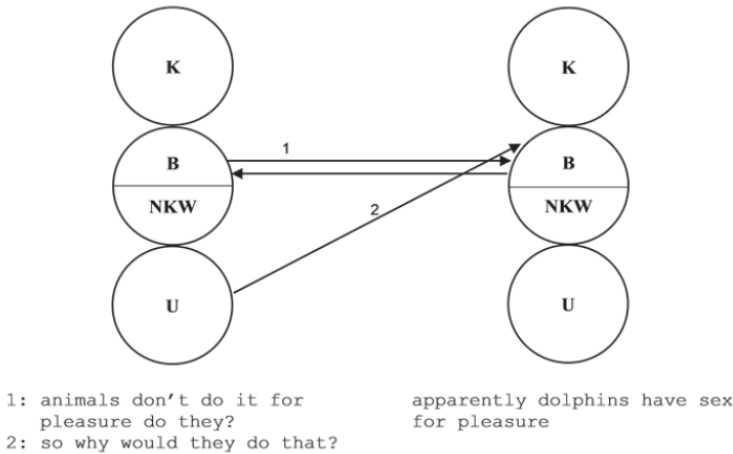


Figure 2. S0441’s tag and wh-question and S0439’s answer

It may be that she interpreted S0441's question as a rhetorical question requiring no answer: certainly, she responds to the earlier supposition by correcting it (*apparently...*) but does not engage explicitly with the question as to *why* [animals would cooperate in sex with humans].

Excerpt 62 (S2DD 1273-1274)

1.S0687: **how would they get in there?**

2.S0689: god knows

A brother (S0689, 16 years) and sister (S0687, 21 years) are talking about how some alligators managed to get inside the Florida Disneyland park. The question originates from the Unknowing position and the presence of *would* indicates that it is directed towards the Uncertain position, seeking an opinion.

The response is formulaic and features reverse polarity (Koshik 2005) i.e., the underlying negative meaning *I don't know* is expressed in the positive (*god knows*). This lexical realisation is hyperbolic (*I don't know* = *nobody knows* = *only god knows*) and conveys that the speaker is unable to provide an answer to the question (Unknowing position, Figure 3).

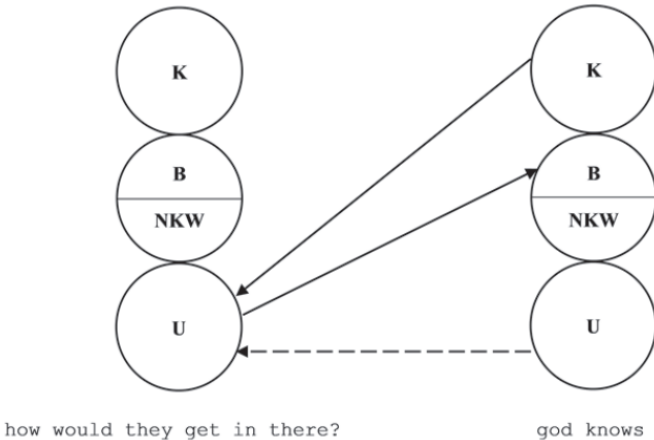


Figure 3. S0687's wh-question ($U \rightarrow B$) and S0689's response: the continuous arrow refers to the lexicalised answer *god knows* ($K \rightarrow U$), the dotted one refers to the implicit assertion *I don't know* ($U \rightarrow U$)

Excerpt 63 (SB9K 423-424)

- 1.S0192: [...] if you could teach any of these modules **which would you go for?**
- 2.S0198: mm don't know not till I start doing them I suppose

The speakers are discussing university teaching modules. S0192 (a 28-year-old male English language instructor) is asking S0198 (a 27-year-old female graduate student) a hypothetical question about her preferences for teaching particular topics.

The question, although conditional (*if you could... which would...*), is not fully open-ended in that a specific list of topics is being discussed; the response is therefore expected to feature one or more of these. The question originates in the Unknowing position and is directed towards the Believing.

S0198 initially replies from the Unknowing position (*mm don't know*), indicating that she does not have any preference (or, possibly, has no experience on which to draw in order to express such a preference).

She then supplements her first answer with an explanation (*not till I start doing them I suppose*), shifting the response from the initial Unknowing stance (*mm don't know*) to one of Uncertainty (*I suppose*, Figure 4).

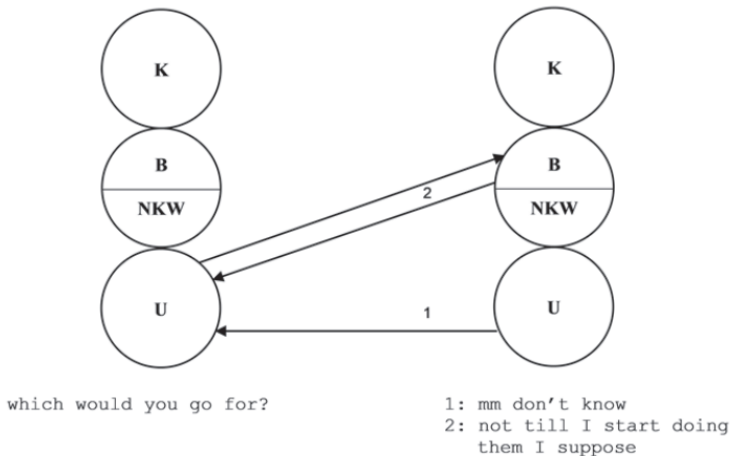


Figure 4. S0192’s wh-question (U→B) and S0198’s answer shifting from Unknowing (misalignment) to Believing (alignment)

Excerpt 64 (S5B4 919-923)

- 1.S0144: erm well **what could we make with that?**
 2.S0024: well I was gonna make erm kedgerree
 3.S0144: ah yeah
 4.S0024: but I'm so tired but we could still make kedgerree
 5.S0144: would be nice

S0144 (male, 36 years) and S0024 (female, 36 years) are discussing what to make for dinner using leftovers in the fridge.

S0024 asks an explicit conditional question made up of an implied hypothetical component (*if we wanted to make something*), plus the lexicalised interrogative component (*what could we make with that?*).

From an epistemic perspective, his question can be paraphrased as follows:

I do not know whether we want to make something. If this is the case, I do not know what could we make with that.

In other words, while the hypothetical component originates in the Not Knowing Whether pole of the Uncertain position, the interrogative part originates in the Unknowing position, and is reinforced by the modal *could*, making his question oriented towards the Believing position.

S0024 responds with a ready-prepared answer (*kedgerree*), originating in the Knowing position but distanced pragmatically by the use of the future-in-past (*I was gonna*) rather than a present or intentional future construction.

She continues (line 4), stating that she is tired—perhaps too tired to prepare a meal—but that the option of making kedgerree is still feasible (*we could still make...*): her initial intention (Known) therefore becomes a proposal (Belief) which S0144 agrees to (Figure 5).

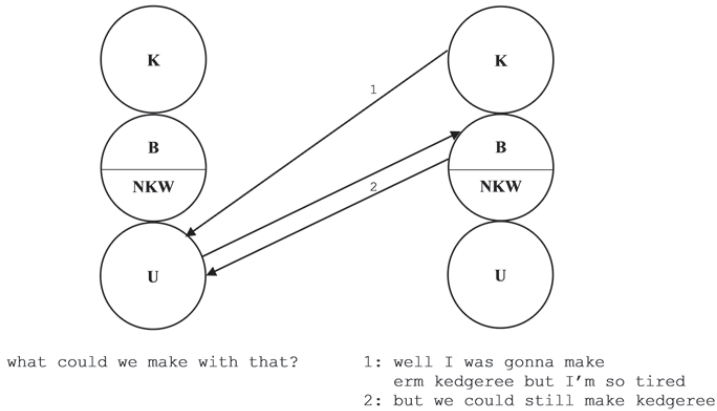


Figure 5. S0144’s wh-question (U→B) and S0024’s answer shifting from Knowing (misalignment) to Believing (alignment)

The excerpt which follows was extracted from the Spoken BNC2014 using the search string **how** _{ADJ} (could | can | may | should | might | ought | would) _{PRON} ***** ?

This supplemented the previously-cited search string by adding all (73) the *how* + *adjective* interrogatives present in the data.

Excerpt 65 (S78H 533-536)

- 1.S0420: [...] I want to get --ANONnameM camping as soon as possible
- 2.S0366: yeah
- 3.S0420: although I dunno how **how young should you start with camping?**
- 4.S0366: oh very you– I think

S0420 (32 years) is talking with his parents about when his 3-year-old son can start going camping, effectively asking his parents for advice.

His question seems to be a conditional question made up of an implied hypothetical component, that is *if you were to take a child camping* (i.e., *if you were me*), plus a lexicalised interrogative component (*how young should you start with camping?*). His question is used to encourage the interlocutor to put herself in his shoes and give her advice.

From an epistemic perspective, S0420’s question originates in the Unknowing position (as also underlined by the expression *I dunno* at the

beginning of his turn) and is oriented towards the Believed position, which is indicated by the presence of the deontic modal *should*.

His mother (S0366, 55 years) answers *oh very you[ng]*, reinforced by the addition of *I think....*, a reply originating in the Believing position and aimed at filling S0420's information gap (Figure 6).

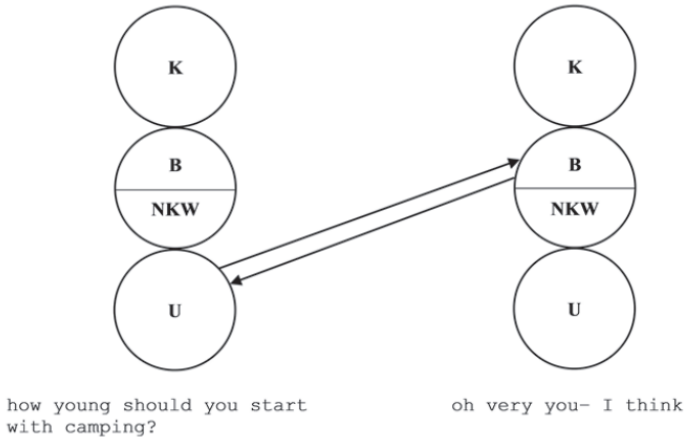


Figure 6. S0420's wh-question and S0366's answer

9.2.2 Wh-questions including *do / don't you think*¹

Examples 52-56 were extracted using the search string (**who | where | what | when | why | which | how**) * (**do | do n*t**) **you think** ***** ? which returned total of 591 examples in 374 different texts (recordings).

¹ There are no figures in this section since they would effectively replicate Figure 6 as far as their epistemic origin (U) and destination (B) are concerned.

Excerpt 66 (S8W2 587-591)

- 1.S0669: what about church? **how do you think that will influence things indirectly?**
- 2.S0670: >> well it introduces a child to a new social circle doesn't it? a new set of people
- 3.S0669: true and do you think
- 4.S0670: >> as well as of course the whole theological impact on a child
- 5.S0669: mm

In this extract, the speakers are evaluating the pros and cons of church attendance for children.

S0669 (female, 19 years old) explicitly asks S0070 (male, 20 years old) what he *thinks* the indirect influence of church attendance will be, signalling a question originating in the Unknowing position and oriented towards the Believing.

The response in line 2, a statement finished off with the question tag *doesn't it?*, indicates supposition (or strong Belief), and continues with a list of possible factors: *a new set of people* and (line 5) *the whole theological impact on a child*—this latter introduced by *of course*.

S0669's follow-up *true* (line 3) and backchannel *mm* (line 5) indicate her full agreement with her interlocutor's suggestions.

Excerpt 67 (S3XC 107-110)

- 1.S0679: **anyway I guess we probably ought to be getting ready for going out now what do you think?**
- 2.S0680: I think so yes if we don't get blown away getting into the car
- 3.S0679: gosh it is really rough out there today isn't it?
- 4.S0680: mm

S0679 (female, 54 years) presents a question full of uncertainty and hesitancy with multiple iterations of modality (*probably, ought to*) and belief verbs (*guess, think*). This tentative suggestion that they hurry up is paired with an explicit request for confirmation in the follow-up question *what do you think?*, originating in the Unknown position and aimed at the Believing position of S0680 (female, 64 years).

S0680's response is equally tentative. Her agreement is couched in Belief: the initial statement *I think so* is followed by a conditional (*if...*) both of which are markers associated with the Believing position.

The speaker's collaborative attempts to reach agreement continue in line 3 (with the question tag *isn't it*), and line 4 (S0680's backchannel *mm*).

Excerpt 68 (SK8T 343-344)

- 1.S0205: I'm not being funny but **where do you think her mum gets the money from?**
 2.S0204: yeah must be her dad yeah

S0205 (female, 20 years) and S0204 (female, 20 years) are gossiping about a friend who never seems short of cash. S0205 initiates by stating that her upcoming question is genuine (*I'm not being funny but...*), to reinforce her interlocutor's understanding that the question stems from the Unknowing position and is oriented towards the Believing (insertion of ... *you think* after the auxiliary *do*).

S0204's answer indicates supposition (originating in the Believing position): *must be...*; the two iterations of *yeah* appear to be discourse markers rather than actual iterations of agreement.

Excerpt 69 (SUGV 189-197)

- 1.S0653: true --ANONnameF **why do you think it might not make you happy?**
 2.S0654: because I would like feel bad for all the people who lost the lottery
 3.S0653: would you?
 4.S0654: yeah because they've been trying their har- their they've been trying so hard trying to get that and they might be quite poor and they might not have much food
 5.S0655: but --ANONnameF
 6.S0653: but you could but you could use some of your money to for the good you could set up a charity couldn't you?
 7.S0654: yeah
 8.S0655: you could give all the money to charity if you won like sixty thousand million
 9.S0653: you could yeah

A 39-year-old mother (S0653) is asking her 7-year-old daughter (S0654) why winning the lottery might not make her happy.

Her *wh*-question stems from the Unknowing position and is oriented towards her daughter's Believing position, i.e., it is a genuine attempt to find out what her daughter *thinks*.

It is also modalised (*why...it might not...*) which opens up space for hypothetical scenarios in the responses.

S0654 answers candidly, expressing her belief that she *would* feel bad for those who had not won.

Her mother continues, prodding her to expand on or perhaps correct this answer (*would you?*, line 3).

S0654 offers an initial follow-up answer from the Knowing position (*they've been trying so hard...*), then adds some Beliefs: *they might be poor or not have much food*.

The conversation then continues with the girl's mother and her 9-year-old brother (S0655) making suggestions about how to use a lottery win to help the less fortunate in society, all with the modal *could* (lines 6 and 8).

The girl reacts to these with a simple *yeah* (line 7), which may indicate that she concedes their points but could equally well be nothing more than a backchannel.

Excerpt 70 (SCQS 43-48)

- 1.S0251: mm so you think that one's a superior product?
 2.S0252: I do
 3.S0251: **so which one do you think is the Morrisons one and which one do you think is the Nairn's?**
 4.S0252: I think the darker one is the Morrisons one
 5.S0251: >> yes
 6.S0252: and I think the lighter one is the Nairn's

This conversation occurs within an informal tasting-test of oatcake biscuits in a domestic context.

In line 1, S0251 (52-year-old exams official) initiates with a declarative question originating in the Believing position and oriented towards the interlocutor's Believing position (*you think ...?*) and obtains the expected affirmative (Belief-based) answer from her 19-year-old son (*I do*).

In line 3, the woman presents two wh-questions (Unknowing position), both of which feature the insert *do you think?*, thus emphasizing the search for Believed information.

In his answer, her son too uses *I think* in both parts, a choice which can be justified by the context: he is guessing which brand each biscuit is, and his expression of belief is necessarily tentative.

9.2.3 Alternative questions including a modal verb

The search string (**could | should | might | would | ought | can | may**) **_ {PRON} _ {VERB} ***** or ***** \?** returned a total of 218 hits, which were sifted manually to isolate only the alternative questions (181). In the commentary to follow, we discuss four examples: a complete and an incomplete alternative question, then an *or something* and an *or not* alternative question.

Excerpt 71 (SPYD 490-491)

- 1.S0529: >> **what would you do? would you like play dead or you just let them kill you?**
- 2.S0530: I don't know I I couldn't I couldn't I wouldn't know I don't know how people act in these situations and how they survive it's just crazy

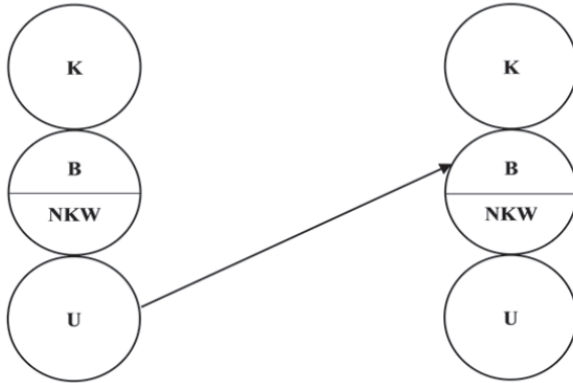
Two female undergraduates are discussing what they might do if they found themselves in a situation with terrorists or gunmen. This imaginary situation can be read as the implied hypothetical component of two conditional questions, a wh-question and an alternative one:

Hypothetical component: if we found ourselves in a situation with terrorists or gunmen

First interrogative component: what would you do?

Second interrogative component: would you play dead or [would] you just let them kill you?

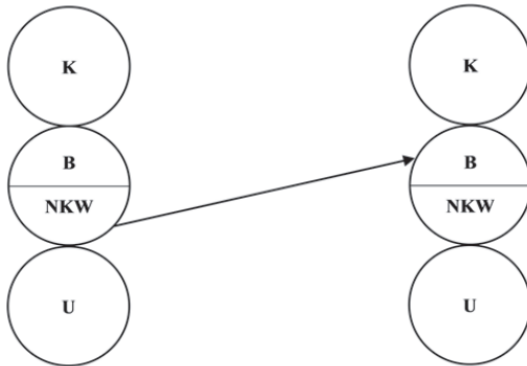
In S0529's wh-question *what would you do?* the modal verb (*would*) indicates that the speaker's Unknowing stance is addressing her interlocutor's Believing position (Figure 7).



what would you do?

Figure 7. S0529's wh-question

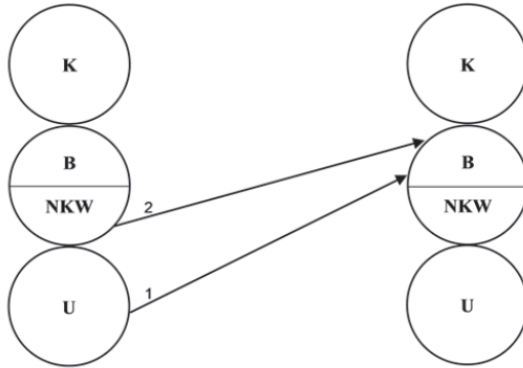
Her second question is an alternative one, originating in the Not Knowing Whether position and addressed—again as indicated by the presence of *would*—to her interlocutor's Believing position (Figure 8).



would you like play dead or
you just let them kill you?

Figure 8. S0529's alternative question

Both S0529's questions are shown in Figure 9.



1: what would you do?

2: would you like play dead or
you just let them kill you?

Figure 9. S0529's epistemic shift from U to NKW

In line 2, it is not possible to determine if S0530 is answering the first or the second question, or both. In any case, her answer can be divided into four distinct parts, each indicating a different epistemic position:

- (1) *I don't know*
- (2) *I I couldn't I couldn't I wouldn't know*
- (3) *I don't know how people act in these situations and how they survive*
- (4) *It's just crazy*

I don't know comes from the Unknowing, when read as a response to *what would you do*; when read as a response to *would you like play dead or...*, it comes from the Not Knowing Whether.

The series of false starts featuring the modals *could* and *would* are Uncertain; but the complete utterance (3) is constructed as *I don't know how*, indicating the Unknowing position.

The final assessment of the situation, *It's just crazy*, albeit a subjective judgement, is communicated from the speaker's Knowing position (Figure 10).

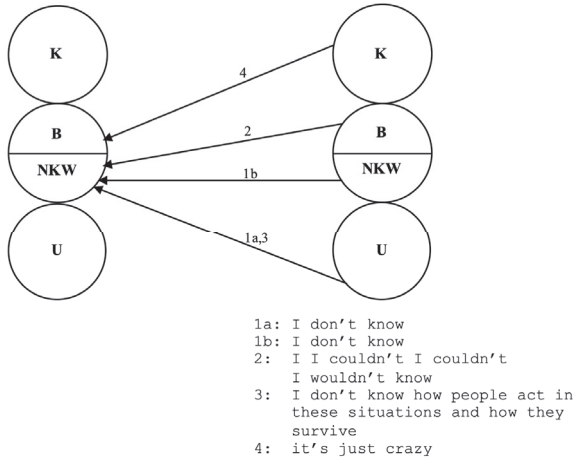


Figure 10. S0530's answer shifting from Unknowing or Not Knowing Whether (1a and 1b) to Believing (2) to Unknowing (3) to Knowing (4)

The whole epistemic dynamics of S0529's questions and S0530's answers is shown in Figure 11.

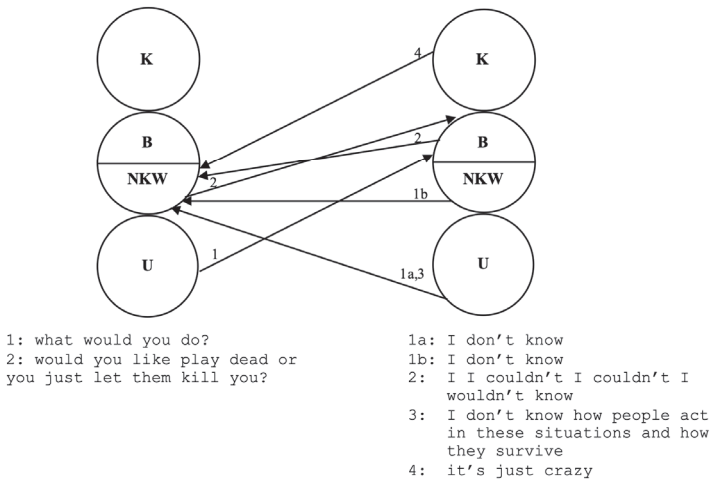


Figure 11. The complex epistemic dynamics involved in S0529's questions and S0530's answers

Excerpt 72 (S6R4 519-521)

- 1.S0092: in your I mean **what language would you be able to teach just Spanish or?**
- 2.S0018: French and Spanish yeah and because of the EBac that is in at the moment is being brought in
- 3.S0092: yeah

A middle-aged teacher (S0092) is asking a younger colleague (S0018) about her language teaching opportunities.

In this case too, the question seems to be a conditional question lacking the hypothetical component (*if it were possible / if the case should arise*). The interrogative component is represented by an incomplete alternative question (Chapter 4, section 4.4): the first option (*Spanish*) is stated while the second is merely suggested by *...or?*

This question starts off as *what language would you be able to teach...*, which originates in the Unknowing position, but is modified at the end by the addition of the alternative options *just Spanish or...?*, shifting the stance to one of Not Knowing Whether. Both the wh- and the alternative question (which together form a multiple question, Chapter 8, section 8.4) are directed toward the Believing position, given the presence of the conditional *would*.

S0018's response confirms the specified alternative and supplies another option (*French*), providing information from the Believing position (I would be able to teach *French and Spanish*).

Actually, S0018's answer originates from the Believing position since the whole sequence is embedded in a fictional, imaginary scenario in which her response can be paraphrased as: *If I had the chance, I would be able to teach French and Spanish*. Such a response is an answer to both S0092's questions (Figure 12).

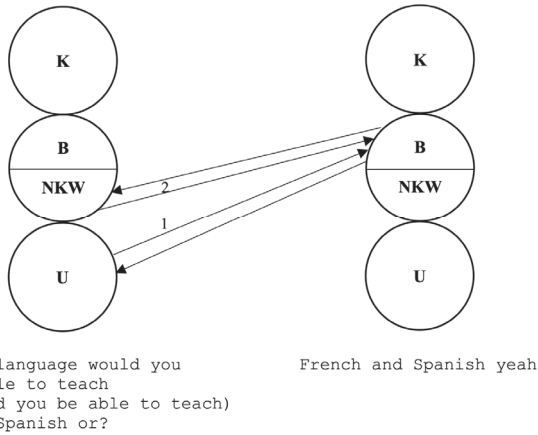


Figure 12. S0092’s wh- and alternative questions and S0018’s answer to both of them

Although S0018 could respond to S0092’s incomplete alternative question by simply replying with a yes (if she would be able to teach just Spanish) or a no plus additional content (if she would be able to teach some other language), she prefers to open her question by listing the two languages she would be able to teach, starting with French (the new piece of information), and continuing with Spanish (repetition of the lexicalised alternative). It seems that, by stating the new information (French) before the given (Spanish) using a reiterative reply, she is trying to highlight her *epistemic primacy*, i.e., her own “primary right to make a claim, asserting greater epistemic authority than that of the questioner” (Lee 2014: 245).

Excerpt 73 (SUH7 24-26)

- 1.S0402: **should we give our names? should we call ourselves like Mr X or something?**
- 2.S0405: >> er it’s just no Mr X use our real names like
- 3.S0403: >> John Smith we’re all John Smith

Three male adolescents (16-17 years) are discussing whether or not their names should be anonymised for the purposes of the conversation recording.

Therefore, in this case too, the questions seem to be conditional, made up of an implicit hypothetical component (*if someone should ask it*), followed by two different question components.

S0402 starts off by asking *should we give our names?* a neutral polar interrogative originating in the Not Knowing Whether position and directed towards the Believing, as confirmed by the presence of *should*.

This is immediately followed by an indefinite alternative question (...*or something?*, Chapter 4, section 4.5), again featuring the modal verb *should*. This too originates in the Not Knowing Whether position and is directed towards the Believing.

The other two interlocutors' responses overlap: the transcription is not precise enough for us to understand exactly when they start talking, or whether they are speaking over one another or not, although they both appear to be responding to the second of S0402's questions.

Excerpt 74 (S78P 2641-2642)

- 1.S0493: **would they survive over winter outdoors as well or not?**
- 2.S0668: yeah well if you obviously make them into the jam and things like that

In this extract, four adult family members are reminiscing about a market they visited when on holiday, where cloudberry and lingonberry were on sale.

One of the two sons (S0493, 31 years) asks his father (S0605) a conditional question lacking the explicit hypothetical component (*if they were to stay outdoors* or something like that). Specifically, using an *or not* alternative question (i.e., the interrogative component of the conditional question) originating in the Not Knowing Whether position (Chapter 4, section 4.6) and oriented towards the Believing, he asks whether these berries would survive over winter.

His father responds with a truncated first conditional in which the apodosis is ellipsed (it has already been stated in the question, i.e., *they would survive...*). The protasis therefore expresses the Believing position.

While in S0493's alternative question the protasis is missing (if they were put over winter outdoors), in S0668's answer it is the apodosis that is missing (cloudberry and lingonberry survive outdoors) or rather it is ellipsed because it can be inferred from the first part of the answer (yes = they would survive over winter outdoors). S0668's confirmative reply (*yeah*) is a conditional answer, i.e., it is confirmative under a condition: cloudberry and lingonberry survive over winter outdoors *only if* you make them into the jam.

9.2.4 Polar interrogatives including a modal verb²

The string **(could | should | might | would | ought | can | may)_{PRON}***** ?** yielded 11.379 matches, which were thinned via random selection to 250 examples. Here we discuss two: one positive and one negative.

Excerpt 75 (SR8V 1337-1339)

- 1.S0612: and like it's er the length of the house is where the seabed is and you're just like flying it was incredible and then
 2.S0428: **would you've done diving?**
 3.S0612: no no I couldn't do that I c- I couldn't do it because I'm scared that I'd kill myself as in I er accidentally burp or something and then something would happen

The women are talking about their experiences snorkelling in the Maldives when S0612 (no age specified) asks whether S0428 (27 years) would have liked to have tried scuba diving as well: *would you've done diving* is a neutral polar interrogative originating from the Not Knowing Whether position, directed towards the Believing position (suggested by the modal *would*).

This question can also be interpreted as a conditional question. However, unlike the previous examples, it seems to be a counterfactual, being expressed as a modal perfect: contrary to what has occurred, if you have been given the chance, would you have done diving?

S0612's answer *no no* (= I wouldn't have done diving) is in line with this directionality. Her subsequent explanation *because I'm scared that I'd kill myself* elaborates further on the specific beliefs that led her to reply in the negative.

Excerpt 76 (SCG7 106-110)

- 1.S0416: there's a guy called the ice man well that's his they they call him the ice man and he can he did he climbed up Mount Everest in his shorts
 2.S0417: like that's ridiculous
 3.S0416: yeah
 4.S0417: yeah that's silly **wouldn't he get frostbite?**
 5.S0416: no that's why they call him the ice man

² In this section no figure is included since any of them would be similar to Figure 8 as far as the epistemic origin (NKW) and destination (B) are concerned.

In this family conversation, a teenage boy (S0416, 12 years) is telling his mother (S0417, 45 years) about a man known as *the ice man* who apparently *climbed up Mount Everest in his shorts*.

His mother, listening with some incredulity, first simply comments (line 2), then (line 4) asks a confirmation-seeking negative polar interrogative, originating in the Believing position (= I believe that *he would get frostbite*) and directed to the interlocutor's Believing position, asking for his opinion.

The son's response (*no* =he wouldn't get frostbite), although Believed as expected, is non-compliant, in that instead of confirming his mother's supposition (= I believe that he would get frostbite) he contradicts her, justifying his negative response with a statement of fact, *that's why they call him the ice man*, originating from the Knowing position.

As a conditional question, S0417's request is made up of:

- an implicit hypothetical component: *if it were true that the ice man climbed up Mount Everest in his shorts*, plus
- a question component: *wouldn't he get frostbite?*

9.2.5 Polar interrogatives and tag questions including *do / don't you think*

The string **(who | where | what | when | why | which | how) * (do | do n*t) you think ***** ?** used above retrieved only positive uses of the *do you think* element, despite the syntax allowing for both *do* and *don't*.

We wanted to investigate some of the negative uses, and reduced the specificity of the search string to the tag element alone **(do | do n*t) you think ? </u>**. This returned 324 matches in 241 texts which were sorted manually to identify all and only the *do / don't you think* uncertain questions, two of which are discussed below.

Excerpt 77 (S78E 182-188)

- 1.S0198: I assume that's the road we're coming up or are we coming up this road?
- 2.S0229: I don't know
- 3.S0198: oh no that's not even a road **is it going to be to our left do you think?**
- 4.S0229: no no it might be
- 5.S0198: it's to our right is it?
- 6.S0229: might be
- 7.S0230: I can't remember I think it I can't remember

Three members of a family are in a car together, destined for an unspecified location. The adult daughter (27 years old, S0198) seems to be consulting a map, while the others confess their ignorance of where they are and even what direction they are going in.

In line 3, the daughter asks her parents which side of the road the location is to be found on, reinforcing her non neutral polar interrogative (Believing) with an additional *do you think?* at the end, oriented towards the interlocutors' Believing position.

Her 69-year-old father (S0229) offers a double answer: *no no* (Knowing position) to his daughter's statement *that's not even a road*, then *it might be* (Believing position) in response to her question. His uncertainty is seen to be absolute since in response to the alternative (*to our right?*, line 5), his response is identical.

His wife's (S0230) comment in the final line of the extract confirms that none of them can remember where the place is to be found.

Excerpt 78 (S6W8 1563-1570)

- 1.S0492: >> I don't like Sophia at all (.). I've noticed that coming back again seems to be people go really back to basics like Emma
- 2.S0496: yeah
- 3.S0492: >> and Sophie and Charlotte and Jessica and
- 4.S0493: **they're all quite posh though don't you think?**
- 5.S0492: oh I don't think they're posh I think they're just quite
- 6.S0493: >> one of those names that you
- 7.S0492: >> just really normal
- 8.S0493: very English

We encountered this conversation in Chapter 6 on tag questions, where we investigated its epistemic design. Three adult siblings (30-33 years old) are here discussing their opinions and preferences with regard to girls' names, some of which they dismiss as *pretentious* or *posh*, others as *just normal*.

In line 4, the youngest contradicts her sister who has just implied that names like Sophie, Charlotte and Jessica are basic names, on a par with Emma. The tag question *don't you think* concluding her affirmation that *they're all quite posh though* turns the statement into a Belief, seeking confirmation from her interlocutor's Believing position.

Her older sister, however, does not cooperate as anticipated, i.e., by agreeing, but instead defends her initial affirmation (line 1) by adding *Oh I don't think they're posh...* (line 5) which is however still located in the

Believing pole, given the presence of *I don't think*. This is an example of epistemic alignment with content disagreement.

In other words, from an epistemic stance perspective S0492's answer aligns with S0493's question (since it comes from the same epistemic position toward which S0493's question is addressed), but from a social action perspective it is a dis-preferred answer (Pomerantz 1984a). Indeed, before asking for S0492's opinion, S0493 presents his own evaluation, seeking agreement.

Furthermore, S0492's disagreement is not only explicit but also strengthened: she does not limit herself to simply reply with *I do not think...*, she also adds *I think they are just quite* (line 5) as well as *just really normal* (line 7) (Figure 13).

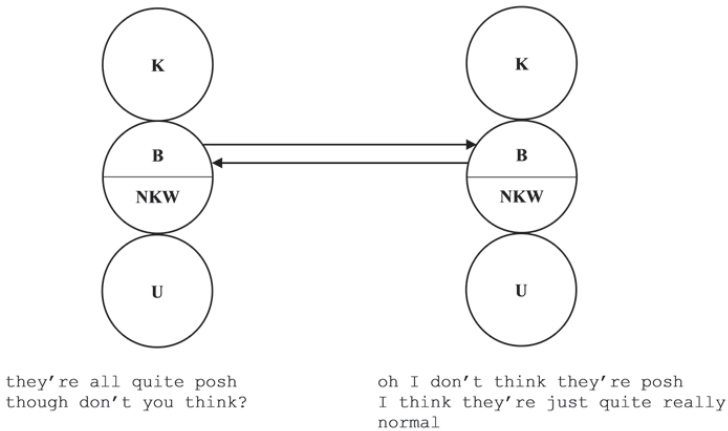


Figure 13. S0493's tag questions and S0492's answers (lines 5 and 7): epistemic alignment but content disagreement

9.2.6 Tag questions including a modal verb

The string (can | could | may | might | should | would | ought to)_{PRON} _({VERB})? \? returned 2295 matches, which were thinned via random selection to 250 examples.

Excerpt 79 (SNG4 1568-1571)

- 1.S0258: erm but my mother-in-law always used to for my birthday she'd like spend like say fifty pound on new books for me on Amazon
- 2.S0255: mm
- 3.S0258: **and like no one can buy you books any more can they?**
- 4.S0255: no

Two female graduates are at a book club, and their conversation deals with weighing up the pros and cons of paper vs e-books.

The younger of the two (S0258, 31 years) comments on the fact that although she used to receive book vouchers as birthday presents, the practice of choosing books to give as presents seems to have disappeared: *no one can buy you books any more can they?*

This tag question with the modal verb *can* communicates the speaker's supposition, i.e., it originates in the Believing position and is confirmation-seeking, anticipating a confirmatory Belief in response, which is precisely what S0255 (48 years) provides.

Excerpt 80 (S3AC 123-126)

- 1.S0423: is it out now?
- 2.S0421: yeah
- 3.S0423: **yeah it might be interesting that mightn't it?**
- 4.S0421: yeah

A father (50 years) and daughter (18 years) are discussing the recent release of the new Sherlock Holmes DVD.

The father (S0423) first asks a simple polar interrogative (*is it out now?*, line 1), then asks a follow-up tag question with the modal verb *might*. This negative tag question implies a supposition, although the weak modal *might* lessens its commitment.

His daughter replies with a simple *yeah* (= it might be interesting), mirroring the level of commitment suggested by her father's question.

9.2.7 Declarative questions including a modal verb

Given the evident syntactic similarities between declarative sentences and declarative questions, we extracted the former in two separate tranches, using one search string for the positive forms, and another—more restrictive than used elsewhere in this study—for the negative forms.

The positive forms were obtained via the search string `_ {STOP} _ {PRON} (could | should | might | would | ought | can | may) _ {VERB} **** \?`, while the negatives were located using the string `_ {STOP} _ {PRON} (could n*t | should n*t | might n*t | would n*t | ought n*t | can*n*t | cannot | may n*t) _ {VERB} **** \?`

As before, these were examined manually and irrelevant examples (i.e., declarative sentences) eliminated. Here we discuss one positive and one negative example.

Excerpt 81 (SNPA 714-716)

- 1.S0330: I would struggle to
 2.S0326: **you'd struggle?**
 3.S0330: yeah I think it would be hard

A group of friends (age range: 20-31) have been telling anecdotes and one of the group (male, 31 years) states that *it would be fun to go and collect something to eat wouldn't it?*

The conversation then addresses hypothetically stealing a baby pig to eat as roast suckling pig and inevitably addresses the need to slaughter the pig. The tone of this part of the conversation is decidedly ironic and jokey.

When S0330 (female, 26 years) states that she *would struggle* (to kill a pig), one of her friends (S0326, 20 years) echoes this statement as a declarative question *you'd struggle?* It seems to communicate incredulity, possibly irony, in the sense that *struggle* is understood as something of an understatement. It originates in the Believing position because of the question design, a position reinforced by the presence of modal *would*, and is addressed to the interlocutor's Believing position.

S0330 agrees in response (*yeah* = I'd struggle), then continues with a statement also coming from the Believing position *I think it would be hard*.

Excerpt 82 (SLBS 1356-1359)

- 1.S0144: well if I wasn't doing this recording I would just go in and stick some music on and go in my cave
 2.S0024: **what? you wouldn't be talking to me?**
 3.S0144: no
 4.S0024: >> that's really mean

In this extract, a cohabiting couple (both 36 years) are on the verge of an argument, caused by the recording (the surrounding context suggests that it is a real argument, not leg-pulling).

In line 1, S0144 states that he would rather be elsewhere, alone, and that the only reason he is talking to his partner is so that the recording can be completed.

Her initial response (*what?*) is one of incredulity (communicating disbelief that her partner has just said the words he did), swiftly followed by a negative (modalised) declarative question originating in the Believing position and directed towards the same position.

Her question is a conditional, where the hypothetical component is given by the counterfactual scenario hypothesized by S0144 (*if I wasn't doing this recording...*).

No (= I wouldn't be talking to you, Believing position) is S0144's abrupt response, which overlaps with S0024's follow-up *that's really mean* (Knowing position).

9.3 Conclusions

In Chapters 3-7 we have seen that questions can come from either the Unknowing or the Uncertain position, either the Not Knowing Whether or the Believing pole.

In the present chapter, we have shown that both unknowing and uncertain questions can be directed not only to the respondent's Knowing position, but also to their Uncertain position, thanks to the inclusion of a modal verb and/or an epistemic verb such as *to think*.

The 23 excerpts we have analysed in this chapter share one and the same interesting feature: they are all directed toward the Believing pole of the Uncertain position; in other words, none of them are directed toward the Not Knowing Whether pole.

From this observation, as well as from the practical impossibility of finding any invented *ad hoc* examples of questions directed at the Not Knowing Whether pole, we argue that questions cannot be addressed to all of the possible epistemic positions. The five question types examined in this book have been found to be addressed either toward the Knowing or toward the Believing positions, i.e., toward a respondent who is either expected to know the answer, or to advance a supposition or to express an opinion, and so on.

As a consequence, the expected answer can come from one of two possible positions: either the Knowing or the Believing; the latter coming into play in that it concerns what the respondent *believes*, not what s/he *knows*.

PART 3

MORE ON UNCERTAIN QUESTIONS

Given its relevance, the Uncertain position is investigated in Part 3 in relation to types of questions different from the five treated in Part 2, i.e., *dubitative* and *rhetorical* questions (Chapters 10 and 11, respectively).

Chapter 12 shows how to perform a *quantitative* analysis of the interlocutors' epistemic positions in a dialogue on the basis of its previous *qualitative* analysis. The Known, Unknown and Uncertain are quantified insofar as both the *epistemic origin* and *destination* of their words are concerned.

CHAPTER 10

DUBITATIVE QUESTIONS¹

10.1 Introduction

Dubitative questions are those polar questions (polar interrogatives, tag and declarative questions) which include a lexical marker of doubt/uncertainty, for example the adverb *maybe* (Stivers and Enfield 2010).

The topic focused on in the present chapter is the relationship between such questions and the epistemic positions those questions come from.

The analysis of this relationship inevitably leads us to take into consideration alternative and wh-questions as well.

10.1.1 Point 7 of the coding scheme

In Chapter 2, section 2.1.1, we said that one of the principal reference frameworks of the present book is Stivers, Enfield and Levinson's (2010) cross-linguistic study on the pragmatics of questions and their responses in everyday conversations in ten different languages.

We also mentioned the *coding scheme* that the team of ten researchers, each working on a different language, developed and used for coding 350 question-response sequences, each in their own language-specific corpus.

The details of the coding scheme, including explanations of each coding category, are described in Stivers and Enfield (2010).

In Part 1 we mostly used this coding scheme in order to define the different question types under analysis in those chapters.

The topic that most interests us, and from which we take our cue for the present chapter, is of secondary importance in the coding scheme, but is, in our view, of great theoretical importance from an epistemic perspective; it

¹ Section 10.7 of the present chapter reproduces almost entirely section 9 of the following paper: Riccioni, Ilaria, Ramona Bongelli Gill Philip, and Andrzej Zuczkowski. 2018. "Dubitative questions and epistemic stance." *Lingua* 207: 71-95. We thank the publishers for permission to reprint that section in this manuscript as well as some other portions of that paper.

falls within the section of the coding scheme devoted to polar questions (Stivers and Enfield 2010: 2622, points 5-8).

What attracted our attention was point 7, which asks the researcher, who has already coded a polar question in his/her own corpus, to consider the following aspect:

(7) *Is the polar question dubitative (“Maybe”) marked?*

0=No

1=Yes

9=N/A (non-polar questions)

Among polar questions, if the question had a marker of doubt/uncertainty in it (e.g., “I wonder if”) then it was coded as dubitative. (This appears to be a grammaticalized way to do polar questions in some languages) (Stivers and Enfield 2010: 2622).

The example, the expressions “maybe” and “I wonder if” given in the above quotation seem to indicate that the authors are referring to *lexical* markers of doubt/uncertainty (from here on abbreviated to ULM, Uncertainty Lexical Marker), and that both direct (“maybe”) and indirect (“I wonder if”) questions are taken into account.²

In other words, as we understand it, a *direct* polar question seems to be coded as dubitative when it includes a ULM, for example the adverb “maybe”; an *indirect* polar question seems to be coded as dubitative when it is introduced by a ULM such as the verbal expression “I wonder if”. In short, polar questions seem to be coded as dubitative when they include a ULM, independently of whether they are direct or indirect.

10.1.2 Polar interrogatives

What is said in parenthesis at the end of the text cited in the previous section (i.e., “This appears to be a grammaticalized way to do polar questions in some languages”, Stivers and Enfield 2010: 2622) leads us to assume that, at least in some languages, for example Tzeltal, a Mayan language (Brown 2010), speakers *must* use this “grammaticalized way” in order to make polar questions.

In other words, they are thus constrained by the rules of their grammar, which provides for that particular *question design*. Of course, this is not the case in English and in many other languages, including French, German, Spanish, and Italian, where, differently from Tzeltal, a question does not require the presence of a ULM in order to be polar.

² When referring to questions, we use “indirect” as synonymous with “embedded”.

Let us consider “polar interrogatives”, a sub-type of polar questions: in order to formulate a polar interrogative, English speakers need only say, e.g., “Is it snowing outside?” (Chapter 5, section 5.2.1), without any need for an additional dubitative adverb such as *maybe*, since English grammar envisages a *morphosyntactic* design (subject-verb inversion, rising intonation) which is the *basic* way of forming polar interrogatives.

English speakers may also say “Is it *maybe* snowing outside?”, i.e., they may choose to add a ULM to the basic morphosyntactic design.

In other words, polar interrogatives *may* include a ULM, but *does not have to*: the presence of a ULM is not obligatory, but is still available as an optional element.

It is precisely this point that requires further investigation from an epistemic perspective: why is it that in English and in many other languages, polar questions allow for the presence of a ULM, while other question types do not?

10.1.3 Wh- and alternative questions

It is worth drawing attention to the fact that point 7 of Stivers and Enfield’s coding scheme is limited to polar questions (interrogatives, tags, declaratives): it is not extended to wh- and alternative questions.

In other words, point 7 and the coding scheme as a whole seem to assume that only polar questions can be dubitative, i.e., include a ULM, while wh- and alternative questions cannot.

If this is indeed the case, what explanation can we put forward?

As an initial quick answer, we can use Stivers and Enfield’s dubitative example expressions *maybe* and *I wonder if* as linguistic tests by adding them to plain wh-questions, e.g., “What is the weather like outside?”.

What emerges is that, in normal contexts, we can say neither

* What is *maybe* the weather like outside?

nor

* *I wonder if* what the weather is like outside.

So, the problem is to uncover why, from an epistemic perspective, wh-questions cannot be dubitative.

If we apply the same two tests to an alternative question like “Were you drunk or were you sober?” (Chapter 4, section 4.1), we have “*I wonder if* you were drunk or you were sober” and, among other possibilities, “Were you *maybe* drunk or were you sober?”.

Both indirect and direct questions are possible, in plausible contexts.

Thus, although the coding scheme seems to establish that only polar questions can be dubitative, alternative questions also have the potential to be so. Again, our interest lies in understanding why this should be the case.

10.1.4 Are dubitative questions more uncertain than plain questions?

Another related aspect concerns only dubitative questions (the group of polar question types and alternative questions): speakers can say both “Is it snowing outside?” and “Is it *maybe* snowing outside?”

The problem is to ascertain whether there is any epistemic difference between these two questions, i.e., between the “dubitative” question (with *maybe*) and its “plain” equivalent (without *maybe*).³

Specifically, we are interested in uncovering whether the presence or absence of a ULM in polar interrogatives, tag, declarative and alternative questions changes anything in the questioners’ commitment, by enhancing or reducing uncertainty.

Put more simply: does a “dubitative” question express greater uncertainty than its corresponding “plain” question?

To the best of our knowledge, these three problems have not yet been addressed with specific reference to epistemic stance.

10.2 Research questions

The present chapter aims to address the aforementioned and intertwined problems from the perspective of the KUB model. In particular, it asks:

- (1) why polar and alternative questions may include a ULM, i.e., may be dubitative;
- (2) why wh-questions cannot;
- (3) what empirical evidence can support the claim that both polar and alternative questions may be dubitative while wh-questions cannot;
- (4) whether the presence of a ULM in polar and alternative questions indicates a different epistemic commitment compared to that expressed in the corresponding plain questions and, if so, what changes can be identified.

³ From here on, questions without a ULM like “Is it snowing outside?” will be called *plain* questions while those with a ULM like “Is it *maybe* snowing outside?” (or like “*I wonder if* it is snowing outside” in the corresponding indirect form) will be called *dubitative* questions.

10.3 Why alternative and polar questions may be dubitative but wh-questions cannot

The answer to research questions 1 and 2 (why polar and alternative questions may include a ULM while wh-questions cannot) was indirectly given in Part 1 where we made the distinction between the questioner's *lack of information*, i.e., lack of knowledge, on the one hand, and *lack of certainty* regarding the information, on the other.

We have seen that different types of question design express either a lack of knowledge (= un-knowledge) or a lack of certainty (= uncertainty). Wh-questions convey a lack of knowledge concerning a wh-word. In this sense, wh-questions are *unknowing questions*, i.e., they come from a specific epistemic stance that represents the questioner's *Unknowing position*.

For this reason, we argue that they cannot include a ULM.

In contrast, polar interrogatives, tag, declarative and alternative questions express a lack of certainty concerning the truthfulness of a proposition; alternative questions do so with regard to (at least) two such propositions.

In this sense, they are *uncertain questions*, i.e., they come from an epistemic stance that represents the questioner's *Uncertain position*. Their epistemic design is already uncertain at the morphosyntactic level, as can be appreciated from their plain question forms.

It is for this reason that we claim they do not need a ULM in order to communicate uncertainty.

This is also why, in principle, they may include it, since ULMs are perfectly compatible with the uncertainty already encoded in the plain question forms.

10.4 Methodology

The initial explanation given above, which offers a general picture as to why polar and alternative questions may include a ULM while wh-questions cannot (research questions 1 and 2), will be tested in greater detail over the next six sections in the following way.

Stivers and Enfield's dubitative example expressions *maybe* and *I wonder if* will be used as "linguistic tests" (section 10.1.3 above) and systematically applied to the examples taken from the Spoken BNC2014 in Part 1 and treated as canonical, i.e., representative of the five question types under analysis (*How much did you drink a day?* / *Shall I put the kettle on or would you prefer coffee?* and so on).

In order to answer research question 3 (what empirical evidence can support the claim that polar and alternative questions may be dubitative while wh-questions cannot), an additional corpus-based study of the use of *maybe* and *I wonder if* in the five question types is presented.

To answer research question 4 (what effect the presence of a ULM in polar and alternative questions has on the questioners' epistemic commitment), plain questions are compared with their corresponding dubitative ones.

10.5 *Dubitative wh-questions

The problem of whether wh-questions may be dubitative was touched upon in section 10.1.3 and the answer was negative (*“What is *maybe* the weather like outside?”).

In Chapter 3, it was shown that wh-questions come from the Unknowing position, and it is for this reason that they cannot be dubitative.

In fact, if we apply the *maybe* test to the wh-question

- (1) *how much did you drink a day?*

that S0109 asks S0052 (Chapter 3, section 3.2.2), we have, in principle, five possible dubitative versions, none of which is grammatically acceptable, irrespective of where *maybe* is inserted:

- (1a) **maybe* how much did you drink a day?
- (1b) *how much *maybe* did you drink a day?
- (1c) *how much did you *maybe* drink a day?
- (1d) *how much did you drink *maybe* a day?
- (1e) *how much did you drink a day *maybe*?

As seen in Chapter 3, this can be explained by reference to the function of wh-questions, i.e., that they “ask for specification of an unknown element” (Biber et al. 1999: 208).

In the example question, the questioner S0109 indicates clearly via her syntax that she is certain that S0052 used to drink a given amount of water a day, but she is ignorant of the precise amount.

Modalising such a question would be incongruous, since it would reframe the definite but unspecified element (the amount) as indefinite or uncertain, thus undermining the communicative intention of the question.

The application of the *I wonder if* test also results in an unacceptable sentence:

**I wonder if* how much you drank a day

If, on the contrary, we add only *I wonder*, the resulting indirect question is acceptable:

I wonder how much you drank a day

The linguistic behaviour of the two expressions *I wonder* and *I wonder if* is similar to that of *I do not know* and *I do not know whether*, respectively (Chapter 4, section 4.8.2). The former expressions (*I wonder* and *I do not know*) suit only wh-questions, while the latter (*I wonder if* and *I do not know whether*) suit only polar and alternative questions.

Thus, Stivers and Enfield (2010) are correct in not extending point 7 of their coding scheme to wh-questions. They cannot be made dubitative, i.e., they cannot admit the presence of a ULM, because they come from the *Unknown* position, not the *Uncertain*.

As said in Chapter 4, section 4.8.2, wh-questions do not refer to questioners' uncertainty between two alternatives, but to their ignorance, i.e., their "non-knowledge", with regards to a particular piece of information which is known to exist: the wh-word acts as a pro-form for that information.

Everything is known, certain, except for one element, leaving one piece of the questioner's cognitive jigsaw missing: in the example provided, this is *how much* S0052 used to drink.

The unknown element cannot be cast into doubt, because it is presupposed to be true (i.e., S0052 used to drink a given amount), rather than merely possible, or uncertain (maybe S0052 used to drink a given amount, maybe she did not).

For this reason, wh-questions cannot include a ULM. The definite but unspecified element marked by the wh-word allows for no uncertainty, only "un-knowledge".

10.6 Plain uncertain questions and corresponding dubitative forms: which are more uncertain?

In the following four sections, the *maybe* and *I wonder if* tests are applied to all four types of questions that come from the *Uncertain* position to show that, for this reason, they can admit a ULM.

The further aim is to uncover any changes in the questioner's epistemic commitment when using such questions, in comparison with their corresponding plain questions.

Concerning this latter aim, it is plausible to advance two hypotheses.

The first is that the insertion of *maybe* would neither enhance nor diminish the degree of uncertainty: the plain question is already uncertain at the morphosyntactic level, so the adverb would be superfluous, redundant. The presence of a ULM would therefore have no epistemic weight in such questions, plain and corresponding dubitative questions being equally uncertain to the same degree.

The second hypothesis is that adding *maybe* would increase the uncertainty: one morphosyntactic marker of uncertainty (the plain question) plus one lexical marker of uncertainty (the adverb *maybe*) would “double” the uncertainty, thus making the dubitative versions more uncertain than the plain questions.

Sections 10.6.1-10.6.4 give a negative answer to the first hypothesis: the questioner’s commitment is not indifferent to the presence of *maybe*.

Moreover, as regards the second hypothesis, it is shown that, while tag and declarative questions, both of which come from the B pole, indeed become *more uncertain*, alternative questions and polar interrogatives, which instead come from the NKW pole, become, paradoxically, *less uncertain*.

10.6.1 Dubitative alternative questions

Stivers and Enfield (2010) make no mention of “dubitative alternative questions” in their description of alternative questions, although they do in principle exist (section 10.1.3 above).⁴

Alternative questions admit the presence of a ULM, because their morphosyntactic design is already uncertain.

Indeed, if we apply the *I wonder if* test to the question

(2) *shall I put the kettle on or would you prefer coffee?*

that S0018 asks S0049 (Chapter 4, section 4.8.1), we have an acceptable sentence:

I wonder if I shall put the kettle on or *if* you would prefer coffee

If we apply the *maybe* test, we achieve the following acceptable dubitative questions:

⁴ We presume that none were present in their data, thus giving no reason to mention them in their coding scheme.

- (2a) shall I *maybe* put the kettle on or would you prefer coffee?
- (2b) shall I put the kettle on *maybe* or would you prefer coffee?
- (2c) shall I put the kettle on or would you *maybe* prefer coffee?
- (2d) shall I put the kettle on or would you prefer coffee *maybe*?

In these examples, we see that *maybe* can occur in medial or clause-final position, in either one of the two clauses.⁵ These positions affect the meaning. In (2a) and (2c) the medial position restricts the scope of *maybe* to the verb immediately following it, while in (2b) and (2d) *maybe* in clause-final position extends over the entire clause to which it belongs.

It must be stressed, however, that it does not range over the complete, dual-clause proposition (alternative questions being composed of two juxtaposed clauses): the presence of coordinating *or* blocks the extension of the modal meaning beyond the clause in which it occurs.

From an epistemic perspective, some differences emerge between the plain alternative question and its dubitative versions.

In the first place, the addition of *maybe* to either one of the alternatives converts it into a *supposition*. This seems to have the function of conveying to the interlocutor that, between the alternatives p_1 and p_2 , the questioner is inclined to believe that the modalised one is more likely than the other.

In other words, the addition of *maybe* allows the speaker to indicate a preference for one of the two options proposed and encourages the interlocutor to favour the alternative that has been framed as dubitative.

Plain alternative questions come from the Not Knowing Whether pole, where the degree of uncertainty between the two alternatives is in perfect equilibrium (Chapter 4, section 4.8.1). The addition of *maybe* upsets this balance by favouring the modalised alternative.

In S0018's plain question, p_1 and p_2 are equally possible: when *maybe* is added, the modalised alternative has more probability of being true than the other.

Contrary therefore to the hypothesis that the addition of a ULM like *maybe* to a plain alternative question would increase its degree of uncertainty, modalised alternative questions seem to be *less uncertain* than their plain equivalents.

Since this may seem counter-intuitive, let us lay bare its mechanisms.

If the Not Knowing Whether pole (and the plain alternative questions coming from it) is understood as maximum uncertainty, the addition of

⁵ While the modality can be present in either of the two clauses, in medial or final position, it is worth noting that the placing of such stance adverbials in final position is typical of conversational English (Biber et al. 1999: 872).

maybe cannot increase that maximum (there can be no “more than maximum”!).

There is no further uncertainty beyond the Not Knowing Whether pole, i.e., beyond that side of the uncertain epistemic continuum which represents maximum uncertainty. It is here that the Unknowing position begins.

The presence of a ULM appears to push alternative questions from the Not Knowing Whether pole in the direction of the Believing pole where tag questions lie.

The questioner adds *maybe* to indicate a preference for the modalised alternative and, in doing so, his/her commitment shifts from equal probability towards unequal probability.

Simultaneously, his/her epistemic position is no longer one of maximum uncertainty, but of lower uncertainty (or greater certainty), and the function of the question is not so much information-seeking as it is confirmation-seeking (see Figure 1, section 10.6.4).

The expected answer, in turn, is no longer neutral but favours the modalised alternative over the non-modalised one.

10.6.2 Dubitative polar interrogatives

In sections 10.1.2 and 10.1.4 we saw that, in English, polar interrogatives (“Is it snowing outside?”) can be made dubitative (“Is it *maybe* snowing outside?”). Epistemically speaking, this is possible because they come from the questioner’s uncertain position.

Indeed, in section 10.3 we demonstrated that the epistemic design of polar interrogatives is already uncertain at the morphosyntactic level, i.e., even without the presence of a ULM.

For the same reason, they may admit a ULM, i.e., they can be made dubitative.

If we apply the *maybe* test to the *plain* polar interrogative

(3) *do you put it all in your diary?*

that S0315 asks S0255 (Chapter 5, section 5.8.1), we can make it *dubitative* in a number of ways, some of which are more acceptable than others:

(3a) *do you maybe put it all in your diary?*

(3b) *do you put it all in your diary maybe?*

The meanings that arise in (3a) and (3b) differ slightly depending on the position of *maybe* in the sentence.

As we explained in the previous section, the scope of some adverbials covers the entire proposition in a clause, while in others its range is restricted, focusing on one particular clause element (Biber et al. 1999: 775).

In (3a), medially-positioned *maybe* focuses the modality on the verb *put*. If placed in final position, as in (3b), its scope extends over the entire proposition, focusing on no clause element in particular.

It now remains to us to investigate what differences there are, from an epistemic perspective, between the plain polar interrogative (3) *do you put it all in your diary?* and its dubitative versions (3a) and (3b). The situation is similar to the one described in connection with dubitative alternative questions (section 10.6.1), at least as far as *neutral* polar interrogatives are concerned.

In S0315's plain polar interrogative *do you put it all in your diary?* (Chapter 5, section 5.7.5), when read neutrally (i.e., information seeking), both alternatives (the explicit *p*, *you put it all in your diary*, and the implicit *non p*, *you do not put it all in your diary*) are equally possible, have the same probability of being true. It is for this reason that it is information-seeking: S0315's expectations are neutral with respect to a *yes* or a *no* response.

The addition of *maybe* turns the explicit *p* into a supposition (*maybe* you put it all in your diary), i.e., gives it more probability of being true. As a result, *p* and *non p*, which in S0315's plain question were equally possible, are no longer *equally possible* in the modalised question. The dubitative question design conveys that the modalised alternative (do you *maybe* put it all in your diary?) is *more likely* to be true than the plain, i.e., non modalised, question (*do you put it all in your diary?*).

As we saw in section 10.6.1 in relation to alternative questions, the addition of a ULM to a plain polar interrogative seems not to add further uncertainty, but to diminish it (i.e., to add *certainty* instead). Like alternative questions, plain polar interrogatives come from the Not Knowing Whether pole where uncertainty is maximal (50%-50%). We have already explained (section 10.6.1) that it is impossible to go beyond "maximum", so the addition of *maybe* cannot have that function. Instead—perhaps unexpectedly—it does the opposite, i.e., it reduces maximum uncertainty for the lexicalised alternative, presenting it as somewhat more likely than its implicit counterpart.

When a speaker's epistemic stance shifts from maximally uncertain between two alternatives towards a slight preference in favour of one of them, it moves towards the Believing pole (see Figure 1, section 10.6.4).

Thus, it appears to be the case that the presence of a ULM in a polar interrogative (as in alternative questions) confers upon it some of the features normally associated with tag questions: the implied higher

likelihood of the modalised proposition converts the question from a purely information-seeking one into one that is confirmation-seeking.

Indeed, the expected response to (3a) and (3b) is more in favour of a *yes* than of a *no*. Questioners' expectations are no longer neutral as they would be in plain polar interrogatives.

As far as the *I wonder if* test is concerned, its application to example (3) also gives an acceptable sentence:

I wonder if you put it all in your diary (or not)

What remains for us to ascertain is whether *maybe* adds uncertainty to *non-neutral* polar interrogatives as well, specifically to *do you put it all in your diary?* read as non-neutral and confirmation seeking.

In Chapter 5, we saw that the design of those polar interrogatives which are read as non-neutral and confirmation seeking conveys that, between the possible alternatives *p* (*you put it all in your diary*) and *non p* (*you don't put it all in your diary*), the questioner S0315 is inclined to believe that the lexicalised alternative is the more likely of the two, i.e., that the respondent S0255 puts it all in her diary; S0315 is asking for confirmation of her own supposition.

Perhaps unexpectedly, the addition of *maybe* (e.g., “Do you *maybe* put it all in your diary?”, or “Do you put it all in your diary *maybe*?”) mitigates the supposition, making it somewhat less probable.

In other words, whereas the addition of the adverb to neutral polar interrogatives and alternative questions *lowers* the degree of uncertainty, in non-neutral polar interrogatives such an addition *raises* it, as we will see also happens in dubitative tag and declarative questions.

From an epistemic perspective, the difference between the plain non-neutral polar interrogative *do you put it all in your diary?* and its corresponding dubitative version *do you put it all in your diary maybe?* is that the latter, due to the mitigating, hedging function of *maybe*, is shifted towards the Not Knowing Whether pole, thus becoming less probable than its corresponding plain version: the questioner's commitment towards the lexicalised alternative is now more uncertain (see Figure 1, section 10.6.4).

10.6.3 Dubitative tag questions

Tag questions may admit a ULM, but only within the declarative component, i.e., the part of the question where the speaker indicates his/her certainty or uncertainty. Modalising the tag component would invalidate its

primary function, which is to elicit confirmation or agreement of the semantic content of the superordinate clause to which it is attached (Biber et al. 1999: 208).

If we apply the *maybe* test to example

(4) *that's not very fair is it?* (Chapter 6, section 6.2.2),

we have for instance

(4a) *that's maybe not very fair is it?*

(4b) *that's not very fair maybe is it?*

which are acceptable dubitative tag questions. Since the declarative component is a plain assertion, it can be made dubitative.

Both examples 4a and 4b admit *maybe*, since such questions come from the Uncertain position and their design is already uncertain at the morphosyntactic level.

As discussed in Chapter 6, the elements described by Stivers and Enfield (2010) as “tag elements” do not belong to a single grammatical class. Tag questions proper echo the main verb of the clause that they are attached to, e.g., *that's not very fair is it?* Also included amongst Stivers and Enfield's tag elements is a very different form, in which the tag element features an introductory verb: *don't you think?*—just like we find here in example (5). The structural differences between these different kinds of tag elements influence the capacity for tags to be modalised, for example in

(5) *they're all quite posh don't you think ?* (Chapter 6, section 6.4.2),

where we have:

(5a) *they're maybe all quite posh don't you think?*

(5b) *they're all maybe quite posh, don't you think?*

(5c) *they're all quite posh maybe, don't you think?*

All three examples (5a)-(5c) can admit *maybe*, since such questions come from the Uncertain position and their design is already uncertain at the morphosyntactic level, although it should be stressed that the presence of the full-set quantifier *all* interferes with the uncertainty that *maybe* introduces to the proposition (it would be more natural to omit *all* if *maybe* is present).

If we apply the *I wonder if* test to the declarative component of the examples (4) and (5) we have two acceptable sentences:

I wonder if that's not very fair
I wonder if they're all quite posh

What remains for us to ascertain is whether *maybe* adds uncertainty to the plain question.

In Chapter 6 we saw that the design of tag questions conveys that, between the possible alternatives *p* (*that's very fair / they're all quite posh*) and *non p* (*that's not very fair / they're not all quite posh*), the questioner is inclined to believe that the lexicalised alternative, independently of polarity, is the more likely of the two.

The addition of *maybe* (*that's maybe not very fair is it? / they're maybe all quite posh don't you think?*) mitigates the supposition, making it somewhat less probable.

Thus, whereas the addition of the modal adverb to alternative questions and neutral polar interrogatives *lowers* the degree of uncertainty (sections 10.6.1 and 10.6.2), in tag questions such an addition appears to *raise* it, as we have just seen happen in non-neutral polar interrogatives.

From an epistemic perspective, the difference between the plain tag questions (4) and (5) and their corresponding dubitative versions (4a-4b and 5a-5c) is that the latter, due to the mitigating, hedging function of *maybe*, are shifted towards the Not Knowing Whether pole, thus becoming less probable than their corresponding plain versions: the questioners' commitment towards the lexicalised alternative is now more uncertain (see Figure 1, section 10.6.4).

10.6.4 Dubitative declarative questions

We saw in Chapter 7, section 7.2.2., that a declarative question like

(6) *you don't ring them?*

has the morphosyntactic structure of an assertion. Both the assertion and the declarative question can be made dubitative with the addition of *maybe*, so we can have some dubitative versions of *you don't ring them?*, such as:

- (6a) *maybe you don't ring them?*
- (6b) *you maybe don't ring them?*
- (6c) *you don't ring them maybe?*

In examples (6a)-(6c), we see *maybe* in initial, medial and final positions respectively.

As already mentioned, the scope of medial *maybe* (6b) is restricted to its nearest neighbour (here the main verb *ring*), while final *maybe* (6c) extends back over the entire clause in which it occurs, modalising it retrospectively.

Initial position *maybe* (6a) has a similarly extended scope, but its clause-initial position also adds prominence (as do all cases of fronting in English), the uncertainty being expressed before—and therefore framing—the proposition.

The question *you don't ring them?* comes from the farthest part of the Believing pole. For this reason, it can admit *maybe*.

The *I wonder if* test can also be applied successfully:

I wonder if you don't ring them

It is interesting to examine, from an epistemic perspective, what difference there is, if any, between the plain declarative question *you don't ring them?* and its dubitative versions, for instance *maybe you don't ring them?*

As stated in Chapter 7, section 7.2.2, the design of the plain declarative question conveys that the questioner S0541 is *almost completely* certain that the addressee S0540 *doesn't ring them*: “almost completely” means that his degree of uncertainty is minimal. It is precisely this minimal uncertainty that differentiates the question from its corresponding assertion and turns it into a strong assumption, i.e., that S0540 *doesn't ring them*.

For these reasons, in our view, adding *maybe* to the plain declarative question lowers its high degree of certainty and, at the same time, raises its minimal level of uncertainty.

In other words, *maybe* changes the proportion of certainty and uncertainty, demoting the epistemic rank of the declarative question to that expressed by a tag question.

The questioner's epistemic commitment changes: *maybe* undermines the status of the declarative question and alters its position along the uncertain epistemic continuum (see Figure 1): from the Believing pole the declarative question moves towards the Not Knowing Whether pole, i.e., towards the place where tag questions are situated.

In comparison with the corresponding plain question, in the dubitative version the questioner's commitment towards the lexicalised alternative shifts from more probable to less probable.

In the “plain” forms of declarative and tag questions, the proportion of certainty is almost maximal and that of uncertainty minimal. Adding the

stance adverb reduces the certainty and correspondingly increases the uncertainty.

In many respects, this is not surprising, since it is widely understood that modalising adverbs have a mitigating, hedging function.

What is important to note, however, is that adding *maybe* does not always enhance uncertainty: in some cases, it actually enhances certainty, i.e., the directionality is reversed.

We have already seen that this happens when *maybe* is added to alternative questions and neutral polar interrogatives. Here, *maybe* has the unexpected effect of lowering their degree of uncertainty, and correspondingly introducing a minimal degree of certainty, which can be understood as expressing a preference for the modalised alternative.

Figure 1 summarises the main points made in this chapter, as a result of the application of Stivers and Enfield's linguistic tests *maybe* and *I wonder if* and of the comparison between plain and corresponding dubitative questions.

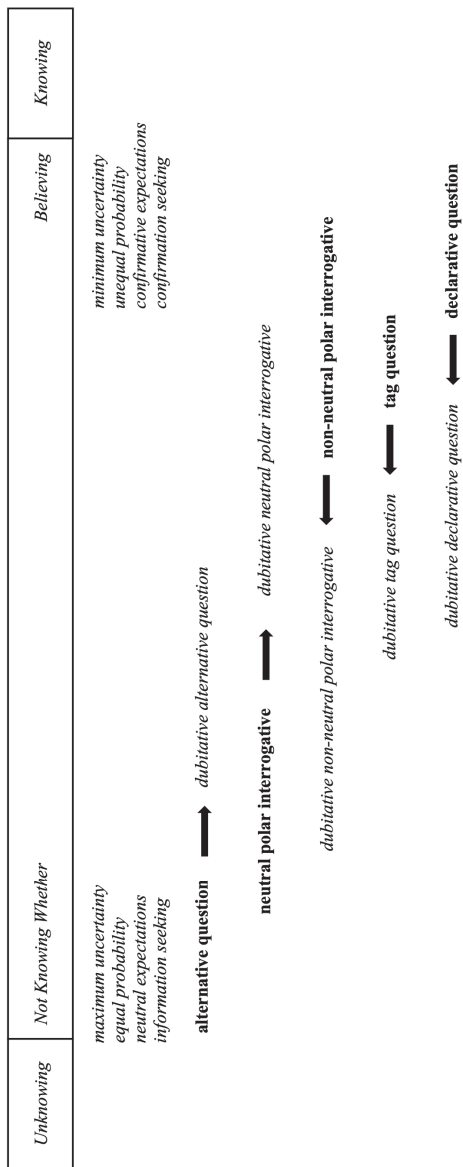


Figure 1. Dubitative questions: alternative questions and neutral polar interrogatives shift from left to right while non-neutral polar interrogatives, tag and declarative questions shift from right to left

10.7 Corpus-based evidence

The claim that polar and alternative questions can be dubitative, while *wh*-questions cannot, finds support in spoken corpus data.

To address the particular arguments being advanced, we investigated the use of *I wonder if / I wonder whether* and *maybe* in these question types again using the Spoken BNC2014 so that the theoretical points raised could be tested against authentic language data and subjected to quantitative analysis. Since the corpus analysed by Stivers (2010) is not available to other researchers, some alternative data set was by necessity required.

Both because one of the authors of the present book is a native speaker of British English and because no emphasis was made by Stivers as to any peculiarly American features of her data, we cannot consider this difference to be significant.

Moreover, our aim was not to compare and contrast British/American forms but rather to test how markers of uncertainty affect the epistemic value of question forms, which were not addressed in Stivers' study. This subsection presents the findings from this corpus-based study.

10.7.1 *I wonder if / whether*

In order to identify the distribution of *I wonder if / I wonder whether* in such question types, we queried the data set with the simple search strings *I wonder if* and *I wonder whether*.

Since *I wonder if / whether* are among the most widely-used formulae introducing indirect questions, it was expected that a high number of such indirect questions would be found in the corpus.

Indeed, the query returned 390 matches in 265 different conversations for *I wonder if* and 24 matches in 22 different conversations for *I wonder whether*.

Out of 390 occurrences of *I wonder if*, 18 were found in indirect alternative questions; the remaining occurrences were found in indirect polar interrogatives.

It is important to note that the combination of *I wonder if / whether* and interrogative pronouns (*why, where, when, who, what, which, how*) was wholly absent in the data.

These results confirm the hypothesis underlying research question 3 as regards *I wonder if / whether*; the case of *maybe* is more complex and is discussed separately.

10.7.2 *Maybe*

Searching corpora for patterns featuring *maybe* requires some skill, since the word is extremely common and not normally associated with interrogative sentences.

To identify the distribution of *maybe* as a dubitative marker in the above mentioned question types, we used regular expressions to formulate the search string. The string **maybe *****_{S} </u>** allowed us to extract all occurrences of *maybe* to be found within 7 words of a punctuation boundary and change of speaker turn.

This query returned 376 matches in 287 different conversations. All the occurrences were manually analysed by the authors to (a) remove those occurrences in which *maybe* was not associated with a question and (b) classify the different question types.

The inter-observer agreement (Cohen's Kappa coefficient) was 0.82, indicating an almost perfect agreement.

Of the initial return of 376 occurrences, the number of examples classified as questions including *maybe* was 192 (Table 1). Frequency data analysis was performed using the SPSS software package.

Table 1. Frequency and percentage of question types including *maybe*

Question types	Frequency	%
Alternative questions	12	6.3
Polar interrogatives	33	17.2
Tag questions	11	5.7
Declarative questions	84	43.8
Unclassified questions*	52	27.1
Tot.	192	100.0

*The label "unclassified questions" refers to questions with an implicit auxiliary or missing main verb: the absence of the verb makes it impossible to reconstruct the syntax, specifically to ascertain whether there is subject-verb inversion. As a result, the question cannot be reliably construed as polar interrogative or declarative

Specifically, almost half (43.8%) of the 192 *maybe* questions are declarative questions; 17.2% are polar interrogatives, 6.3% are alternative questions and 5.7% are tag questions. No *wh*-questions including *maybe* were identified (Figure 2).

After taking into consideration the unclassified questions (27.1%), which can be either polar interrogatives or declarative questions (but not tag-questions or alternative questions, which are easily identified by their

syntactic form), we end up with 88.1% of questions including *maybe* being declarative and/or polar interrogatives (43.8% declarative questions + 17.2% polar interrogatives + 27.1% unclassified questions = 88.1%).

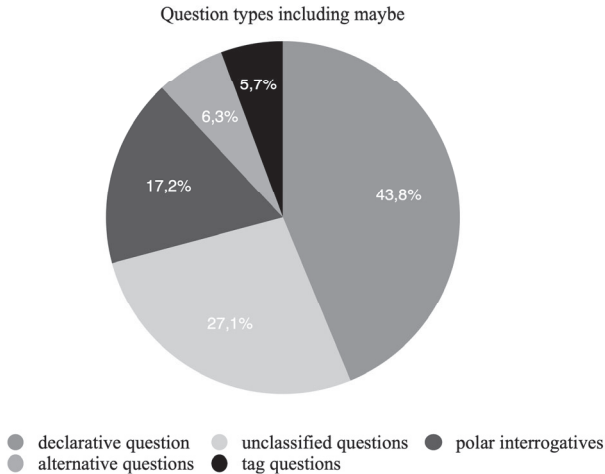


Figure 2. Distribution of question types including *maybe*

10.7.3 Extracts from Spoken BNC2014

Alternative questions

Excerpt 83 (S8J6 25-26)

- 1.S0115: so yeah so that (.) so you're saying a butternut squash does it taste like a pumpkin or a bit sweeter **maybe**?
- 2.S0037: well I tend- like we had some just in the soup last week so I don't even know if it's like what it's like on its own really (.) I like the shape

Polar interrogatives

Excerpt 84 (SN22 1165-1166)

- 1.S0074: is that something you're going to do again in the future **maybe**?
- 2.S0018: that's something that I hope I don't have to do

*Tag questions***Excerpt 85 (S4QF 2540-2541)**

- 1.S0252: it's very er flexible **maybe** isn't it?
 2.S0368: yeah it's

*Declarative questions***Excerpt 86 (SG4J 832-833)**

- 1.S0024: **maybe** we can buy some at the shop?
 2.S0144: well if the shop's open (.)

*Unclassified questions***Excerpt 87 (S5PF 642-644)**

- 1.S0073: >> I've never eaten pork (.) I don't think I've ever eaten
 pork (.) I've eaten bacon and I've eaten pepperoni
 2.S0162: **maybe** ham?
 3.S0073: ham I've never eaten

10.7.4 Chi-squared

The non-parametric chi-squared test was applied to verify if the presence of *maybe* in questions is significantly related to specific question types. The test reveals that the difference is statistically significant ($\chi^2 = 97.427$, $df = 4$, $p\text{-value} < .000$): the use of *maybe* is considerably more frequent in declarative questions and less frequent in alternative and tag questions. The observed and expected frequencies of *maybe* in polar interrogatives are similar.

The results shown in Table 1, Figure 2 and the chi-squared test strongly support the claims that polar interrogatives, alternative, tag and declarative questions may include *maybe*, since they come from the uncertain position; and that wh-questions cannot include *maybe*, since they come from the unknowing position.

10.7.5 Position of *maybe* in questions

An additional examination of the 192 dubitative questions was carried out to identify the syntactic position of *maybe*: initial, medial, or final (sections 10.6.1-10.6.4). The inter-observer agreement was 0.89, indicating an almost perfect agreement.

As shown in Table 2, the initial position is used in almost half (49%) of occurrences; final position is used just over a third of the time (35.4%) and medial position is clearly the least favoured.

Table 2. Frequency and percentage of position of *maybe* in questions

Position of <i>maybe</i>	Frequency	%
Initial	94	49.0
Medial	30	15.6
Final	68	35.4
Tot.	192	100.0

10.7.6 Chi-squared

Independently of the question type, the difference between the three possible positions of *maybe* is statistically significant ($\chi^2 = 32.375$ df = 2, p-value < .000): the initial position is the preferred one, and the medial the least common. The observed and expected frequencies of final position are close.

10.7.7 Question types and position of *maybe*

Table 3. Frequency and percentage of question types in relation to the position of *maybe*

Question types	Position of <i>maybe</i>	Frequency	%
Alternative questions	Initial	3	25.0
	Medial	6	50.0
	Final	3	25.0
	Tot.	12	100.0
Polar interrogatives	Initial	6	18.2
	Medial	7	21.2
	Final	20	60.6
	Tot.	33	100.0
Tag questions	Initial	6	54.5
	Medial	3	27.3
	Final	2	18.2
	Tot.	11	100.0
Declarative questions	Initial	53	63.1
	Medial	13	15.5
	Final	18	21.4
	Tot.	84	100.0
Unclassified questions	Initial	26	50.0
	Medial	1	1.9
	Final	25	48.1
	Tot.	52	100.0

Finally, as shown in Table 3, question types and position of *maybe* were compared.

The preferred position of *maybe* changes depending on the question type.

In alternative questions, it is mainly medial; polar interrogatives favour final position while tag and declarative questions find *maybe* in initial position.

In the unclassified questions, it is either initial or final, largely in line with such questions being either declarative or polar interrogative.

10.7.8 Chi-squared

The non-parametric chi-squared test was applied to ascertain if there are significant differences in the position of *maybe* in each question type.

In alternative and tag questions there are no significant differences (respectively, $\chi^2 = 1.500$, $df = 2$, $p\text{-value} < .472$ and $\chi^2 = 2.364$, $df = 2$, $p\text{-value} < .307$), i.e., *maybe* is found in nearly equal proportions in the three different positions.

However, in polar interrogatives and declarative questions the differences are statistically significant. Specifically, in polar interrogatives *maybe* is more frequent in final position ($\chi^2 = 11.091$, $df = 2$, $p\text{-value} < .004$), in declarative questions it is more frequent in initial one ($\chi^2 = 33.929$, $df = 2$, $p\text{-value} < .000$).

10.8 Conclusions

There were four main aspects to the present chapter: to find out, from an epistemic stance perspective:

- (1) why polar and alternative questions can be made dubitative, i.e., can include a ULM,
- (2) why it is that wh-questions cannot,
- (3) what empirical evidence can support the claim that polar and alternative questions can be dubitative while wh-questions cannot,
- (4) whether the presence of a ULM in polar and alternative questions changes anything in the questioners' epistemic commitment in comparison with the corresponding plain questions (and, if so, what changes can be identified).

The answer to questions 1 and 2 was given in Part 1, Chapters 3-7, by showing that polar and alternative questions can be made dubitative since they come from the questioner's *Uncertain position*: for this reason, their

epistemic design is already uncertain at the morphosyntactic, i.e., grammatical, level (the plain question forms), with no need for a ULM.

In brief, they do not require a ULM to be uncertain, since they are already uncertain “by their very nature”.

For the same reason, i.e., for their coming from the Uncertain position, they can, in principle, include a ULM.

Wh-questions, on the contrary, cannot be dubitative, since they come from the *Unknowing*, not the *Uncertain*, position: in their epistemic design there is no room for un-certainty, only for un-knowledge.

Sections 10.5 to 10.7 endeavoured to provide empirical support to the claim that polar and alternative questions can be dubitative, while wh-questions cannot.

Firstly, Stivers and Enfield’s dubitative example expressions *maybe* and *I wonder if/whether* were used as linguistic tests and systematically applied to the canonical examples of the five question types analysed in Part 1.

Secondly, a corpus-based study of the use of *maybe* and *I wonder if/whether* in questions was undertaken, to enrich the findings and make a quantitative analysis possible.

The application of both linguistic tests to polar and alternative questions resulted in grammatically acceptable sentences, while to wh-questions it resulted in grammatically unacceptable sentences, as corroborated by the absence of such forms in the corpus data.

Both results strongly support our claims that polar and alternative questions can include a ULM since they come from the Uncertain position, while wh-questions cannot since they come from the Unknowing position.

As far as the corpus-based study is concerned, the Spoken BNC2014 data confirmed that

- (1) polar and alternative questions can be introduced by *I wonder if/ I wonder whether*, while wh-questions cannot;
- (2) polar and alternative questions can include *maybe* (although the percentage is not high: speakers use *maybe* in 6.3% of alternative questions), but wh-questions cannot include *maybe* (no occurrences are present in the data);
- (3) declarative questions are the most frequently-used of the dubitative questions involving *maybe*.

This third finding is consistent with that of Stivers (2010: 2773), according to whom “declarative utterances were the dominant polar question type” in spontaneous American English conversations.

Therefore, not only are declarative questions the most widely-used polar questions, but they are also the most numerous of the dubitative questions including *maybe*.

Although all dubitative questions can include *maybe* in any of the three syntactic positions (initial, medial and final), the statistical analysis revealed that in polar interrogatives *maybe* is more often placed in final position while in declarative questions it is more often found in initial position.

Finally, to answer the fourth research question (whether the presence of a ULM like *maybe* in polar and alternative questions changes anything in the questioner's epistemic commitment in comparison with the corresponding plain questions), the *maybe* test was applied to alternative and polar questions in order to ascertain whether the presence of this stance adverb adds more uncertainty to such questions, which are already uncertain at their grammatical design: does one grammatical marker of uncertainty (the plain question design) plus one lexical marker of uncertainty (the adverb *maybe*) double the degree of uncertainty in dubitative questions?

Maybe is a stance adverb that signals the speaker's uncertainty in the here-and-now of communication. In particular, in our view, it signals a *supposition* (or something similar: assumption, hunch, guess...).

In saying *Maybe Alex is on the beach*, the speaker communicates that, even though s/he does not know whether Alex is on the beach or not, s/he nonetheless is more committed to suppose (to believe, to think) that p (Alex is on the beach) is more likely to be true than non p (Alex is not on the beach). In this sense, *maybe* is closer to the Believing than to the Not Knowing Whether pole: in saying *Maybe Alex is on the beach*, the speaker mitigates the corresponding assertion *Alex is on the beach* making it a supposition.

Since *maybe* mitigates certainty, when added to questions coming from the Believing pole (like non-neutral polar interrogatives, tag and declarative questions) where the degree of certainty is higher than that of uncertainty, the adverb mitigates the degree of certainty, i.e., reduces the higher probability assigned to the lexicalised alternative and correspondingly increases the lower probability assigned to the non-lexicalised alternative (the proportion of certainty and uncertainty still remaining in favour of the former).

This is in accordance with the hypothesis that the presence of *maybe* raises the degree of uncertainty (and correspondingly lowers the degree of certainty).

But, when added to questions coming from the Not Knowing Whether pole (like alternative questions and neutral polar interrogatives) where the uncertainty is maximal (50% probability to each alternative), the adverb

mitigates what it finds there: it finds no certainty, it only finds uncertainty, then it mitigates uncertainty.

This means that the modalised alternative *is supposed* to be *less uncertain*, i.e., more certain, than the plain one: the former is supposed to be more likely to be true than the latter (Figure 1, section 10.6.4).

Contrary to the above-mentioned expectation and to what Stivers and Enfield (2010) claim, the addition of *maybe* makes alternative questions and neutral polar interrogatives neither *uncertain* (since they are already so at their grammatical, plain level) nor *more uncertain* (since they already represent the maximum uncertainty).

Rather, the addition of *maybe* makes them, paradoxically, *less uncertain*, i.e., more likely to be true.

In other words, *maybe* seems to *modulate* (Lakoff 1973; Halliday 1976;; Caffi 1999) the epistemic force of the uncertain questions, functioning as a *hedge* when added to non-neutral polar interrogatives, tag and declarative questions, since it increases their uncertainty, and as a *booster* when added to alternative questions and neutral polar interrogatives, since it lowers their uncertainty.

The evidence to support these last two claims is beyond the reach of descriptive corpus analysis but could fruitfully be pursued via psycholinguistic and cognitively-oriented investigations.

CHAPTER 11

RHETORICAL QUESTIONS

It is well known that between the syntactic form of *questions* and the action performed by *asking questions* there is no single reciprocal relationship (see, for instance, Austin 1962; Weigand 2010 in the field of Speech Act Theory; Schegloff 1984; Heritage and Roth 1995 in the field of Conversation Analysis).

The syntactic form of questions is not always used to ask questions, i.e., to seek new information, but to perform other acts, for example invitations, offers, complaints, requests, repairs and so on.

A further example is given by *rhetorical questions*: they are asked and understood not as seeking but as conveying information to the addressee, specifically an *assertion* of the *opposite polarity* to that of the question (Bolinger 1957; Horn 1978; Quirk et al. 1985; Koshik 2005; Rohde 2006).

11.1 Quirk et al. (1985) on rhetorical questions

The rhetorical question is interrogative in structure, but has the force of a strong assertion. It generally does not expect an answer. A positive rhetorical *yes-no* question is like a strong negative assertion, while a negative question is like a strong positive one (Quirk et al. 1985: 825).

For example,

(1) *Is that a reason for despair?* (positive question)

means

Surely that is not a reason for despair (negative assertion)

and

(2) *Isn't the answer obvious?* (negative question)

means

Surely the answer is obvious (positive assertion)

The presence of the epistemic adverb *surely* in the assertions, both positive and negative, seems to account for and underline the fact that they are *strong* assertions.

There are also rhetorical *wh*-questions. The positive question is equivalent to a statement in which the *wh*-element is replaced by a negative element (Quirk et al. 1985: 826).

For example, the positive questions

(3) *What difference does it make?*

is equivalent to the negative assertion

It makes no difference

The less common negative question is equivalent to a statement in which the *wh*-element is replaced by a positive element (Quirk et al. 1985: 826).

(4) *Who doesn't know?*

is equivalent to

Everybody knows

What does this mean in terms of the questioner's epistemic stance, in particular in terms of the KUB model?

Let us comment on some of the abovementioned examples from the point of view of the KUB model.

11.2 Quirk et al.'s (1985) examples from the perspective of the KUB model

The syntactic form of the question *Is that a reason for despair?* is that of a plain polar interrogative, but its social action is not seeking but giving a piece of information (*Surely that is not a reason for despair*), i.e., an assertion which is of the opposite polarity to that of the question.

As a plain polar interrogative, the question *Is that a reason for despair?* would come from the questioner's Not Knowing Whether position (*I do not know whether that is a reason for despair*) and would be addressed towards the receiver's Knowing position.

As a rhetorical question, i.e., as the corresponding negative assertion (*Surely that is not a reason for despair*), it comes instead from the questioner's Knowing position (*I know / am certain that that is not a reason for despair*) and is addressed towards the receiver's Unknowing position (Figure 1).

The same holds true for the negative example *Isn't the answer obvious?* = *Surely the answer is obvious* = *I know / am certain that the answer is obvious*.

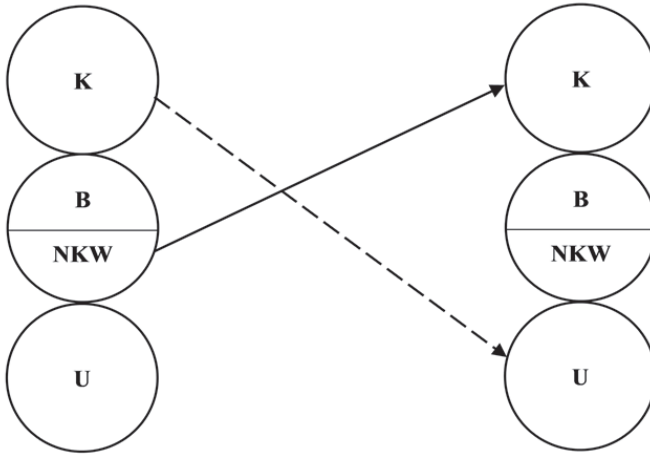


Figure 1. The continuous arrow refers to the plain polar interrogatives *Is that a reason for despair?* / *Isn't the answer obvious?* and the dotted one to their implicit assertions *Surely that is not a reason for despair* / *Surely the answer is obvious*

Similarly, if interpreted as a plain wh-question, *What difference does it make?* would come from the questioner's Unknowing position (*I do not know what difference it makes*) and would be addressed to the receiver's Knowing position.

As a rhetorical question, i.e., as the corresponding negative assertion (*it makes no difference*), it comes instead from the questioner's Knowing position (*I know / am certain that it makes no difference*) and is addressed to the receiver's Unknowing position (Figure 2).

The same holds true for the negative example *Who doesn't know? = Everybody knows = I know / am certain that everybody knows.*

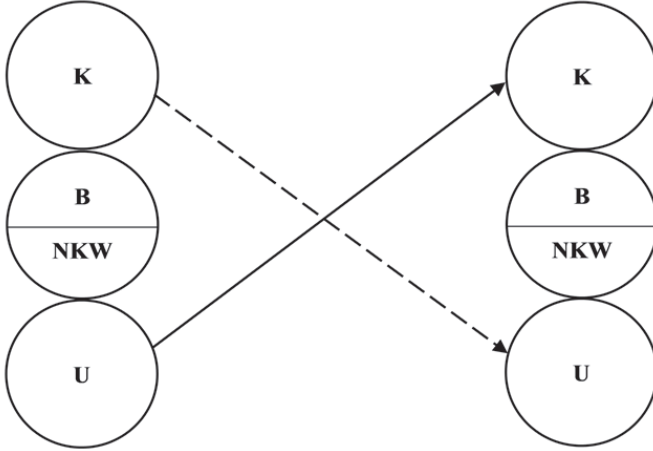


Figure 2. The continuous arrow refers to the plain wh-questions *What difference does it make? / Who doesn't know?* and the dotted one to the implicit assertions *It makes no difference / Everybody knows*

A rhetorical reading of each of the above questions requires at least five shifts:

- (i) a shift from question to assertion, i.e., a change in the social action performed by the speaker;
- (ii) a shift from positive to negative polarity or vice versa;
- (iii) a shift in the questioner's epistemic position: from Not Knowing Whether (Figure 1) or Unknowing (Figure 2), respectively, to Knowing;
- (iv) a shift in the receiver's epistemic position: from Knowing to Unknowing (Figures 1 and 2);
- (v) a shift in the receiver's expected response: in principle, a plain polar interrogative, when informative, expects either a yes or a no; when confirmative, it expects a yes, when affirmative, and a no, when negative (Raymond 2003; Clayman and Loeb 2018). A plain wh-question usually expects a detailed open-ended answer. Both types of question, when rhetorical, expect *agreement with their implicit assertions*, i.e., they expect an answer whose polarity is the same as that of the implicit assertion. In other words, they expect the answer to have the opposite polarity of the question, i.e., they expect a *yes* when the question is negative, and a *no* when the question is affirmative.

11.3 In rhetorical questions, is the speaker's epistemic position always Knowing?

The problem which we are most interested to discuss in this chapter is the questioner's epistemic position, i.e., point (iii) mentioned above, according to which the strong assertion implicit in a rhetorical question, whether wh- or polar interrogative, conveys the speaker's Knowing/Certain position (*I know / am certain that p / that non p*).

We would like to revisit this point of view and suggest that some rhetorical questions can be read as coming from the Believing pole of the Uncertain position. In order to do so, we make initial reference to Koshik's (2005) *Beyond rhetorical questions*, which explicitly links rhetorical questions to the questioner's epistemic stance.

11.4 Koshik (2005) on rhetorical questions as an expression of the speaker's epistemic stance

Using Conversation Analysis methodology, the author analyses "rhetorical and other questions that are designed to convey assertions, rather than seek new information" (Koshik 2005:1) in ordinary conversation, news interviews, teacher-student talk, parent-child talk.

The types of questions that Koshik analyses are yes/no questions (i.e., in our terminology, polar interrogatives), wh-questions and alternative questions.

To refer to these questions, instead of the term *rhetorical question*, Koshik (*ibid.*: 2 and 147) prefers to use the expression *reversed polarity question (RPQ)*, for two main reasons:

- (i) the term *rhetorical questions* can be misleading, since it suggests that such questions receive no answer whereas many of them, in fact, do receive answers;
- (ii) the term *RPQ* captures the relationship among a wider variety of questions, some of which (like, for example, a particular use of polar interrogatives and alternative questions in pedagogical contexts) are not thought of as *rhetorical questions*.

Koshik's main aims are to show

how these question sequences unfold interactionally in naturally-occurring talk, what kind of answers, if any, they engender, and how these answers display the recipients' understanding of the social actions that these questions are used to perform (*ibid.*: 1).

The main results concerning the *social actions* of RPQs show that such questions can be used as

- (i) accusations (negative polar interrogatives);
- (ii) challenges to prior actions or prior turns of either co-present or non-present parties (affirmative polar interrogatives and wh-questions);
- (iii) complaints (wh-questions);
- (iv) pre-disagreements (affirmative polar interrogatives);
- (v) error correction initiations (polar interrogatives and alternative questions).

As far as the questioner's epistemic stance is concerned, the main point made all through Koshik's book is that RPQs are an *expression of the speaker's epistemic stance*:

If we look at examples from naturally-occurring talk, we see that certain questions do, indeed, appear to convey strong reversed polarity assertions, thereby *displaying the epistemic stance of the speaker*, i.e., that *the speaker knows the answer to the question and knows it with certainty* (*ibid.*: 12, *emphasis added*).

It is by virtue of this epistemic stance display that such questions *prefer*, in the Conversation Analysis sense, an answer of the polarity opposite to that of the question, "i.e., an answer that aligns with the stance displayed in the question. In other words, a dispreferred answer would be heard as a disagreement" (*ibid.*: 13).

On the contrary, when a candidate reversed polarity question reveals *doubt* instead of *knowledge* and *certainty*, i.e., when it displays *weakening epistemic strength*, then it cannot function as a rhetorical question but only as a plain question: the preferred answer has the same polarity as that of the question (*ibid.*: 13-16).

11.5 Do rhetorical questions always convey strong reverse polarity assertions?

Koshik's reading of rhetorical questions as strong reversed polarity assertions is in line with Quirk et al.'s point of view (section 11.1), i.e., with the traditional viewpoint, and the meaning she gives to the term *epistemic stance* ("the speaker knows the answer to the question and knows it with certainty") maps onto the Knowing/Certain position in the KUB model (section 11.2).

We agree with most of Koshik's observations, yet we query her claim that RPQs *always* convey *strong* reverse polarity assertions, i.e., assertions

coming from the Knowing/Certain position. We claim that some of these can be read as conveying reverse polarity assertions of *mild* strength, i.e., *mitigated* assertions coming from the Believing pole of the Uncertain position. Even though the *epistemic strength* of the question is downgraded, such questions can still function as RPQs.

As an example of our claim, in the following sections we discuss those negative polar interrogatives that Koshik affirms can be used as *accusations* (see point (i) in the above list of social actions of RPQs).

Koshik treats this topic at the very beginning of her book (Chapter 2), by resorting to a paper by Heritage (2002) that we summarize in the following section.

11.6 Heritage (2002) on negative polar interrogatives in news interviews

Heritage (2002: 1428) suggests that, in the context of news interviews, negative polar interrogatives are quite commonly treated by both questioners and answerers “as a vehicle for assertions”, i.e., “as expressing a position or point of view [...], as accomplishing assertions of opinion, rather than questioning” (=rather than seeking information).

An example of that is the question put by the interviewer (IR), journalist Helen Thomas, to the interviewee (IE), President Clinton, during a press conference:

- 1.IR: W'l Mister President in your zea:l (.) for funds during
 2 → the last campaign .hh **didn't you put the Vice President (.)**
 3 **an' Maggie and all the others in your (0.4) administration**
 4 **top side .hh in a very vulnerable position, hh**
 5 (0.5)
 6.IE: > I disagree with that. hh u- How are we vulnerable because
 ...

In lines 2-4, Thomas deploys a negative polar interrogative (which, for simplicity's sake, can be abbreviated into *Didn't you put the members of your administration in a very vulnerable position?*) to assert her *opinion* that Clinton put the members of his administration in a very vulnerable position.

Such an opinion embodies a critical evaluation of the President's conduct and conveys an expectation for a positive response, i.e., invites Clinton's assent, agreement, on her opinion.

In other words, the negative question, rather than seeking information, is designed to convey an affirmative assertion and favour a ‘yes’ answer in which Clinton acknowledges Thomas’ criticism.

Given that Thomas’ opinion is opposite in polarity to that of the question (affirmative vs negative), this latter is considered to be a *reverse polarity* question, i.e., a rhetorical question.

In line 6,

Clinton formulates his response in ‘disagreement’ with Thomas’s negative interrogative, thereby addressing it as a statement of opinion, rather than as a question in search of information, about Clinton’s stance on the matter. (Heritage 2002: 1432).

According to Hayano (2014: 411), Thomas’ negative question functions as a positive assertion “that challenge the recipient’s position”.

As for the response preference, this question seems to embody what Schegloff (2007) calls *cross-cutting preferences*, according to which the “preference in the polarity of the question’s design does not match with the preference of the action type” (Lee 2014: 419).

In addition to a type-conformity preference—according to which polar questions are designed to receive a yes or a no answer (Raymond 2003)—response types can indeed “be distinguished according to two fundamental dimensions of preference: the type of action a response performs and the form it takes” (Lee 2014: 418).

As for Thomas’ question:

- (1) being a polar interrogative, it is designed for a *yes* or a *no* answer (Raymond 2003);
- (2) being a negative polar interrogative, it should prefer a positive yes-answer (Hayano 2014: 405; Clayman and Loeb 2018: 2);
- (3) being an assertion that is used to convey the questioner’s negative evaluation concerning what the respondent would have done in the past, it should prefer a rebuttal (Pomerantz 1984a).

As underlined by Robinson and Bolden (2010: 510), “in the case of cross-cutting preferences, those of action tend to supersede those of syntax”, i.e., “answerers prioritize the preference of social action over grammatical preference” (Robinson and Heritage 2016: 5).

Cross-cutting preferences “are commonplace in adversarial journalism, with grammatical preference mobilized to push for responses constructed as politically damaging for the politician” (Clayman and Loeb 2018: 4).

Clinton, by explicitly displaying his disagreement with the interviewer, answers in a preferred way in terms of action type (i.e., he disagrees with a negative evaluation concerning his past behaviour).

11.7 Negative polar interrogatives from the KUB perspective

How can we translate Heritage's analysis of the above excerpt into the terminology used in the present chapter and in the KUB model?

Instead of being neutral and information seeking, thus coming from the Not Knowing Whether pole of the Uncertain position, Thomas' question, being a statement of opinion, is non-neutral and confirmation seeking: it comes from the Believing pole, minimum uncertainty, and can be paraphrased as

I think that you put the members of your administration in a very vulnerable position

Clinton's answer *I disagree with that* (which is equivalent to something like *No, I don't think so*, shows that he answers not the plain question but the implicit statement of opinion (Figure 3).

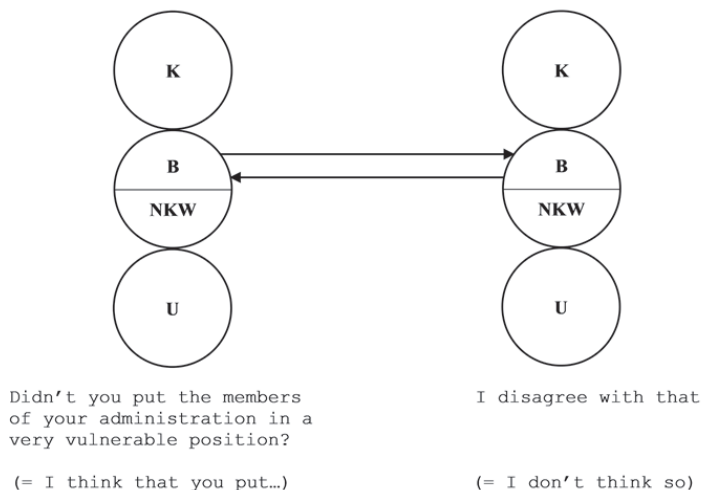


Figure 3. Thomas' polar interrogative read as expressing an opinion (*I think that you put...*) and seeking confirmation, and Clinton's disconfirming answer (*I do not think so*)

In Figure 3 the two parallel lines show that the interlocutors *align* in terms of their *epistemic stances* (B-B) but the content of their question and answer

tells us that they *disagree* in terms of their *opinions*. Thus we must distinguish between *alignment/misalignment*, on the one hand, and *agreement/disagreement*, on the other. Epistemic alignment does not necessarily involve content agreement.

11.8 Koshik (2005) on the Thomas-Clinton interview

Koshik (2005) examines the Thomas-Clinton interview three times (on pages 12-13, 17-18, and 59-61).

Her analysis partially follows Heritage's reading, according to which the question would be the *expression of an opinion*, but she recognizes a further function operating within the question, that of being an *accusation*:

Clinton's response, "I disagree with that" [...] shows that he views the interviewer as having made an assertion that can be disagreed with. He goes on to specify the assertion that he has heard the interviewer making, i.e., that *the members of the president's administration have been made vulnerable*. We can see that he has heard this question as *asserting an opinion*, rather than asking a question (*ibid.*: 17, *emphasis added*).

However, the author goes on to state that

the opinion Clinton has heard being asserted is *hostile*; the interviewer is *accusing* him of putting staff members in a vulnerable position. Clinton responds with a denial, challenging the interviewer's view of fundraising as exaggeratedly negative (*ibid.*: 17, *emphasis added*).

Grammatically negative yes/no questions, when asked by interviewers, are thus regularly heard not only as affirmative assertions but as accusations (*ibid.*: 18).

11.9 Expression of opinion, accusation or mitigated accusation?

We can identify two reasons for considering Thomas' question as either an (implicit) expression of opinion or a *mitigated* (implicit) accusation but not an (implicit) accusation *tout court*. The first is: to be an accusation, is it enough for an opinion to be hostile? We believe not.

In our view, to accuse and to express a hostile opinion not only belong to the same category of speech acts (Austin 1962; Searle 1969, 1975), they are also "neighbours" along the performative continuum.

The slight difference between them is in their illocutionary force, in that an accusation is stronger than an expression of hostile opinion; their illocutionary force also depends, among other conditions, on the speaker's epistemic stance.

An accusation, whether explicit (*I accuse you of having put... etc.*) or implicit (*You put... etc.*)¹ conveys a Knowing stance which is stronger than the Believing stance conveyed by an expression of (hostile) opinion (*I believe that you put...*).

An accusation can be paraphrased as

I know that it is true that you put..., I have the evidence, I can prove it.

The expression of a (hostile) opinion can be paraphrased as

I do not know whether it is true that you put..., but I am inclined to believe that you did, even though I cannot prove it.

If so, in the performative and epistemic continuum, we have at least four different degrees of illocutionary force and epistemic stance:

- (1) *I accuse you of having put...* (explicit accusation)
- (2) *You put...* (implicit accusation)
- (3) *I think that you put...* (explicit expression of opinion)
- (4) *Didn't you put ...?* (implicit expression of opinion = I think that you put...)

Koshik reads the negative polar interrogative *Didn't you put...?* not only as an implicit expression of opinion (I think that you put...) but also as an implicit accusation (You put...). This creates an important difference between her view and ours (which is similar to Heritage's), in that we read it only as an implicit expression of opinion (I think that you put...).

Given the abovementioned proximity of the two speech acts, both readings are in principle possible.

However, if (4), i.e., the negative polar interrogative *Didn't you put...?* is also read as an (implicit) accusation (You put...), as Koshik claims, it must necessarily be read as a *mitigated* (implicit) accusation, i.e., as an assertion closely related to (3) *I think that you put...*, rather than to (2) *You put...*, since we must not forget that the accusation is conveyed indirectly, through a question form.

¹ Cf. Austin's (1962) distinction between explicit and implicit performative utterances.

Our second stronger reason is based on empirical data which supports our claim that some rhetorical questions can be read as conveying *mitigated* assertions coming from the Believing pole of the Uncertain position, i.e., from a stance which is *less strong* than the Knowing. Even though the *epistemic strength* of the implicit assertions is downgraded, such questions can still function as rhetorical.

The examples of rhetorical question taken from Quirk et al. (1985) in section 11.1 (*is that a reason for despair? / who doesn't know?* etc.) and Thomas' question to Clinton in section 11.6 (*didn't you put...?*) all include a verb in the indicative, therefore it is immediately clear that the implicit assertion must also include a verb in the indicative (*that is not a reason for despair / nobody knows / you put ...*), thus conveying a strong stance, a Knowing position.

But does this hold true for rhetorical questions which include a conditional modal verb (*would, could, should, etc.*), i.e., rhetorical questions which are addressed to the respondent's Believing position (Chapter 8)? We argue that it does not.

Using examples extracted from the Spoken BNC2014, we intend to demonstrate that rhetorical questions featuring a modal conditional also communicate implicit assertions, but that such assertions are milder due to the need to include a conditional in the response.

The conditional in such questions is not restricted to the meaning of the question posed, but is also part of the implicit assertion itself. As a consequence, the implicit assertion cannot originate in the Knowing position, since Knowing cannot be expressed by conditionals.

11.10 Search strings and extracts from Spoken BNC2014

We noted earlier with reference to declarative questions (Chapter 7, section 7.2) that extracting such examples from the corpus using formal criteria necessarily involves manual post-editing in order to distinguish between declarative questions and declarative statements.

Rhetorical questions pose an analogous issue: how can they be differentiated formally from other question types? The short answer to this is that they cannot, or rather, that they are identifiable as rhetorical via the answers that they elicit, not by their syntax.

An initial attempt using a very complex search string, reducible to the general principle “relative pronoun” plus “modal verb” plus “have” followed by an interrogative marker at up to 4 words distance, yielded five examples of the *who would have believed it?!* type of rhetorical question, i.e., counterfactuals featuring a modal perfect. The only modals to occur here

are *would* and *could*. No examples with the pronoun *whoever* were found with this type of question structure, but the *-ever* pronouns are in fact very infrequent in the Spoken BNC2014. Such infrequency did however make it possible to try a simple string; a second attempt in which we simply listed all possible *-ever* pronouns followed by a question mark at up to seven words distance, yielded only two examples.

For these reasons, we decided to use four different search strings, that will be specified during the analysis of the following seven excerpts which present five wh-questions and two polar interrogatives.

11.10.1 Wh-questions

This first example features the formulaic rhetorical question, *what would you do without me?* recovered using the simple search string **what would you do without me**. This string returned 4 matches in 4 different texts, one of which is reproduced here.

Excerpt 88 (S7GJ 915-919)

- 1.S0041: I don't er do I have to defrost these before I pan-fry them?
 2.S0046: you just need to shove them under a cold tap for like ten minutes (.) poke a hole in the bottom
 3.S0041: oh yeah (.) that's a good idea
 4.S0046: God **what would you do without me?**
 5.S0084: --UNCLEARWORD

Three friends (in the 19-28 age range) are preparing a meal, and discussing how to defrost frozen food before cooking it. One of the three (male) suggests a practical short-cut, which one of his female companions acknowledges as being *a good idea*. He then utters the rhetorical question *what would you do without me?* which also expresses a degree of irony. This question is understood as being rhetorical both due to its formulaic nature (there are four occurrences of this string in the corpus) and the absence of response (the “unclear word” is likely to have been a muttered comment or backchannel, but is not further elaborated in the conversation). The implicit assertion (whose polarity is opposite to that of the question) can only be *you would do nothing without me*.²

² The future indicative **you will do nothing without me* in the implicit assertion is unacceptable in connection with the conditional *would* in the question, since in this case *will* gives or predicts definite information about the future, while *would* opens up possibilities.

The final expression *without me* is equivalent to the conditional clause *if I were not with you*, thus the question is a conditional one (*what would you do if I were not with you?*) and the implicit assertion is equivalent to a conditional statement of the type *simple conditional + simple past*, i.e., *you would do nothing if I were not with you*, originating in the Believing position, i.e., (I believe that) you would do nothing without me (Figure 4).

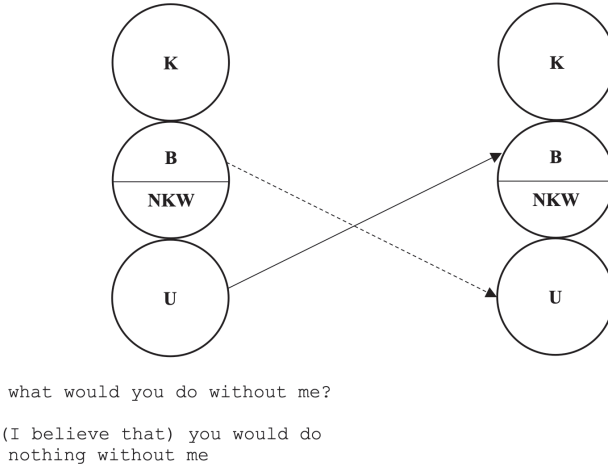


Figure 4. S0046's wh-question (continuous arrow) and implicit assertion (dotted arrow)

A tranche of rhetorical questions featuring modal perfects were extracted from the corpus using the string **who (should | ought | would | could | might) have ***** \?**. This string returned 6 matches in 6 different texts, three of which are reproduced here.

Excerpt 89 (S632 2513-2517)

- 1.S0216: so did you just get an upgrade or did you pay?
- 2.S0211: no erm my phone got stolen
- 3.S0220: >>**who would have thought that would be a good thing?**
- 4.S0211: I know my phone got stolen er last week I had the er iPhone five S sixty-four gig
- 5.S0216: yeah

Three 22-year old female students are talking about S0211's new phone. S0216 asks if it cost her anything, to which S0211 specifies that the upgrade was free because her phone (presumably associated with her contract) had been stolen.

S0220 interjects with the rhetorical question *who would have thought that would be a good thing?* This is a mitigated rendering of the underlying proposition *nobody would have thought that getting your phone stolen would be a good thing* and originates in the speaker's Believing position (notice again the conditional *would*). The rhetorical question expresses surprise which S0211's backchannel *I know* seems to acknowledge and echo.

Excerpt 90 (SM88 961-970)

- 1.S0154: so many teachers that never they are like together it's really weird (.) they there this history teacher and maths teacher got married (.) and I can't now think of any more
- 2.S0152: yeah
- 3.S0012: well they do I mean they're with each other eight hours a day near enough
- 4.S0153: Miss --ANONnameN was with Mr --ANONnameN (.)
- 5.S0154: **who could have been with Mr --ANONnameN?** he's a horrible man
- 6.S0012: is he?
- 7.S0154: I have him for PE worst choice of my life
- 8.S0153: I told you
- 9S0154: he's so horrible like we picked volleyball cos we thought it would be a teacher who doesn't really care about PE so we wouldn't actually have to do it
- 10.S0154: and it turned out it was Mr --ANONnameN head of PE and oh my god he is so nasty

A group of family members are talking about school, specifically, at this point, teachers who have romantic relationships with their colleagues.

Two girls (S0153, 16 years old, and S0154, 14 years old) dominate the conversation. On hearing that Mr --ANONnameN is involved in a relationship with a female colleague, S0154 expresses her incredulity and disgust with the rhetorical question *who could have been with Mr --ANONnameN?*, adding the specification *he's a horrible man*.

Her interlocutors engage with this additional comment but do not reply to the question, which confirms it in this context as rhetorical (and in any case, the identity of the female colleague has already been mentioned, in S0153's immediately preceding turn).

The question originates in the Believing position, given the presence of the conditional *could*, and expresses the proposition (I believe that) *nobody could have been with Mr --ANONnameN*, whose polarity is opposite to that of the question.

Excerpt 91 (SXGX 546-550)

- 1.S0519: **who would have dreamt of putting this on here?**
 2.S0520: >>>only the good parts of it well no one with taste
 3.S0519: painting out the flowers is also an important step
 4.S0520: the bedroom flowers?
 5.S0519: yeah

In this example, a mother (59 years) and daughter (32 years) are viewing a house where they end up criticising the old, 1970's wallpaper. The older woman asks the rhetorical question *who would have dreamt of putting this on here?*, expressing her opinion which originates in the Believing pole, i.e., (I believe that) *nobody would have dreamt of putting this [wallpaper] on here*.

The daughter's overlapping turn addressees this question with *no one with taste [would have dreamt of putting this on here]*, a confirmatory response originating from the same Believing position rather than an information-providing one, even though additional information is presented (Figure 5). Notice again the conditional *would* and the reverse polarity of question and assertion.

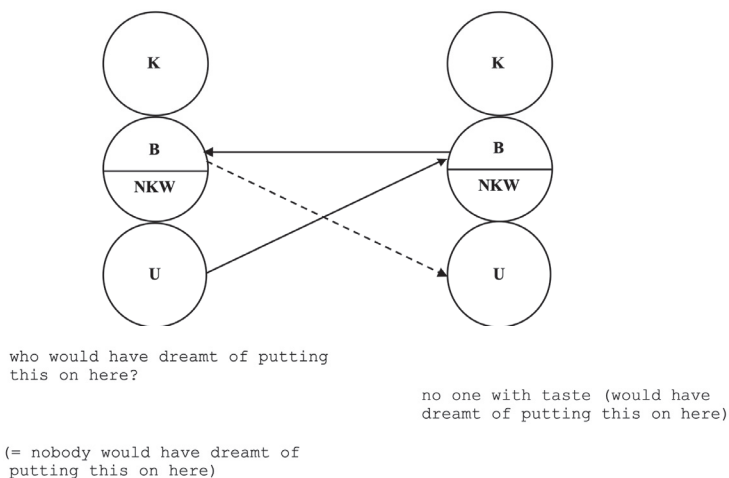


Figure 5. S0519's rhetorical question (continuous arrow) and implicit assertion (dotted arrow) + S0520's response

We also tried the *-ever* interrogative pronouns in our search for rhetorical questions in the corpus. *Whyever* was the only one to provide any hits for this type of question (the string **whyever ***** \?** returned two matches in 2 different texts). An example is provided below.

Excerpt 92 (S2PS 363-365)

- 1.S0068: I read that and I think well you know **whyever did you put that on?** If if I put something on I would hope it's of interest to people (.) I'd say I've been to this concert or I've been
- 2.S0150: mm
- 3.S0068: on holiday

A group of university librarians, all in their forties, are discussing posts on social media. S0068 expresses his exasperation at posts which are banal or embarrassing (or both), and utters the question *whyever did you put that on?*, where *you* refers to a generic person posting content (*that*) online.

The presence of *whyever* makes the wh-question rhetorical since it signals both the speaker's surprise and his negative evaluation or criticism of the posted content. He is communicating something akin to *it would have been better not to put that on* or *you shouldn't have put that on*: even though

his question does not explicitly contain a conditional (but an indicative), the implicit assertion requires a (deontic) conditional.

Such a negative statement of opinion, opposite in polarity to that of the question, originates in the Believing pole and corresponds to the proposition (I believe that) *you shouldn't have put that on* (Figure 6).

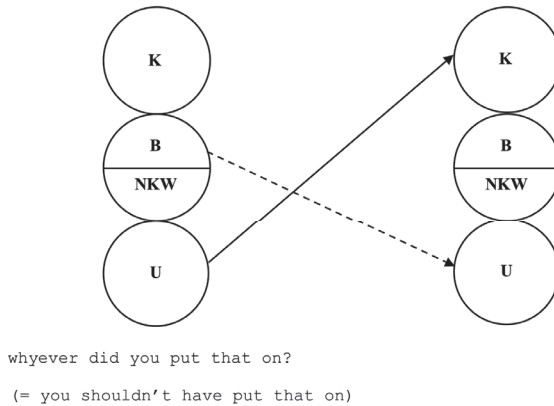


Figure 6. S0068's rhetorical question: indicative in the wh-question (continuous arrow) and conditional in the implicit assertion (dotted arrow)

11.10.2 Polar interrogatives

The following two examples of rhetorical questions are negative polar interrogatives extracted from the corpus with the string **should (n*t) you ***** \?** which returned 25 matches.

Excerpt 93 (S6W8 989-992)

- 1.S0496: **shouldn't you have flipped that over?**
- 2.S0497: sorry yeah
- 3.S0493: put the arm on
- 4.S0497: put your arm on

In this example, some close family members (early thirties) are playing a board game in which players arrange body parts to form animals and insects. This extract starts with one player asking *shouldn't you have flipped that over?*, presumably in reference to a card or playing piece.

In line with Heritage's point of view on negative polar interrogatives (section 11.6), we read this question as non-neutral and confirmation seeking, i.e., as a statement of opinion with the opposite polarity to that of the question (sections 11.7 and 11.9):

I believe that *you should have flipped that over*

S0497 replies with a hasty apology *sorry yeah* which indicates that he interpreted the question as the implicit affirmative assertion, *you should have flipped that over*, originating in the Believing position, due to the presence of the conditional (deontic) *should* (Figure 7).

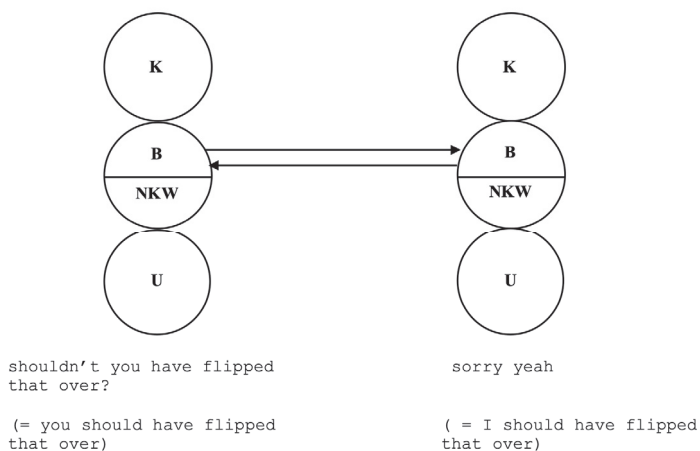


Figure 7. S0496's rhetorical question and S0497's response

Excerpt 94 (SUVQ 1912-1922)

- 1.S0236: >>they're like can you move that out of there? well no
 2.S0235: >>yeah
 3.S0192: yeah
 4.S0198: >>mm
 5.S0235: I could but I'm not going to
 6.S0198: >>oh dear
 7.S0236: >>no I'll do it here why can't I do it here? **shouldn't you be helping me with it?**
 8.S0192: >>mm
 9.S0198: >>are th- are they all?

10.S0236: >>that's what you get paid for

11.S0192: >>that's your job yeah

Four friends (27-28 years old) are complaining about their negative experiences in discount supermarkets, where customers often have too little time to bag their groceries, may be told by cashiers to move away to free up space in the packing area for the next customers' groceries.

S0236 vents his frustration in one long turn which features overlapping interjections and backchannels from his friends. His rhetorical negative question *shouldn't you be helping me with it?*, addressed to an imaginary cashier, is the implicit affirmative assertion *you should be helping me with it* originating in the Believing position.

The immediate ensuing context confirms this interpretation as an implicit assertion, as S0236 continues by stating (still to the imaginary cashier) *that's what you get paid for* and S0192 overlaps with *that's your job yeah*.

Figure 8 illustrates the main point made in this chapter.

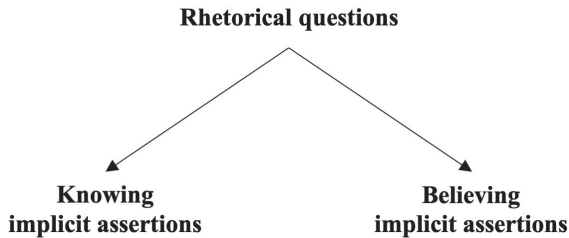


Figure 8. Implicit assertions in rhetorical questions can convey the Believing, not only the Knowing position

CHAPTER 12

QUANTITATIVE ANALYSIS OF THE SPEAKERS’ EPISTEMIC POSITIONS IN A DIALOGUE

The KUB model allows for both qualitative and quantitative analysis of epistemic stance in spoken dialogues and written texts.

12.1 Qualitative analysis

As shown in the previous chapters, the *qualitative* analysis of natural conversational sequences concerns the identification of the speakers’ epistemic positioning and shifting, by examining the evidential and epistemic markers they use in the conversational sequences. Such analysis allows to understand the epistemic dynamics among interlocutors in terms of negotiation, alignment/misalignment, etc.

12.2 Quantitative analysis

The *quantitative* analysis of the three epistemic positions consists in singling out the number of words dominated by their respective evidential and epistemic markers, namely the “scope” (Quirk et al. 1985) of such markers.

As regards written texts, the quantitative analysis allows to identify the proportion of Known, Unknown, Uncertain (both Not Known Whether and Believed) in a single text or a whole corpus, from a *synchronic* perspective as well as a *diachronic* one.

For example, in a corpus of 80 scientific biomedical articles randomly selected from the British Medical Journal from 1840 to 2007, we identified the lexical and morphosyntactic Uncertainty markers and their scope in order to test whether there were significant variations along the 167-year span with regards to the proportion of Certainty and Uncertainty (Bongelli et al. 2012; Bongelli et al. 2014; Zuczkowski et al. 2016; Bongelli et al. 2019; Omero et al. 2020).

As far as spoken dialogues are concerned, the results of the quantitative analysis let us understand how the Known, Unknown and Uncertain are

distributed in every single turn and their turn constructional units (TCUs), in each sequence (adjacency pairs, triplets, etc.), in a whole dialogue and also, respectively, for each interlocutor (Philip et al. 2013; Dorigato et al. 2015; Zuczkowski, Bongelli and Riccioni 2017, Chapters 5-7).

We want to close our book by showing how to perform a quantitative KUB analysis of a conversation, using the extract entitled *How much did you drink a day?* whose qualitative analysis was partially carried out in Chapter 3.

12.3 Procedures for quantitative analysis

The quantitative KUB analysis of any conversation is based on its previous qualitative analysis and, similarly, is carried out turn by turn, TCU by TCU, in order to take account of possible epistemic shifts within a single turn.

We proceed in the following way: for each TCU included in a single turn (e.g., *Ilaria is cooking*) we specify:

(1) the speaker's epistemic position conveyed (in our example, *Knowing*) and also the epistemic position (of the interlocutor) at which it is directed (→*Unknowning*),

(2) the linguistic reason for assigning such epistemic position to that TCU (plain declarative sentence),

(3) the number of words representing that epistemic position, i.e., the number of words present in that TCU (3 words).

Of course, when all the TCUs included in a single turn convey one and the same epistemic position, for simplicity's sake we do not divide the turn under scrutiny into its constitutive TCUs: the number of words governed by the epistemic position will correspond to that of the whole turn.

12.4 Quantitative analysis of Excerpt 1 (S3RN 104-130) *how much did you drink a day?*

- 1.S0052: have I told you about my drinking less?
 - **Not Knowing Whether** (→**Knowing**, i.e., addressed toward the interlocutor's **Knowing**)
 - neutral polar interrogative [*I do not know whether* I have told you about my drinking less]
 - **8 words**
- 2.S0109: no (.) drinking less?

This turn is made up of two TCUs: *no* and *drinking less?*

TCU 1: *no*

- **Knowing (→Not Knowing Whether)**, alignment with turn 1)
- the adverb *no* is here equivalent to the plain declarative sentence *you have not told me about your drinking less*
- **1 word**

TCU 2: *drinking less?*

- **Not Knowing Whether (→Knowing)**
- the echo question *drinking less?* is equivalent to [*did you say*] *drinking less?*, i.e., to [*I do not know whether you said*] *drinking less*
- **2 words**

3.S0052: *yeah*

- **Knowing (→Not Knowing Whether)**, alignment with turn 2, second TCU)
- the adverb *yeah* is here equivalent to the plain declarative sentence *I said drinking less*
- **1 word**

4.S0109: *no*

- **Knowing (→Not Knowing Whether)**, alignment with turn 1)
- the adverb *no* is here equivalent to the plain declarative sentence *you have not told me about your drinking less*
- **1 word**

5.S0052: *I've decided to try and drink less*

- **Knowing (→Unknowing)**
- plain declarative sentence
- **8 words**

6.S0109: *but that's a bad thing*

- **Knowing (→Unknowing)**
- plain declarative sentence
- **6 words**

7.S0052: *mm (.) it depends on how much you're drinking to start with (.) so I get paranoid that I'm going to get a headache if I don't drink (.) and it turns out I was actually drinking quite a lot each day*

- **Knowing (→Unknowing)**
- the conditional statement *so I get paranoid that I'm going to get a headache if I don't drink* is of the first type (zero conditional, simple present + simple present; the *if* can be substituted by *when / every time* and so on, see Chapter 1, section 1.3.2), thus it is read as Knowing. The rest of the turn is also Knowing (all plain declarative sentences)
- **41 words** (the initial expression *mm* is a backchannel and not counted here as a 'word')

8.S0109: well you're quite tall

- **Knowing (→Unknowing)**
- plain declarative sentence (the adverb *well* is counted as Knowing)
- **6 words**

9.S0052: does that make any difference?

- **Knowing (→Unknowing)**
- the polar interrogative *does that make any difference? [I do not know whether that makes any difference, Not Knowing Whether]* is here read as rhetorical, its implicit assertion conveying the Knowing *that makes no difference*, therefore we consider this question as Knowing
- **5 words**

10.S0109: well

- **Knowing (→Unknowing)**
- the adverb *well* is counted as Knowing
- **1 word**

11.S0052: so I'm now drinking less and I'll probably I'm still drinking (.) so I didn't drink very much when I was like a child I think

This turn is made up of 4 TCUs: *so I'm now drinking less / and I'll probably / I'm still drinking / so I didn't drink very much when I was like a child I think /*

TCU 1: *so I'm now drinking less*

- **Knowing (→Unknowing)**
- plain declarative sentence
- **6 words**

TCU 2: *and I'll probably*

- **Believing (→Unknowing)**

- declarative sentence including the uncertainty lexical marker *probably*
- **4 words**

TCU 3: *I'm still drinking*

- **Knowing (→Unknowning)**
- plain declarative sentence
- **4 words**

TCU 4: *so I didn't drink very much when I was like a child I think*

- **Believing (→Unknowning)**
- declarative sentence including the uncertainty lexical marker *I think* as sentence-final modifier: *so I didn't drink very much when I was like a child I think* = *so I think that I didn't drink very much when I was like a child*
- **15 words**

12.S0109: so you're making up for it?

- **Believing (→Knowing)**
- plain declarative question
- **7 words**

13.S0052: and then I started drinking loads and now I just started cos I cos I so I was drinking lots in a like paranoid I'm going to get a headache way (.) but then still having headaches so it's clearly not through dehydration so (.) I cut down on my ridiculous drinking

- **Knowing (→Unknowning)**
- the whole turn is made up of plain declarative sentences
- **52 words**

14.S0109:→ how much did you drink a day then?

- **Unknowning (→Knowing)**
- wh-question
- **8 words**

15.S0052: about (.) I don't know three litres maybe? But I had a lot and now I'm having about two litres a day (.) which I think is more normal

This turn includes five TCUS: about / I don't know / three litres maybe? / But I had a lot and now I'm having about two litres a day / which I think is more normal

TCU 1: *about*

- **Knowing (→Unknowning)**
- the expression *about* can be completed as the plain declarative sentence *I drank a day about...*
- **1 word**

TCU 2: *I don't know*

- **Unknowning (→Unknowning)**
- the expression *I don't know* can be completed as the declarative sentence *I don't know how much I drank a day* which includes the Unknowning lexical marker *I don't know*
- **4 words**

TCU 3: *three litres maybe?*

- Uncertain, either Not Knowing Whether if this self-addressed question is read as a dubitative polar interrogative (= *Did I drink three litres maybe?*) or Believing if read as a dubitative declarative question (= *I drank three litres maybe?*). In any case, from an epistemic point of view the difference between the two question types is very slight: both are suppositions (with different degrees of strength) and, as such, they correspond to a mitigated declarative sentence like *I drank three litres maybe*
- As said in Chapter 3, section 3.2.4, in the context made by S0109's question (*How much did you drink?*) and S0052's two preceding TCUs, we think it more plausible to read *three litres maybe?* as a dubitative declarative question (**Believing**) (**→Unknowning**: being a self-addressed dubitative question, which the questioner herself is unable to answer, the piece of information sent to her interlocutor corresponds to *I drank three litres maybe*, a mitigated declarative sentence addressed toward the interlocutor's Unknowning position)
- **3 words**

TCU 4: *But I had a lot and now I'm having about two litres a day*

- **Knowing (→Unknowning)**
- plain declarative sentences
- **15 words**

TCU 5: *which I think is more normal*

- **Believing (→Unknowning)**
- declarative sentence including the lexical marker of uncertainty *I think*
- **6 words**

16.S0109: yeah (.) you're meant to drink two litres a day but it's not all meant to necessarily co- come from

This turn includes two TCUs: *yeah* and the rest of the turn.

- In our view, the initial adverb *yeah* indicates agreement with S0052's Believing position in the last TCU of the previous turn (*which I think is more normal*), thus we read it as **Believing** (= *I think it's more normal too*) (→**Unknowing**)

- **1 word**

The rest of the turn is made up of two plain declarative sentences coming from the **Knowing** (→**Unknowing**)

- **19 words** (*co-come* is counted as one word)

17.S0052: you're meant to drink two litres?

- **Believing** (→**Knowing**)
- plain declarative question
- **7 words**

18.S0109: two litres

- **Knowing** (→**Believing**)
- plain declarative sentence (it is the confirming answer to S0052's declarative question in the previous turn)
- **2 words**

19.S0052: yeah

- **Knowing** (→**Unknowing**)
- agreement with the Knowing position of S0109's previous turn (*two litres*)
- **1 word**

20.S0109: but it doesn't all have to come from drink

- **Knowing** (→**Unknowing**)
- plain (deontic) declarative sentence
- **10 words**

21.S0052: yeah I think I'm now drawing drinking like the right amount rather than a ridiculously large amount like I was drinking (.) because I can't you know these big glasses

This turn is made up of three TCUs: *yeah* / *I think I'm now drawing drinking like the right amount rather than a ridiculously large amount like I was drinking* / (.) because I can't you know these big glasses

TCU 1: *yeah*

- **Knowing (→Unknowning)**
- the adverb *yeah* indicates agreement with S0109's Knowing position in the previous turn (*but it doesn't all have to come from drink*)
- **1 word**

TCU 2: *I think I'm now drawing drinking like the right amount rather than a ridiculously large amount like I was drinking*

- **Believing (→Unknowning)**
- this TCU is all dominated by the uncertainty lexical marker *I think*
- **21 words**

TCU 3: *because I can't you know these big glasses*

- **Knowing (→Unknowning)**
- plain declarative sentence
- **9 words**

22.S0109: *yeah*

- **Knowing (→Unknowning)**
- the adverb *yeah* indicates agreement with S0052's Knowing position in the last TCU (*because I can't you know these big glasses*) of the previous turn
- **1 word**

23.S0052: I have like (.) well I drink a litre I drink a litre at school and then I drink one of them in the morning and like maybe three in the evening (.) so I'm still drinking one in the morning and a litre at school (.) I'm just having less in the evening

- the scope of the uncertainty lexical marker *maybe* in the declarative sentence *and [I drink] like maybe three [big glasses] in the evening* in the middle of the turn is only the word *three*. Thus the expression *maybe three* conveys the **Believing** position (*maybe* in our view is here equivalent to *I think*) (→Unknowning)
- **2 words**
- the rest of the sentence and of the turn is **Knowing** (all plain declarative sentences) (→Unknowning)
- **51 words**

24.S0109: *that's probably sensible*

- **Believing (→Unknowning)**

- declarative sentence including the uncertainty lexical marker *probably* and analogous to *I think that's sensible*
- **4 words**

25.S0052: yeah cos also I go to the toilet every night and that's quite annoying

This turn includes two TCUs: *yeah* and the rest of the turn.

- In our view, the initial adverb *yeah* indicates agreement with S0109's Believing position in the previous turn (*that's probably sensible*), thus we read it as **Believing** (= *I think that's probably sensible too*) (**→Believing**)
- **1 word**
- the rest of the turn is **Knowing** (plain declarative sentences, **→Unknowing, 14 words**)

26.S0109: and then you complain that you can't sleep

- **Knowing (→Unknowing)**
- plain declarative sentence
- **9 words**

27.S0052: yeah I know (.) so just like part of my like you know (.) improving my life in crazy ways

- **Knowing (→Unknowing)**
- plain declarative sentences (the initial *yeah* indicates agreement with S0109's Knowing position in the previous turn (*and then you complain that you can't sleep*), thus we read it as Knowing
- **18 words**

At first glance, the majority of both interlocutors' turns consist in plain declarative sentences from the Knowing to the Unknowing position, but a significant role also seems to be played by the Uncertain position, especially the Believing pole.

As far as questions are concerned, there are six of them, three asked by S0052 and as many by S0109: of these, two are neutral polar interrogatives:

- *have I told you about my drinking less?* (S0052, turn 1, from NKW to K),
- *drinking less?* (S0109, turn 2, TCU 2, from NKW to K);

another two are plain declarative questions:

- *so you're making up for it?* (S0109, turn 12, from B to K),
- *you're meant to drink two litres?* (S0052, turn 17, from B to K);

one is a wh-question:

- *how much did you drink a day then?* (S0109, turn 14, from U to K).

Finally, we also have a self-addressed *dubitative* declarative question [*I drank*] *three litres maybe?* which as a piece of information for the interlocutor corresponds to the supposition *I drank three litres maybe* (S0052, turn 15, TCU 3, from B to U).

The Believing position is also conveyed (mostly by S0052) through declarative sentences including a lexical marker of uncertainty like *I think* (turn 11, TCU 4; turn 15, TCU 5; turn 21, TCU 2), *probably* (turn 11, TCU 2) and *maybe* (turn 23).

Only once does S0109 convey her Believing position through a declarative sentence (turn 16, TCU 1, the adverb *yeah* is paraphrased as *I think it's more normal too*) expressing agreement with S0052's previous turn, the final TCU (*which I think is more normal*).

12.4.1 Distribution of words between interlocutors

Out of a total of 376 dialogue words, 298 (79.26%) are uttered by S0052 and 78 (20.74%) by S0109, i.e., S0052 (the narrator) speaks almost three times more than S0109 (the audience), as expected in a narrative sequence (Figure 1).

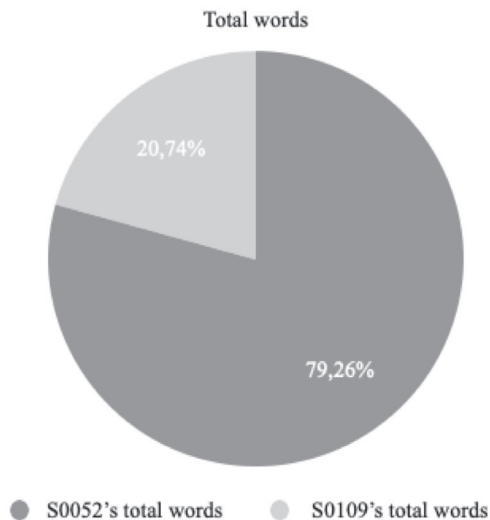


Figure 1. Percentages of words uttered by each interlocutor

12.4.2 Epistemic origin of the interlocutors' words: distribution of Known, Unknown and Uncertain

If we sum up the words referring to the epistemic origin of **S0052**'s words, i.e., the epistemic positions they come from, we have:

Knowing: $1 + 8 + 41 + 5 + 6 + 4 + 52 + 1 + 15 + 1 + 1 + 9 + 51 + 14 + 18 = 227$

Unknowning: **4**

Not Knowing Whether: **8**

Believing: $4 + 15 + 3 + 6 + 7 + 21 + 2 + 1 = 59$

If we sum up the Not Knowing Whether (**8**) and the Believing (**59**), we have the total **Uncertain 67**.

Out of 298 total words uttered by S0052, the percentages of words referring to her epistemic positions are shown in Table 1 and Figure 2.

Table 1. Words and percentages referring to S0052's epistemic positions

S0052	words	%
Knowing	227	76.17
Unknowning	4	1.34
Not Knowing Whether	8	2.68
Believing	59	19.80
Tot.	298	100

} 67 } 22.48

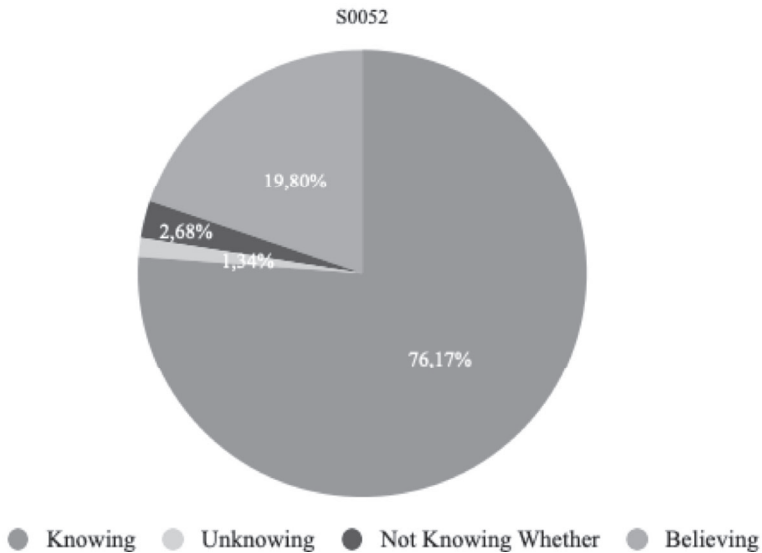


Figure 2. Percentages referring to S0052's epistemic positions

The Knowing (76.17%) is the most used position (plain declarative sentences), followed by the Believing (19.80%), the former being almost four times more frequent than the latter.

The Believing is formed from two questions:

- *three litres maybe?* turn 15, TCU 3, 3 words,
 - *you're meant to drink two litres?* turn 17, 7 words,
- and the following uncertain declarative sentences:
- *and I'll **probably**,* turn 11, TCU 2, 4 words,
 - *so I didn't drink very much when I was like a child **I think**,* turn 11, TCU 4, 15 words,
 - *which **I think** is more normal,* turn 15, TCU 5, words 6,
 - ***I think** I'm now drawing drinking like the right amount rather than a ridiculously large amount like I was drinking,* turn 21, TCU 2, 21 words,
 - ***maybe** three,* turn 23, 2 words (*and [I drink] like maybe three [big glasses] in the evening*),
 - *yeah* (=I think that's probably sensible too, turn 25, TCU 1, 1 word).

The most commonly used uncertainty lexical marker is *I think* (three times) followed by the adverbs *probably* and *maybe*.

The Not Knowing Whether (2.68%) consists only of one question, the initial polar interrogative *have I told you about my drinking less?* (turn 1, 8 words).

Believing plus Not Knowing Whether makes 22.48% Uncertainty.

The Unknowing (1.34%) is something of a Cinderella, consisting only in the answer *I don't know* (turn 15, 4 words) to S0109's question *how much did you drink a day then?*

If we now sum up the words referring to the epistemic positions of the second interlocutor, **S0109**, we have:

Knowing: $1 + 1 + 6 + 6 + 1 + 19 + 2 + 10 + 1 + 9 = 56$

Unknowing: **8**

Not Knowing Whether: **2**

Believing: $7 + 1 + 4 = 12$

If we sum up the Not Knowing Whether (**2**) and the Believing (**12**), we have the total **Uncertain 14**.

Out of 78 total words uttered by S0109, the percentages of words referring to her epistemic positions are shown in Table 2 and Figure 3.

Table 2. Words and percentages referring to S0109's epistemic positions

S0109	Words	%
Knowing	56	71.79
Unknowing	8	10.26
Not Knowing Whether	2	2.56
Believing	12	15.38
Tot.	78	100

} 14 } 17.94

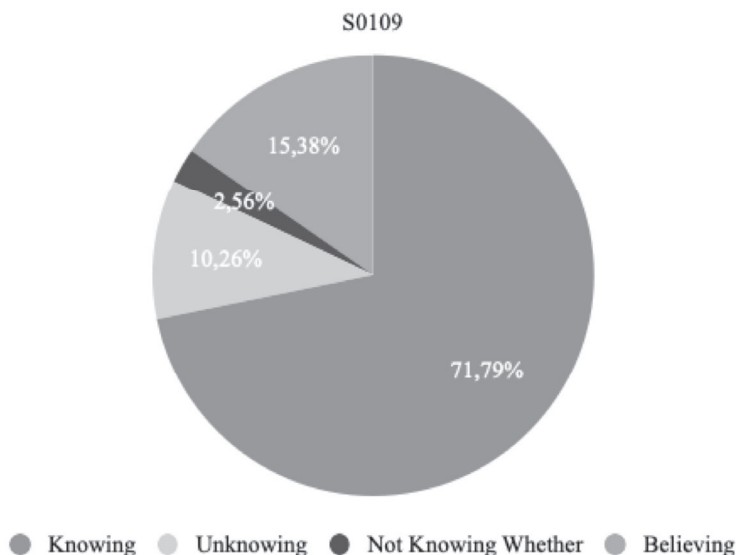


Figure 3. Percentages referring to S0109's epistemic positions

Here too the most favoured position is the Knowing (plain declarative sentences), followed by the Believing, the former being used four and a half times more than the latter. The ratio between the two positions is analogous to that shown in Figure 2: $76.17\% > 19.80\%$ (Figure 2), $71.79\% > 15.38\%$ (Figure 3).

But now it is the Unknowning that increases significantly, moving from 1.34% (Figure 2) to 10.26% and leaving the Cinderella role to the Not Knowing Whether, even though the percentages of this latter are nearly the same in both Figures (2.68%, Figure 2; 2.56%, Figure 3).

Believing plus Not Knowing Whether makes 17.94% Uncertainty.

The Believing consists of one question, *so you're making up for it?* (turn 12), 7 words, and two uncertainty declarative sentences, *yeah* (= I think it's more normal too) (turn 16, TCU 1), 1 word; and *that's probably sensible* (turn 24), 4 words.

The Unknowning is formed from the wh-question *how much did you drink a day then?* (turn 14), 8 words.

The Not Knowing Whether consists only in one question, *drinking less?* (turn 2, TCU 2).

If we sum up the words referring to the epistemic positions of both interlocutors, out of 376 dialogue total words we have:

283 (227 + 56) (75.27%) are Knowing,

12 (4 + 8) (3.19%) are Unknowing,

10 (8 + 2) (2.66%) are Not Knowing Whether,

71 (59 + 12) (18.88%) are Believing,

i.e., **81** (10 + 71) (21.54%) are Uncertain, as shown in Table 3 and Figure 4.

Table 3. Words and percentages referring to S0052's + S0109's epistemic positions

S0052 + S0109	words	%
Knowing	283	75.27
Unknowing	12	3.19
Not Knowing Whether	10	2.66
Believing	71	18.88
Tot.	376	100

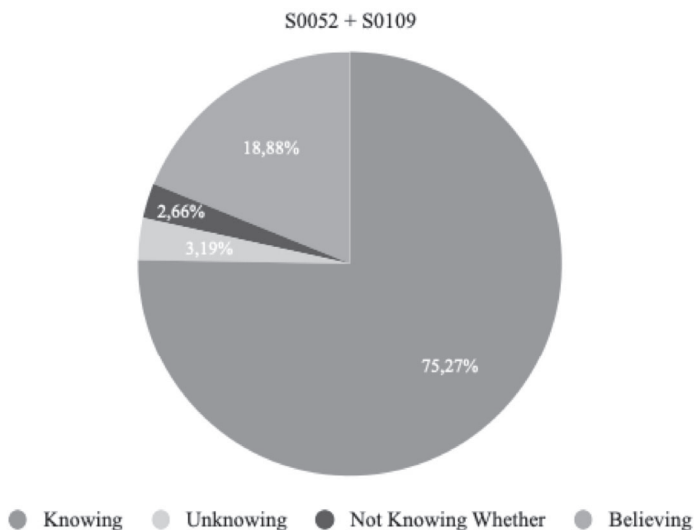


Figure 4. Percentages referring to S0052's + S0109's epistemic positions

The Knowing is used four times more than the Believing, thus the ratio between the two positions is analogous to those shown in Figures 2 and 3.

The Unknowing (3.19%) is slightly more than the Not Knowing Whether (2.66%), this latter now playing the Cinderella role.

In all three Figures (2-4), the Not Knowing Whether remains constant: 2.68% (Figure 2), 2.56% (Figure 3), 2.66 (Figure 4).

On the contrary, the Unknowing has a peak in Figure 3 (10.26%) compared with Figure 2 (1.34%) and 4 (3.19%). That peak refers to S0109's turns and, in our view, it is not casual but related to the different conversational roles of the two interlocutors, as we stress in commenting on Table 4 and Figure 5 below.

Table 4. Synoptic view of words and percentages referring to S0052's and S0109's epistemic positions

	S0052	S0109	Tot.
Knowing	227 (80.21%)	56 (19.79%)	283 (100%)
Unknowing	4 (33.33%)	8 (66.67%)	12 (100%)
Not Knowing Whether	8 (80%)	2 (20%)	10 (100%)
Believing	59 (83.10%)	12 (16.90%)	71 (100%)
Tot.	298 (100%)	78 (100%)	376 (100%)

The percentages shown in Table 4 are calculated from the total words referring to each epistemic position, not from the total words in the dialogue (as was the case in Figure 4) nor from the total words of each interlocutor (as was the case in Tables 1-2 and in Figures 2-3).

So, for example, Table 4 shows that, out of a total of 283 Knowing words, 227 (80.21%) are used by S0052 while 56 (19.79%) by S0109; and so on for the other epistemic positions. In brief, the two interlocutors are epistemically compared.

Figure 5 displays the same percentages in a bar chart.

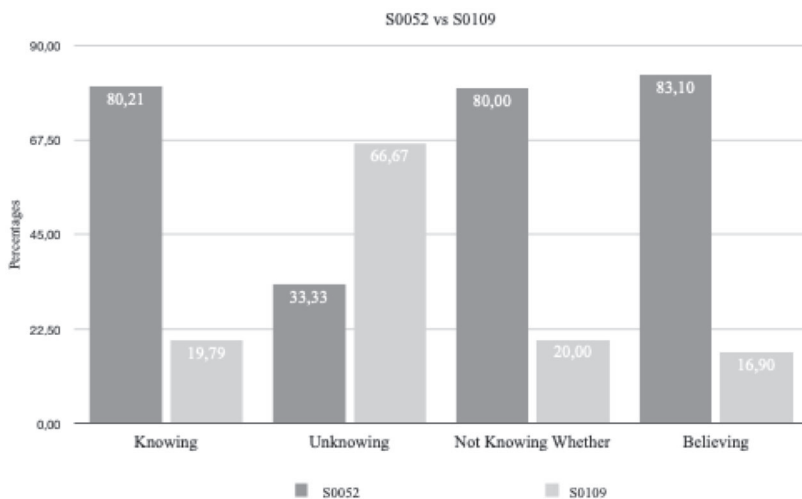


Figure 5. Percentages of S0052's and S0109's epistemic positions

Figure 5 shows that S0052 uses the Knowing, Not Knowing Whether and Believing positions almost three times more than S0109. On the contrary, S0109 uses the Unknowning position twice as much as S0052 does.

We must not forget that S0052 is the one who poses the initial question *Have I told you about my drinking less?*, which functions (as said in Chapter 3, section 3.2.1) as a *story preface* (Jefferson 1978; Sacks 1974b; Schegloff 2007; Terasaki 2004; Stivers, Mondada and Steensig 2011) or an *abstract* (Labov and Waletzky 1967/1997), i.e., something that introduces or summarizes the story to tell.

S0052's question *Have I told you about my drinking less?* can thus be also seen as a proposal for negotiating the upcoming *conversational* and, in our view, *epistemic roles* of both interlocutors: S0052 knows something that forms part of her experience and is going to tell it to S0109, who does not know it yet. A narrator and an audience.

S0109's response *no (.) drinking less?*, which includes another question, shows that she is interested in knowing the story and is playing the role of an audience.

So S0052 begins to narrate her attempt to drink less water than she usually did. In a narrative sequence, the narrator obviously takes a "prevailing" role in the distribution of the speech.

In this excerpt, S0052 speaks three times more than S0109 and, as a narrator, she describes not only her past and present water-drinking habits

from the Knowing position, she also expresses evaluations and opinions about them from the Believing position. It is, therefore, understandable that she uses the Knowing and the Believing positions much more than S0109. It is equally understandable that S0109 uses the Unknowing position much more than S0052, since it is S0109 who does not know the story and wants to learn about it.

This is in line with Heritage's (2012a, 2012b) notion of *epistemic asymmetry*: speakers are driven to engage in conversational sequences to fill *epistemic gaps* (either their own or those of the interlocutor). "Every conversational contribution is motivated by the desire to give (or receive, or share) information" (Heritage 2012c: 79).

In our excerpt, it is S0052 who desires to give information to S0109. Between the two interlocutors there is an initial *imbalance of information*: S0052 is in a *more knowledgeable* position (K+) while S0109 is in a *less knowledgeable* one (K-). Therefore, S0052 provides information to drive the K+ / K- *epistemic seesaw* forward and to fill the epistemic gap between herself and S0109. The conversational sequence is closed when the imbalance is equalized: from the initial K- S0109 shifts to a subsequent K+.

We want only to remark that the information given by S0052 to S0109 does not only consist of Known (76.17%) but also of Believed (19.80%).

As a general conclusion, we can underline that in all the four Figures (2-5) the most frequently used position is the Knowing, followed by the Believing, while the Not Knowing Whether and the Unknowing are used far less. These data are in line with those of our previous research on spoken dialogues (Zuczkowski, Bongelli and Riccioni 2017, Chapters 5-7).

But we can go even further, if we count the same number of words uttered by each interlocutor from the perspective of *the epistemic position at which they are directed*.

So, for example, in section 12.4 we have seen that S0052's turn 1 (*Have I told you about my drinking less?* 8 words) comes from the Not Knowing Whether and is addressed toward S0109's Knowing position.

S0109's answer in turn 2 comes from the Knowing position (*No = You didn't tell me about your drinking less*, 1 word) and it is directed at S0052's Not Knowing Whether, i.e., the position from which S0052's question originated (alignment, in this case).

The same numbers of words (8 and 1, respectively) are now counted not from the perspective of their epistemic origin (NKW and K, respectively) but of their destination (K and NKW, respectively).

Another example: in turn 5, S0052's plain declarative sentence *I've decided to try and drink less* (8 words) comes from the Knowing and is addressed toward the Unknowing; similarly, in the next line (6), S0109's

plain declarative sentence *but that's a bad thing* (6 words) comes from the Knowing and is directed at the Unknowing. The same numbers of words (8 and 6, respectively) are now counted as Unknowing, not as Knowing.

In this way, if we add these data (epistemic *destination* of the interlocutors' words) to those shown in the previous figures and tables (epistemic *origin* of the interlocutors' words), we can have a complete quantitative map of the epistemic positions involved in the dialogue.

12.4.3 Epistemic destination of the interlocutors' words: distribution of Known, Unknown and Uncertain

If we sum up the words referring to the epistemic destination of S0052's turns, we have:

Unknowing: $8 + 41 + 5 + 6 + 4 + 4 + 15 + 52 + 1 + 4 + 3 + 15 + 6 + 1 + 1 + 21 + 9 + 53 + 14 + 18 = \mathbf{281}$

Knowing: $8 + 7 = \mathbf{15}$

Not Knowing Whether: **1**

Believing: **1**

If we sum up the Not Knowing Whether (**1**) and the Believing (**1**), we have the total **Uncertain 2**.

Out of 298 total words uttered by S0052, the percentages referring to the epistemic destination of her turns are shown in Table 5 and Figure 6.

Table 5. Words and percentages referring to the epistemic destination of S0052's turns

S0052	words	%
Unknowing	281	94.30
Knowing	15	5.03
Not Knowing Whether	1	0.34
Believing	1	0.34
	} 2	} 0,68
Tot.	298	100

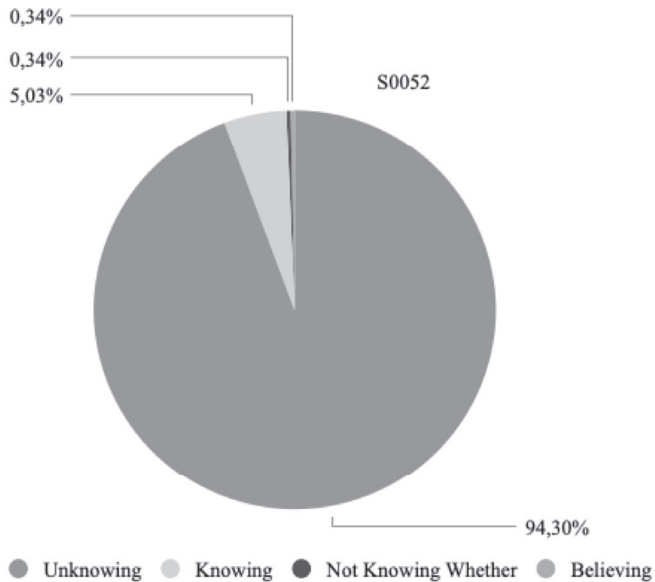


Figure 6. Percentages referring to the epistemic destination of S0052's turns

The Unknowning is the most frequently addressed position, followed by the Knowing, but the former is used almost nineteen times more than the latter. This means that almost all of S0052's turns are directed at S0109's Unknowning (S0052 is the narrator), the words addressed toward the Knowing consisting only in two turns, which not incidentally correspond to as many questions, *have I told you about my drinking less?* (turn 1, 8 words) and *you're meant to drink two litres?* (turn 17, 7 words).

The Believing (0.34%) and Not Knowing Whether (0.34%) are insignificant.

If we now sum up the words referring to the epistemic destination of **S0109's** turns, we have:

Unknowning: $6 + 6 + 1 + 1 + 19 + 10 + 1 + 4 + 9 = 57$

Knowing: $2 + 7 + 8 = 17$

Not Knowing Whether: $1 + 1 = 2$

Believing: 2

If we sum up the Not Knowing Whether (**2**) and the Believing (**12**), we have the total **Uncertain 4**.

Out of 78 total words uttered by S0109, the percentages of words referring to the epistemic destination of her turns are shown in Table 6 and Figure 7.

Table 6. Words and percentages referring to the epistemic destination of S0109's turns

S0109	words	%
Unknowing	57	73.08
Knowing	17	21.79
Not Knowing Whether	2	2.56
Believing	2	2.56
Tot.	78	100

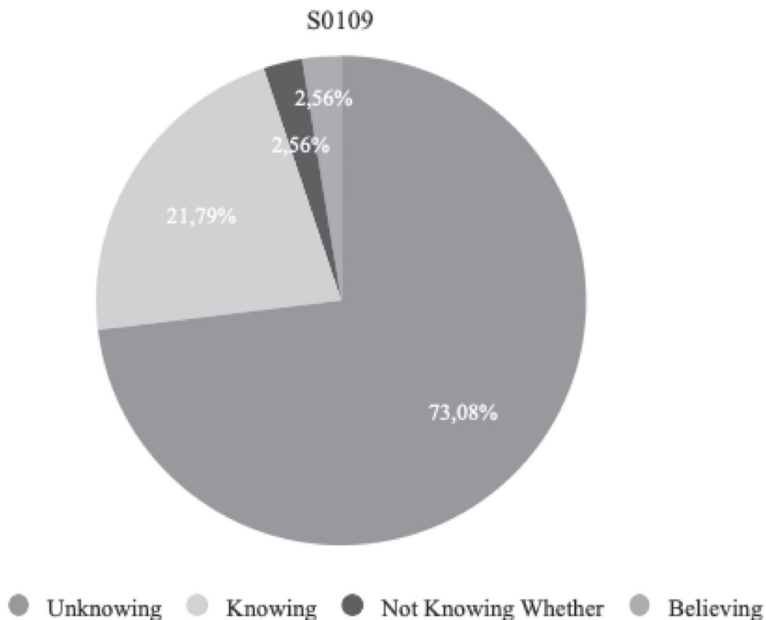


Figure 7. Percentages referring to the epistemic destination of S0109's turns

Here too, the most frequently addressed position is the Unknowing, followed by the Knowing, but now the former is only almost three and a half times more than the latter (S0109 is the audience). It is not by mere chance that the words addressed toward the Knowing consist in three plain questions: *drinking less?* (turn 2, TCU 2, 2 words), *so you're making up for it?* (turn 12, 7 words), *how much did you drink a day then?* (turn 14, 8 words).

The Not Knowing Whether (2.56%) and Believing (2.56%) still play a small role, yet they are more than in Figure 6 (both 0.34%).

If we sum up the words referring to the epistemic destination of both interlocutors' turns, we have, out of 376 total words in the dialogue:

338 (281 + 57) (89.89%) are Unknowing,

32 (15 + 17) (8.51%) are Knowing,

3 (1 + 2) (0.80%) are Not Knowing Whether,

3 (1 + 2) (0.80%) are Believing,

i.e., **6** (3 + 3) (1.60%) are Uncertain, as shown in Table 7 and Figure 8:

Table 7. Words and percentages referring to the epistemic destination of S0052's plus S0109's turns

S0052 + S0109	words	%
Unknowing	338	89.89
Knowing	32	8.51
Not Knowing Whether	3	0.80
Believing	3	0.80
	} 6	} 1.60
Tot.	376	100

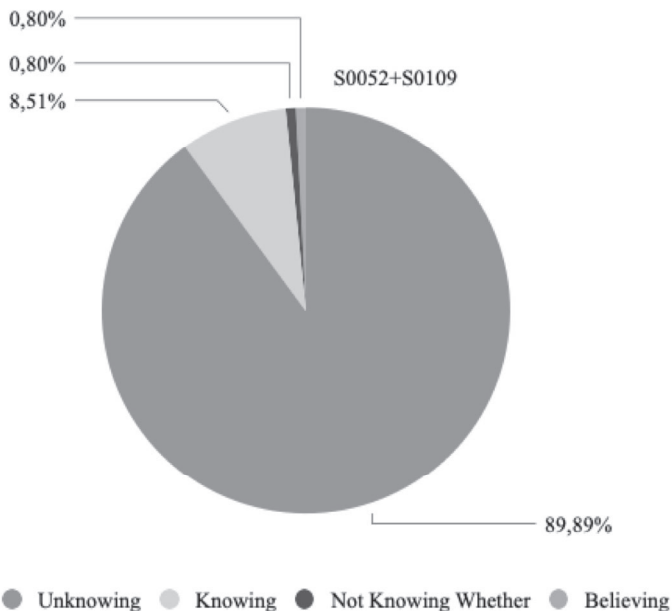


Figure 8. Percentages referring to the epistemic destination of S0052's plus S0109's turns

In Table 7 and Figure 8, the number of words referring to the addressed positions of both interlocutors and their percentages, calculated from the dialogue total words, show that the Unknowing is ten and a half times more frequent than the Knowing.

The percentages shown in Table 8 and Figure 9 here below are instead calculated from the total words referring to each addressed position.

So, for example, Table 8 shows that, out of 338 total words addressed to the Unknowing position, 281 (83.14%) are uttered by S0052 and only 57 (16.86%) by S0109; and so on for the other epistemic positions. The two interlocutors are epistemically compared again, as in Table 4 and Figure 5.

Figure 9 shows the same percentages in a bar chart.

Table 8. Synoptic view of words and percentages referring to the epistemic destination of S0052's and S0109's turns

	S0052	S0109	Tot.
Unknowing	281 (83.14)	57 (16.86)	338 (100%)
Knowing	15 (46.88)	17 (53.13)	32 (100%)
Not Knowing Whether	1 (33.33)	2 (66.67)	3 (100%)
Believing	1 (33.33)	2 (66.67)	3 (100%)
Tot.	298 (100%)	78 (100%)	376 (100%)

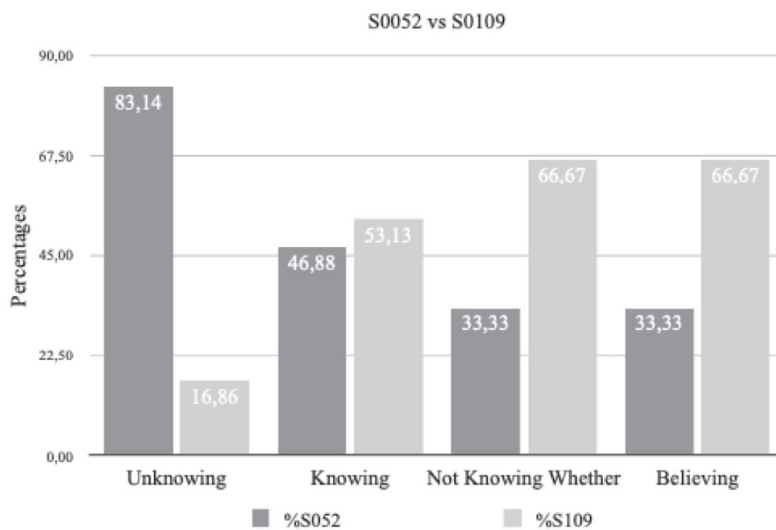


Figure 9. Percentages referring to the epistemic destination of S0052's and S0109's turns

Both Table 8 and Figure 9 show that S0052 (the narrator) addresses her words toward S0109's Unknowing almost five times more than S0109 does toward S0052's Unknowing. These data too are in line with Heritage's notion of *epistemic asymmetry*, as mentioned at the end of the previous section.

Both S0052 and S0109 address their words toward the interlocutor's Knowing in more or less the same measure, S0109 (53.13%) slightly more than S0052 (46.88%). This means that both speakers ask questions directed at the interlocutor's Knowing position.

On the contrary, S0109 (the audience) addresses her words toward S0052's Not Knowing Whether and Believing twice as much as S0052 does toward the same positions of S0109.

As a general conclusion of this section (epistemic destination), we can stress that the most frequently addressed position is the Unknowing followed by the Knowing, while the less frequently addressed ones are the Not Knowing Whether and the Believing.

If we add these data to those resulting from section 12.4.2 (epistemic origin), where the preferred positions were the Knowing and the Believing, we find that both data fit together well: in this conversation the Knowing is mostly directed at the Unknowing (mostly in the form of plain declarative sentences), as usually happens, and the Believing is directed not only to the Unknowing (mostly in the form of uncertain declarative sentences) but also to the Knowing (in the form of plain questions). The Believing as an addressed position is almost totally absent, simply because no question is directed at this position.

OVERALL CONCLUSIONS

In this book, taking as our main reference points Stivers, Enfield and Levinson's (2010) study on questions and responses, and John Heritage's model of epistemic stance (Chapter 2), we applied the KUB model (illustrated in Chapter 1) to five types of question (wh-, alternative, tag, declarative questions and polar interrogatives), when their social action is mainly information and/or confirmation seeking.

1. Unknowing and uncertain questions

Through the *qualitative* analysis (presuppositions, question design, social action and preference organization) of 94 fragments of English question-answer sequences extracted from the Spoken BNC2014 and considered as representative of the specific question type under examination, in Chapters 3-8 we tried to achieve the first two aims of the present book (Chapter 2, section 2.2), i.e., to show that

- (1) questions come from two distinct epistemic positions, the *Unknowing* and the *Uncertain*: wh-questions come from the former position, and in this sense they can be called *unknowing questions*; alternative and polar questions come from the latter position, and in this sense they can be called *uncertain questions*. In other words, within the K-position in Heritage's epistemic model, we explicitly distinguish a less knowledgeable questioner who asks a question because *s/he does not know p* and a less knowledgeable questioner who asks a question because *s/he does not know whether p* or because *s/he believes that p*, i.e., is uncertain.
- (2) Uncertain questions convey different degrees of uncertainty, thus occupying different points along the epistemic continuum of the Uncertain position, ranging from the Not Knowing Whether pole of maximum uncertainty to the Believing pole of minimum uncertainty. Alternative questions and neutral polar interrogatives are closer to the Not Knowing Whether pole, while non-neutral polar interrogatives, tag and declarative questions are closer to the Believing pole.

2. Wh-questions

Wh-questions express a lack of knowledge (=un-knowledge) concerning the *identity* of a particular *piece* of information *within* a proposition, i.e., a wh-word (e.g., *how much* did you drink a day?). The questioner aims to find out the only unknown element (*how much...*) within a state of affairs presupposed to be true, i.e., as known and certain to her/him (you drank a given amount a day). The wh-word acts as a pro-form for the missing information. This is the reason why wh-questions come from the Unknowing position, are information seeking, and expect a content response.

Any full reasonable analysis or theory of questions should relate their *direct* forms to the corresponding *indirect* ones, especially when the type of analysis is epistemic in nature. A direct question can be treated as semantically equivalent to a declarative sentence containing the corresponding indirect question embedded under a suitable *evidential* or *epistemic* verb. If we use the verb *to know* to transform a *direct* wh-question such as *how much did you drink a day?* into its corresponding *indirect* form, we have

I do not know how much you drank a day

which we use as a formula to represent the epistemic design of wh-questions.

Formally, such an epistemic design may be represented as

I do not know + p

where p is the content of the question (*how much you drank a day*) and the expression *I don't know* signals the questioner's total lack of knowledge concerning p.

On the contrary, polar questions (interrogatives, tag and declarative questions) express a lack of certainty (=un-certainty) concerning the *truth* of a *complete* proposition or, as in alternative questions, of (at least) two propositions.

3. Alternative questions

In order to find out more about the linguistic design of alternative questions as well as to have quantitative data to refer to, in Chapter 4 we analysed a corpus of 611 alternative questions extracted from the Spoken BNC2014. They proved to be of four types:

- *complete*, where from a lexical and grammatical point of view the alternatives are fully expressed (e.g., *did you have caesareans or natural births?*). They expect a response specifying the chosen alternative;
- *incomplete*, where one (or occasionally more) lexicalised alternative is followed by a *pending* disjunctive conjunction *or* (e.g., *do they eat them or strangle them or?*). Almost 60% of respondents reply to such questions (both with and without overlap) with a *yes* or a *no* (plus optional further content), as if they were polar interrogatives;
- *indefinite*, where the conjunction *or* is immediately followed by an indefinite pronoun (e.g., *do you want me to like tidy your room or something?*). The questioner uses such indefinite pronouns (*something, somewhere, anything, what* and *whatever* in our corpus) to indicate that s/he is referring generally and vaguely to something similar to what s/he has just mentioned in the previous alternative(s). The respondent is expected to choose one of the lexicalised alternatives or to specify the possible referent of the indefinite pronoun in the final alternative;
- *negative*, i.e., *or not* questions, where the second alternative is the negation of the first (e.g., *do you want it washed up or not?*). They expect a *yes* or a *no* answer (like polar questions).

The question design of all 4 types of alternative questions can be basically reduced to two:

p_1 or p_2 ? = alternative questions of the first type (complete, incomplete, indefinite)

p_1 or non p_1 ? = alternative questions of the second type (negative, i.e., *or not* questions)

Both are closer to the Not Knowing Whether pole, since the questioner conveys that s/he is equally uncertain between the truthfulness of two explicit, lexicalised alternatives, both of which are possibly true to the same degree (50%-50% probability).

This means that in both types of alternative question the questioner displays that her/his expectations concerning the interlocutor's response are *neutral*, not oriented in favour of one of the alternatives; both are expected to the same extent.

For this reason, such questions are *information-seeking* rather than *confirmation-seeking*: in principle, the first type expects a content response specifying which alternative is chosen by the respondent, the second type expects a yes-no response (like polar questions).

If we again use the verb *to know* to transform the *direct* alternative questions of both types (*did you have caesareans or natural births?* / *do you want it washed up or not?*) into their corresponding *indirect* forms, we have

I do not know whether you had caesareans or natural births

I do not know whether you want it washed up or not

which we use as a formula to represent the epistemic design of both types of alternative questions (p_1 or $p_2?$ / p_1 or non $p_1?$). Formally, such epistemic designs may be represented as

I do not know whether + p_1 or p_2

I do not know whether + p_1 or non p_1

The expression *I do not know whether...or...* makes explicit the questioner's epistemic position of uncertainty between the two alternatives that s/he is faced with and it gives rise to a grammatically acceptable sentence. On the contrary, if we place the expression *I do not know*, as in the case of wh-questions, we would give rise to two grammatically unacceptable sentences:

**I do not know you had caesareans or natural births*

**I do not know you want it washed up or not*

The expression *I do not know* suits wh-questions only, it does not suit alternative questions (nor does it suit polar interrogatives, tag and declarative questions), which instead require *I do not know whether*.

From a theoretical point of view, the most interesting types of alternative question seem to be the *incomplete* and *or not* ones, since they are strictly related to polar interrogatives.

4. Incomplete alternative questions and polar interrogatives

Linguistically, incomplete alternative questions seem to be properly neither *polar interrogatives* nor *alternative questions*, since they feature the conjunction *or* after a lexicalised alternative (which is absent in polar interrogatives), and also lack the second (or third and so on) lexicalised alternative after the conjunction.

Nonetheless, they seem to be *alternative* in the questioners' intention (otherwise the use of the disjunctive conjunction would be nonsensical) and *polar* in most of the respondents' reactions: they answer soon after the lexicalised alternative(s), typically replying with a *yes* or a *no* (the most common and frequent responses to polar interrogatives), to which sometimes they add further content.

In other words, in answering soon after the lexicalised alternative, the respondents often seem to *process* such questions *as if* they were polar interrogatives, although the questioners' intention to close them with a further alternative is clear, given the presence of the conjunction *or*.

Obviously, it is impossible to know whether the respondent interprets the incomplete alternative question as a polar interrogative or not, i.e., whether s/he prefigures the missing alternative and replies taking into account this one as well. The only evidence we have is the answer that follows the lexicalised alternative and is communicated before the second alternative is made explicit, as it is the case in polar interrogatives.

As said above, respondents mainly reply to incomplete alternative questions (both with and without overlap) with a *yes* or a *no* (plus optional further content).

5. *Or not* alternative questions and polar interrogatives

Or not questions, though less frequent than the other three types of alternative question, are interesting from a theoretical point of view in two aspects.

Firstly, since they can be answered by a simple *yes* or *no*, they rightfully fall into the category of *yes-no* questions, i.e., polar questions. Alternative questions of the first type (*p₁ or p₂*?) do not, since they cannot be answered with a simple *yes* or *no*: these fall into the category of content questions, similar to *wh*-questions, even though the content of answers to *wh*-questions is new, specifying the identity of the *wh*-word present in the questions, whereas the content of answers to alternative questions of the first type is a repetition of the chosen alternative or a specification of the indefinite pronoun.

Secondly, since *or not* questions are *yes-no* questions, they have a close relationship with these, mostly with one particular type, i.e., polar interrogatives, to the point that some authors, since Coleman (1914) on, claim that polar interrogatives (e.g., *is it still snowing outside?*) can be considered as a special type of alternative question in which the second alternative (*or not*) has been suppressed and thus remains implicit, not lexicalised: *is it still snowing outside (or not)?*

Bolinger (1978) takes a different view, claiming that polar interrogatives (as well as tag and declarative questions) advance a *hypothesis* for confirmation. The dispute between Coleman's and Bolinger's contrasting interpretations is not an idle one, since the different way of reading the linguistic design of polar interrogatives reverberates on the type of *social action* (information vs confirmation seeking) assigned to them and thus on their *epistemic design* as well.

6. Polar interrogatives

When read as Coleman suggests, polar interrogatives are *information seeking*, and thus *neutral* towards a *yes* or a *no* as an answer. Both alternatives, explicit and implicit (*it is still snowing outside* and *it is not snowing outside any longer*), are assigned the same probability of being true (50%-50%). The questioner is advancing no hypothesis.

Instead, following Bolinger, a polar interrogative is read as advancing a *hypothesis seeking confirmation* and thus as *non-neutral* with respect to a *yes* or *no* response: now the positive and negative possibilities are *not* assigned the same probability of being true.

In our example, the positive lexicalised possibility that *it is still snowing outside*, being the hypothesis to be confirmed, is assigned more probability of being true than the negative (implicit) possibility that *it is not snowing outside any longer*.

In other words, the notion of hypothesis, supposition and the like involves two propositions, one of which is given a stronger chance of being true than the opposite. However, its truthfulness has not yet been verified, so in the here and now of communication the questioner does not know whether that proposition is true or false, yet s/he believes it to be true. The answerer's response is expected to confirm such a supposition.

In this sense, both Coleman's and Bolinger's readings imply the questioner's uncertainty between two contrasting alternatives. The degree of uncertainty is, however, different: neutral questions (both alternatives are assigned the same probability of being true) are more uncertain than non-neutral questions (the lexicalised alternative is assigned greater probability of being true than the non-lexicalised one is).

For the above reasons, neutral polar interrogatives, like alternative questions, come from the Not Knowing Whether pole of the Uncertain position, the maximum uncertainty: they convey that, for the questioner, either of the two alternatives is *equally possible* (fifty-fifty probability of being true), i.e., that the questioner is *equally uncertain* between them. The

answerer's response is expected to let the questioner know which one is true and is open to both *yes* and *no* as a response.

By applying the same test of transforming direct into indirect questions used previously, the *epistemic design* of *neutral* polar interrogatives may be represented as:

I do not know whether it is still snowing outside (*or not*)

and more formally as

I do not know whether + *p* (or non *p*)

where *non p* = *or not*

In this case too, as in alternative questions of both types, the suitable expression to be placed before *p* is *I do not know whether*.

If we placed *I do not know* before *p*, we would end up again with a grammatically unacceptable sentence, as it was with alternative questions:

* *I do not know* it is still snowing outside

The epistemic design of *non-neutral* polar interrogatives is somewhat different and can be represented as

I do not know whether it is still snowing outside (*or not*), *but I am inclined to believe that* it is

The expression *I am inclined to believe that...* indicates that the questioner is advancing a hypothesis, a supposition, coming from the Believing pole of the Uncertain position.

More formally, the epistemic design of *non-neutral* polar interrogatives may be represented as

I do not know whether + *p* (or non *p*) *but I am inclined to believe that* *p*

In the epistemic continuum of the Uncertain position, *non-neutral* polar interrogatives come from a point between *neutral* polar interrogatives, on the one side, and tag questions on the other.

7. An ambiguous question design

The presence in the literature of the two aforementioned readings of polar interrogatives may be due to their linguistic design itself, where rarely is there any lexical or grammatical indication of whether a hypothesis is being advanced or not. The question design of polar interrogatives appears somewhat ambiguous in this respect, in the sense that both Coleman's and Bolinger's readings seem plausible in principle.

On the contrary, the design of the other question types under analysis in the present book is not ambiguous: on the one hand, wh- and alternative questions of both types are clearly information-seeking; on the other hand, the presence of the tag element in tag questions and the absence of the subject-verb inversion in declarative questions clearly show that the questioner is advancing a hypothesis seeking confirmation.

The design of polar interrogatives seems instead to be open to both readings, at least in English. Indeed, due to the context in which they occur, their turn sequential position and propositional content, some polar interrogatives among those we have analysed in the Spoken BNC2014 *seem* to fit Coleman's reading better, i.e., a neutral and information-seeking reading, while some others *seem* to fit Bolinger's reading better, i.e., a non-neutral and confirmation-seeking reading.

We hedge these claims because, in principle, establishing whether a polar interrogative is neutral or non-neutral is almost always a complex matter: often, neither the context of its occurrence nor its turn sequential position and propositional content make it possible to establish *with certainty* whether a polar interrogative is neutral (information seeking) or non-neutral (confirmation seeking) or something else.

We know from personal experience that prosody offers little help either. As an example of the difficulty in ascertaining the social action of polar interrogatives, some extracts from the Spoken BNC2014 were discussed at the end of Chapter 4.

8. Tag and declarative questions

In *tag questions* too (e.g., *that's not very fair is it?*), the questioner does not know whether *p* is true or false, but s/he supposes it to be true with decreasing uncertainty in comparison to non-neutral polar interrogatives.

The tag element gives the declarative component of the question the function of an explicit hypothesis, a supposition seeking confirmation and expecting a yes-no response. Questioners are more inclined to think that the lexicalised, explicit alternative is more likely to be true than the implicit

one. Such questions come from a point between non-neutral polar interrogatives and declarative questions.

Declarative questions (*You don't ring them?*) come from the farthest extremity of the Believing pole, the minimum uncertainty, and get the closest to the respondent's Knowing position, i.e., to K+ in Heritage's gradient, since their linguistic design includes a declarative sentence functioning as a strong supposition.

The questioner's epistemic commitment towards the truth of *p* is very high, very close to certainty: s/he is almost completely certain that the supposition is true, requests confirmation and expects a yes-no response.

The epistemic design of both tag and declarative questions is the same as that of non-neutral polar interrogatives:

I do not know whether it is not very fair (or it is), but I am inclined to believe that it is not

I do not know whether you do not ring them (or you do), but I am inclined to believe that you do not

More formally:

I do not know whether + non p (or p) but I am inclined to believe that non p

As in non-neutral polar interrogatives, the expression *I am inclined to believe that...* indicates that the questioner is advancing a supposition.

The difference among all the uncertain questions is given by their degree of uncertainty: the closer a question gets to the Believing pole, the less uncertain it is.

In all four types of uncertain questions, the questioner wants to move from *possible* states of affairs, more or less uncertain, to a *true, certain* state, thanks to the recipient's response.

These uncertain states of affair are communicated as being equally probable in alternative questions and neutral polar interrogatives and as being unequally probable to different degrees in non-neutral polar interrogatives, tag and declarative questions.

The expression "unequally probable" means that the lexicalised alternative is supposed to be more likely of being true than the non-lexicalised one.

In all four types of uncertain questions the recipient's response is expected to resolve the questioner's uncertainty, allowing the questioner to know which possibility is actually true.

In wh-questions, on the contrary, questioners want to move from an unknown state of affairs to a known one, i.e., certain, true.

9. Epistemic design: *I do not know* versus *I do not know whether*

Table 1 represents the epistemic designs underlying the different question types. The main difference in the epistemic designs of unknowing and uncertain questions is given by the expression *I do not know* versus *I do not know whether*.

Table 1. Question type, epistemic design and social action

Question type	Epistemic design	Social Action
Wh-questions	I do not know p	Informative
Alternative questions	I do not know whether p ₁ or p ₂ is true	
Neutral polar interrogatives	I do not know whether p (or non p) is true	
Non-neutral polar interrogatives	I do not know whether p (or non p) is true but I am inclined to believe that p is true	Confirmative
Tag questions		
Declarative questions		

As a matter of fact, when transformed from direct into indirect questions, wh-questions require *I do not know* as an introducing epistemic verbal expression to form a grammatically acceptable sentence, while alternative and polar questions require *I do not know whether... or... .*

Uncertainty, by definition, implies *alternatives*: the questioner is faced with at least two different possibilities (p and non p), and the verbal expression *I do not know whether...or...* conveys this sense of epistemic uncertainty well.

The transformation from direct to indirect questions with their suitable epistemic complement (*I do not know* vs *I do not know whether*) can be considered as a “linguistic test” aimed at checking whether a question is unknowing or uncertain.

From an epistemic stance perspective, there is a great difference between *not knowing* and *not knowing whether*, as much as between *un-knowledge* and *un-certainty*: information communicated as *unknown* involves *absence of knowledge*; information communicated as *not known whether* involves *absence of certainty*, i.e., *presence of doubt*.

In all uncertain questions, the questioner aims to resolve a doubt or to confirm a supposition concerning which of two states of affairs, mutually exclusive and presupposed to be possible, is true. Questioners try to dispel doubt on the truth of two alternative propositions.

Unlike *wh*-questions, where questioners adopt an Unknowing position, alternative and polar questions do not seem to involve “groping in the dark”, since they advance a doubt or a supposition, asking the interlocutors from either a Not Knowing Whether or Believing position.

The epistemic continuum ranging from the Unknowing position to the Believing pole of the Uncertain position (Figure 3, Chapter 5, section 5.5; for the reader’s convenience, this figure is repeated below as Figure 1) can be compared to Heritage’s epistemic gradient as presented in Chapter 2, section 2.1.2, which includes a K- questioner and a K+ recipient (Figure 2, again repeated here for the reader’s convenience).

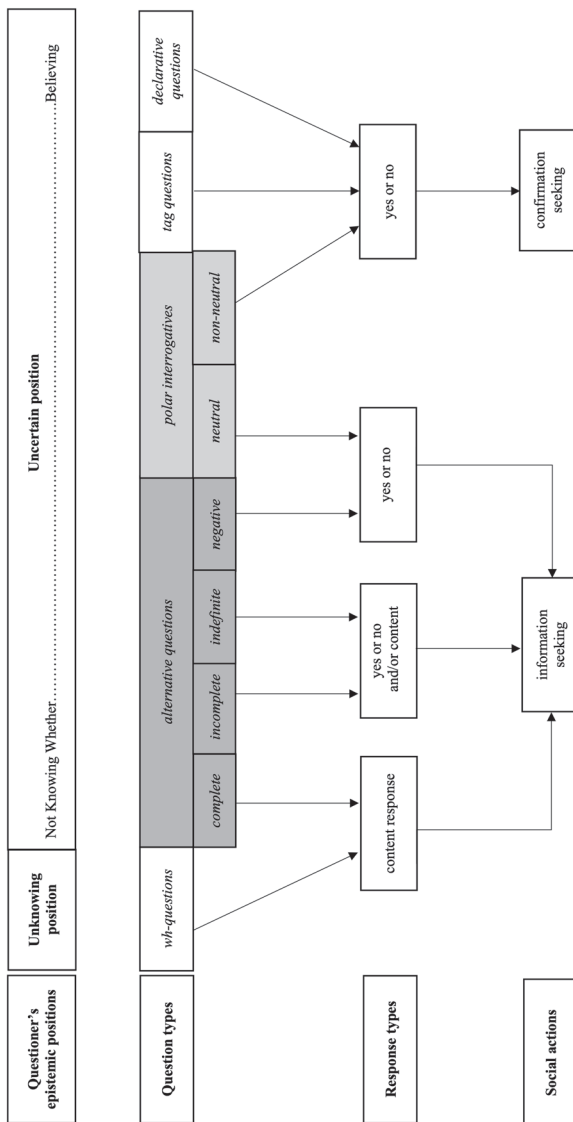


Figure 1. Questioner's Unknowing and Uncertain position, question types, response types and social actions. While wh-questions come from the Unknowing position, alternative questions and the three sub-types of polar questions come from the Uncertain position. All questions are situated in different points along the epistemic continuum that goes from the Unknowing to the Uncertain position, this latter ranging from the Not Knowing Whether to the Believing pole

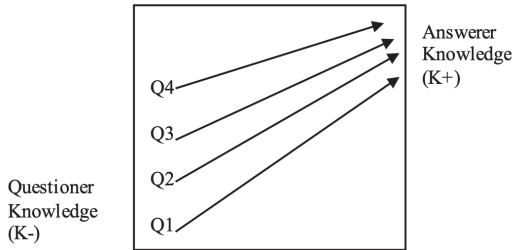


Figure 2. Epistemic gradient (Heritage and Raymond, 2012: 181): Q1, Q2, Q3, Q4 represent respectively wh-question, polar interrogative, tag and declarative question

In Figure 3 the two models are superimposed.

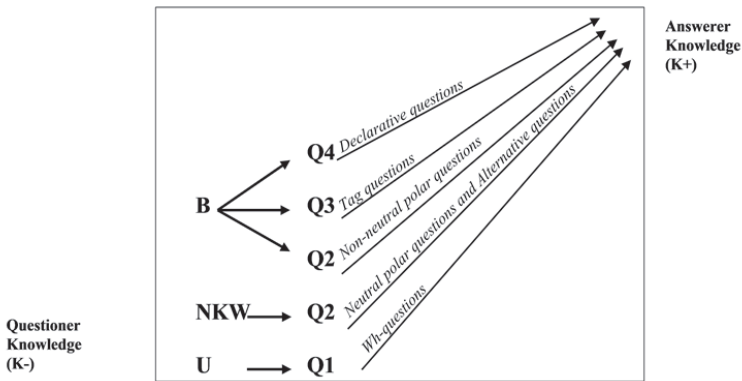


Figure 3. Our Unknowning (U) position and the NKW/B poles of the Uncertain position superimposed onto Heritage’s K- position

The similarity between the two epistemic continua—Heritage’s and ours—is that Q1-Q4 are placed in the same order along the epistemic gradient.

The differences are the following:

- (1) alternative questions, neutral and non-neutral polar interrogatives are added to Heritage’s examples Q1-Q4 in Figure 2: Q2 (polar interrogative) comes from NKW or B depending on neutral or non-neutral reading;
- (2) our model distinguishes between the Unknowning, Not Knowing Whether and Believing positions, while Heritage’s K- does not make any explicit distinction between knowledge and uncertainty.

In our view, the Uncertain position has an epistemic status of its own, different from that of knowing and unknowing. Epistemic stance is not only a matter of knowing more or less than the interlocutor (K+ or K- in Heritage's terminology), i.e., of *Knowing* and *Unknowing* (in our terminology), but also of *Not Knowing Whether* and of *Believing*.

The epistemic expressions *I do not know whether p* and *I believe that p* refer to linguistic phenomena that are different from those referred to by *I know p* and *I do not know p* and convey a third epistemic position, the Uncertain, to be added to the previous two (Knowing and Unknowing).

10. Wh-questions and whether-questions

What is the difference between the expressions *I do not know p* and *I do not know whether p*? At first glance, the conjunction *whether*, obviously. But, consequently, also the content of the proposition *p*.

In the expression *I do not know p*, the proposition *p*, i.e., the content of the question, includes one of the seven wh-words *why*, *where*, *what*, *who*, *which*, *when*, *how*, as in the example *I do not know how much water you drank*. Thus, the *Unknowing* position, as far as questions are concerned, could be defined as (i.e., is semantically equivalent to) *Not Knowing Why / Where / What / Who / Which / When / How*.

In the expression *I do not know whether p*, as in the example *I do not know whether it is still snowing outside*, the *whether* is not included in the proposition *p* (*it is still snowing outside*), since no direct question in Contemporary English can begin with *whether*: *Whether is it still snowing outside (or not)?

"The main difference between *whether* and the other *wh* words is that *whether* cannot be used with main clauses" (Bolinger 1978:99), specifically with direct questions.

Thus, on the one hand we have *wh-questions*, questions beginning in their direct and indirect form with *why / where / what / who / which / when / how*, which represent *Unknowing* questions.

On the other hand we have *whether-questions*, questions beginning in their indirect form with *whether*, which represent *Uncertain* questions.

The difference between *Unknowing* and *Uncertain* questions is the difference between *wh-* and *whether-*questions.

11. Even the Unknowing position is a continuum

In Chapters 4-7 the Uncertain position was shown to be an epistemic continuum with different degrees of uncertainty: each uncertain question is

closely bound up with all the others, in particular with the one that precedes and follows it along the continuum. We saw interesting connections between alternative questions and polar interrogatives (summarised here in sections 4 and 5) and between neutral and non-neutral polar interrogatives (sections 6 and 7).

In Chapter 8 we claimed that even the Unknowing position is an epistemic continuum with different degrees of unknowledge, ranging from open to closed and finally dual wh-questions (Figure 4).

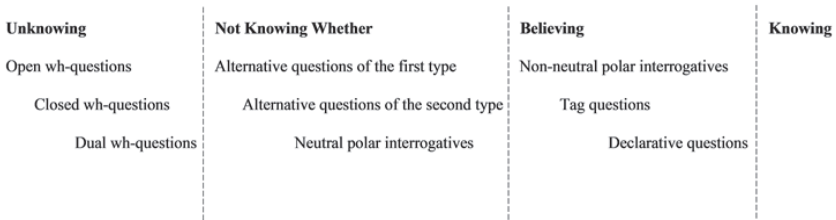


Figure 4. The Unknowing continuum within the whole epistemic continuum

In principle, a wh-question is *open* when there are many possible answers to it the specifics of which are unknown to the questioner, i.e., s/he has no idea of the answer (*where did they sell the ticket that won the last Italian national lottery?*). This could be thought of as the prototype of wh-questions.

A wh-question is *closed* when there are only a few possible answers, which are therefore more or less known to the questioner, i.e., s/he has already some idea of what they are. In the question *how much water did you drink a day?*, the range of answers can be easily supposed by the questioner: about two litres, two and a half litres, three litres...

A wh-question is *dual* when there are only a couple of possible answers, which are well known to the questioner: *which pair of shoes should I wear (between two pairs)?*

Dual wh-questions are particularly interesting since they border on alternative questions, the first question type at the beginning of the Uncertain position along the epistemic continuum that goes from the Unknowing to the Believing.

We observed that dual (but in principle also open and closed) wh-questions can be transformed into their corresponding alternative questions (and vice versa), thus usually being interchangeable in the same context of

occurrence: *which pair should I wear?* $\leftarrow \rightarrow$ *should I wear this pair or that one?*

Both questions are information seeking and expect the same content response, i.e., an answer between two alternatives (*this pair* versus *that pair*), and the questioner *perfectly knows* what these alternatives are: by asking *which pair of shoes should I wear?*, the questioner is not groping in the dark (as usually happens with open wh-questions), s/he has already a precise idea of the possible answer (as normally happens with alternative and polar questions).

Since uncertainty by definition implies a doubt between (at least) two alternatives, dual wh-questions (and their interchangeability with corresponding alternative questions) pose the problem of whether they still convey an unknowing or instead an uncertain stance.

The dilemma is: should all wh-questions (open, closed and dual) be considered as unknowing or should only the open ones be considered as such, while dual and closed wh-questions should be considered as uncertain?

In favour of the former (all wh-questions are unknowing) we advanced three arguments, two theoretical and one practical.

Firstly, we appealed to what we stated in Chapter 1, section 1.5.1: epistemic stance is a linguistic, communicative notion, not a mental one. We distinguished knowledge, uncertainty and unknowledge as a speaker's mental states (inner world) from what s/he says (outer world), i.e., from the epistemic stance conveyed by the question type s/he chooses to use in a given context.

In order to ascertain whether a questioner is conveying an unknowing or an uncertain stance, it is really not necessary to enter her/his mind (even were this possible). It is sufficient to stop at language.

Everything else being equal in her/his inner world as far as her/his knowledge, unknowledge and uncertainty about a given state of affairs are concerned, in the outer world a questioner can choose *one* question type *at a time* among those at her/his disposal (at least five), and effectively s/he can choose between an unknowing and an uncertain question.

If the questioner asks the wh-question *which pair should I wear?*, it is enough to say that she uses the linguistic design of an unknowing question, and conveys the epistemic stance that *she does not know which* alternative is true, *she does not know which pair of the two* she should wear.

If the questioner, in the same context, instead of the above wh-question asks the alternative question *should I wear this pair or that one?*, it is enough to say that she uses the linguistic design of an uncertain question

(Not Knowing Whether pole) and *conveys* the epistemic stance that *she does not know whether* the first or second alternative is true.

Not knowing which alternative is true between two alternatives (dual wh-question, Unknowing position) and *not knowing whether* the first or second alternative is true (alternative question, Uncertain position) are two different *linguistic* means of obtaining the same piece of information from the respondent: the former makes use of the Unknowing position, the latter of the Not Knowing Whether.

Moreover, in the same context, the questioner is not limited to the wh-question *which pair should I wear?* or the alternative question *should I wear this pair or that one?* but can also opt for the multiple question that combines both of them *which pair should I wear? this one or that one?* (which means that they do not exclude each other, just because the epistemic stance they convey is different) or any of the other uncertain questions at her/his disposal (a polar interrogative, a tag or a declarative question).

Secondly, the same question *which pair should I wear?* might also be asked in front of a shoe rack containing a dozen pairs of shoes. Even in this case, the wh-question could in principle be transformed into the corresponding alternative question: *should I wear this one or this one or this one or this one ...* and so on, up to the twelfth pair, but to ask such a question would be absurd and would also violate Grice's (1975) maxims of quantity and manner (be brief, avoid unnecessary prolixity).

To use an unknowing instead of an uncertain question in front of her shoe rack is more economical for the questioner: she saves time and breath.

Or instead should we say that the wh-question conveys the speaker's *uncertainty* when asked not only in front of two pairs but also in front of the dozen pairs in her shoe rack? Can uncertainty range from two to twelve?

The real problem is: with *up to how many alternatives* can we properly talk of uncertainty and express uncertainty with a question? Two, three, four, five, a dozen, how many? And *from how many alternatives onwards* can we properly talk of unknowledge and express unknowledge with a question?

Is there anybody who can establish *where* uncertainty ends and unknowledge begins or vice versa? And on what grounds?

Since a closed wh-question like *how much water did you drink a day?* corresponds, roughly speaking, to an alternative question with about three alternatives (*did you drink more or less two litres or two litres and a half or three litres of water?*), does it convey uncertainty or unknowledge?

Thirdly, during the qualitative analysis of natural conversational sequences, it is sometimes possible to establish *with precision* whether a wh-question is open, closed or dual (as in the examples about the lottery

ticket and the two pairs of shoes) or to give an *approximate* number of the possible answers to it, i.e., of the corresponding alternatives it can include (as in the example of the amount of water drunk), but it is more often impossible to decide what kind of a wh-question (open, closed, dual) the one that we are faced with is.

As a matter of fact, one and the same wh-question can have either an open or a closed or a dual reading, depending on its context of occurrence, on how much the questioner knows and/or supposes about the respondent, etc. For example, *where did you go last night?* can be an open question when the questioner does not know much about the respondent and supposes that s/he could have gone *anywhere* last night.

The same question could be a closed one, when the respondent (a colleague of the questioner, for example) is known to be someone who likes going out at night, usually to the movie or theater, art-exhibitions and the like.

Finally, *where did you go last night?* can be a dual question, when for instance questioner and respondent are friends and the latter was uncertain the day before about whether to go to the football or the tennis match that evening. Should we say that such a wh-question conveys the questioner's uncertainty?

In these three last examples, the set of reference of the same wh-question, i.e., the number of possible answers to it, is in the questioners' mind, which we cannot enter. Thus, when we cannot establish whether a wh-question is open, closed or dual, we cannot establish whether it is unknowing (open wh-question) or uncertain (closed and dual wh-questions).

For all the above reasons, it is theoretically more reasonable and in practice more convenient, in our view, to cut the Gordian knot and consider *all* wh-questions, dual included, as unknowing: even in contexts that in themselves communicate uncertainty (as when the questioner is holding up two pairs of shoes), our language allows us to use two different *tools* to obtain the same piece of information from the respondent, the one employs the Unknowing position, the other the Uncertain.

In the same context, not only is a wh-question question interchangeable with an alternative question, but also each of the two does not exclude the other, they can both be asked one after the other.

The fact that each of the two conveys a different stance (unknowing vs uncertain) is probably the main reason why a wh-question can be immediately followed by an alternative or polar question, thus resulting in a *multiple question*: *Which pair should I wear? This one or that one? / Where did you go last night? To the movie or to the theater?* (wh-question

+ alternative question); *How much water did you drink? Three litres?* (wh-question + polar interrogative), etc.

In order to have real linguistic data about wh-questions followed by alternative questions *with two alternatives* (which tell us that the wh-questions are dual), a corpus of such multiple questions was extracted from the Spoken BNC2014 and the analysis of some excerpts was presented, taking care that each of the seven wh-words (*what, why, where*, etc.) were included in the wh-questions.

12. Questions addressed toward the Believing position

Figures 2 and 3 in section 9 show that all the five question types under analysis are addressed toward the answerer's Knowing position (K+), but in Chapter 9 we have seen that some questions—including, for example, a modal verb (e.g., *what could we make with that?*) or the expression *do you think* (e.g., *why do you think it might not make you happy?*)—are directed at the respondent's Believing position, i.e., to a respondent who is not expected to know the answer but is expected to be able to advance a hypothesis, supposition, opinion and so on.

As a consequence, the expected answer also comes from the Believing position, not the Knowing. In this case, i.e., when the answer aligns with the question, the answer concerns what the respondent *believes*, not what s/he *knows*: s/he is supposed to *know nothing*, neither *more* nor *less* than the questioner.

The *third* main aim of the book was therefore to show that questions can be addressed not only toward an undifferentiated K+ position but toward two distinct epistemic positions, either the *Knowing* or the *Believing*.

In Chapter 9 we analysed 23 extracts from the Spoken BNC2014 including examples of wh-, alternative, tag and declarative questions as well as polar interrogatives in which the presence of either a modal like *would, could, should, might, can* (e.g., *when would you go if you went?*) or the expression *do you think* (e.g., *where do you think her mum gets the money from?*) show that all these questions are directed at the Believing position.

Thus, the overall results coming from Part 2 of the book (Chapters 3-9) show that, on the one hand, the five question types under analysis may come from three epistemic positions, either the Unknowing or Not Knowing Whether or Believing (they cannot come from the Knowing) and may be directed at two ones, either the Knowing or the Believing (they cannot be directed at the Not Knowing Whether nor the Unknowing, Figure 5).

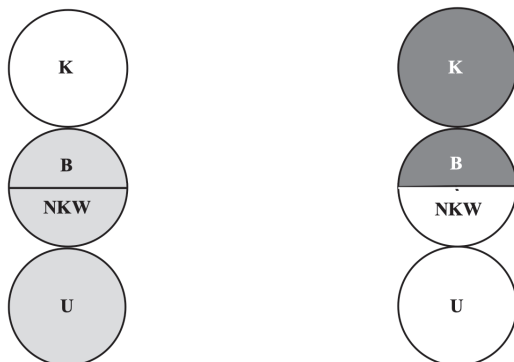


Figure 5. Questions may come from either the Unknowing or Not Knowing Whether or Believing (light grey) and be directed at either the Knowing or Believing (dark grey)

Given its relevance, the Uncertain position was also investigated in the last part of the book (Chapters 10-12) in relation to *dubitative* and *rhetorical* questions as well as to the *quantitative analysis* of dialogues.

13. Dubitative questions

Dubitative questions are those polar questions which include a lexical marker of doubt/uncertainty, for example the adverb *maybe* in their direct form or the verbal expression *I wonder if* introducing their indirect form (Stivers and Enfield 2010).

We added alternative questions to polar questions, since also the former can be dubitative. Both question types were compared with wh-questions, since these latter cannot be dubitative. Thus, Chapter 10 asks:

- (1) why polar and alternative questions may include an Uncertainty Lexical Marker (abbreviated to ULM), i.e., may be dubitative;
- (2) why wh-questions cannot;
- (3) what empirical evidence can support the claim that both polar and alternative questions may be dubitative while wh-questions cannot;
- (4) whether there is any epistemic difference between the “dubitative” question (with *maybe*) and its “plain” equivalent (without *maybe*), i.e., whether the presence or absence of a ULM in polar and alternative questions changes anything in the questioners’ commitment, by enhancing or reducing uncertainty.

The answer to questions 1 and 2 was indirectly given in Part 1 of the book where we made the distinction between unknowing and uncertain questions: the epistemic design of these latter is already uncertain at the morphosyntactic level; this is the reason why they may include a ULM, since ULMs are perfectly compatible with the uncertainty already encoded in the plain question forms.

On the contrary, *wh*-questions cannot admit the presence of a ULM, because they come from the *Unknowing* position, not the *Uncertain*: in their epistemic design there is no room for un-certainty, only for un-knowledge.

Question 3 was answered in a twofold way. Firstly, Stivers and Enfield's dubitative example expressions *maybe* and *I wonder if / whether* were used as linguistic tests and systematically applied to the canonical examples of the five question types analysed in Part 1.

The application of both linguistic tests to polar and alternative questions resulted in grammatically acceptable sentences, while to *wh*-questions it resulted in grammatically unacceptable sentences, as corroborated by the absence of such forms in the corpus data.

Both results strongly support our claims that polar and alternative questions can include a ULM since they come from the *Uncertain* position, while *wh*-questions cannot since they come from the *Unknowing* position.

Secondly, an additional corpus-based study of the use of *maybe* and *I wonder if* in the five question types was undertaken in the Spoken BNC2014, to enrich the findings and make a quantitative analysis possible. The Spoken BNC2014 data confirmed that

- (1) polar and alternative questions can be introduced by *I wonder if / I wonder whether*, while *wh*-questions cannot;
- (2) polar and alternative questions can include *maybe* (although the percentage is not high: speakers use *maybe* in 6.3% of alternative questions), but *wh*-questions cannot include *maybe* (no occurrences are present in the data);
- (3) declarative questions are the most frequently-used of the dubitative questions involving *maybe*.

Finally, to answer research question 4, plain questions were compared with their corresponding dubitative ones. The *maybe* test was applied to alternative and polar questions in order to ascertain whether the presence of this stance adverb adds more uncertainty to such questions, which are already uncertain in their grammatical design: does one grammatical marker of uncertainty (the plain question design) plus one lexical marker of uncertainty (the adverb *maybe*) double the degree of uncertainty in dubitative questions?

Maybe is a stance adverb that signals the speaker's uncertainty in the here-and-now of communication. In particular, in our view, it signals a *supposition* (or something similar: assumption, hunch, guess...). In this sense, *maybe* is closer to the Believing than to the Not Knowing Whether pole.

Since *maybe* mitigates certainty, when added to questions coming from the Believing pole (like non-neutral polar interrogatives, tag and declarative questions), where the degree of certainty is higher than that of uncertainty, the adverb mitigates the degree of certainty, i.e., reduces the higher probability assigned to the lexicalised alternative and correspondingly increases the lower probability assigned to the non-lexicalised alternative (the proportion of certainty and uncertainty still remaining in favour of the former).

Thus, dubitative non-neutral polar interrogatives, tag and declarative questions shift from the Believing pole towards the Not Knowing Whether pole. This is in accordance with the hypothesis that the presence of *maybe* raises the degree of uncertainty (and correspondingly lowers the degree of certainty).

However, when added to questions coming from the Not Knowing Whether pole (like alternative questions and neutral polar interrogatives) where the uncertainty is maximal (50% probability to each alternative), the adverb mitigates what it finds there: it finds no certainty, only uncertainty, and as a result it mitigates uncertainty. This means that the modalised alternative is *supposed* to be *less uncertain*, i.e., more certain, than the plain one: the former is supposed to be more likely to be true than the latter (Figure 1, Chapter 10, section 10.6.4; for the readers convenience, this figure is repeated here as Figure 6).

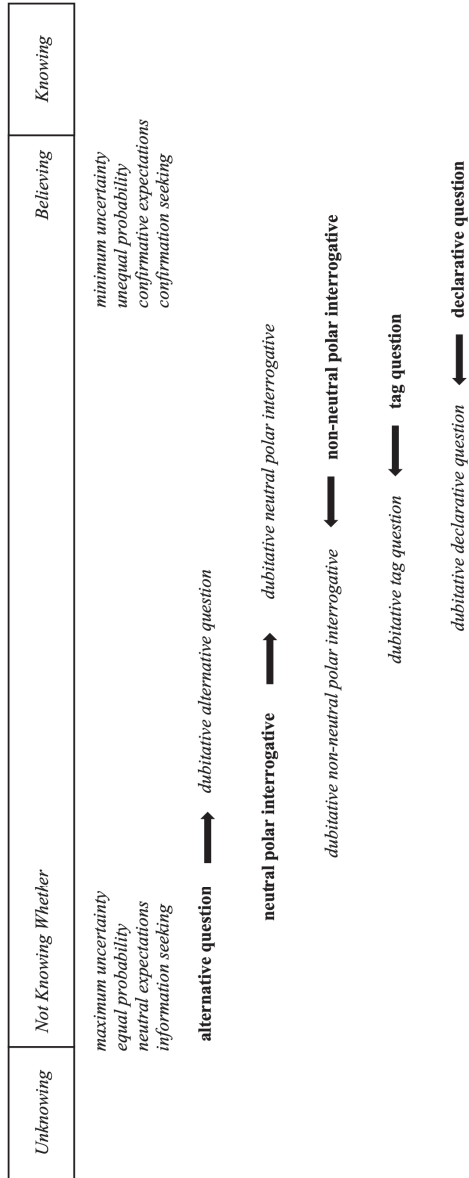


Figure 6. Dubitative questions: alternative questions and neutral polar interrogatives shift from left to right while non-neutral polar interrogatives, tag and declarative questions shift from right to left

Contrary to the above-mentioned expectation and to what Stivers and Enfield (2010) claim, the addition of *maybe* makes alternative questions and neutral polar interrogatives neither *uncertain* (since they are already so at their grammatical, plain level) nor *more uncertain* (since they already represent the maximum uncertainty). Rather, the addition of *maybe* makes them, paradoxically, *less uncertain*, i.e., more likely to be true. Since this may seem counter-intuitive, let us lay bare its mechanisms.

If the Not Knowing Whether pole is understood as maximum uncertainty, the addition of *maybe* cannot increase that maximum (there can be no “more than maximum”!). There is no further uncertainty beyond the Not Knowing Whether pole, i.e., beyond that side of the uncertain epistemic continuum which represents maximum uncertainty. It is here that the Unknowing position begins. The presence of a ULM appears to push alternative questions and neutral polar interrogatives from the Not Knowing Whether pole in the direction of the Believing pole where non-neutral polar interrogatives lie.

The questioner adds *maybe* to indicate a preference for the modalised alternative and, in doing so, his/her commitment shifts from equal probability towards unequal probability. Simultaneously, his/her epistemic position is no longer one of maximum uncertainty, but of lower uncertainty (or greater certainty), and the function of the question is not so much information-seeking as it is confirmation-seeking (see Figure 6).

The expected answer, in turn, is no longer neutral but favours the modalised alternative over the non-modalised one.

In other words, *maybe* seems to *modulate* (Halliday 1976; Lakoff 1973; Caffi 1999) the epistemic force of the uncertain questions, functioning as a *hedge* when added to non-neutral polar interrogatives, tag and declarative questions, since it increases their uncertainty, and as a *booster* when added to alternative questions and neutral polar interrogatives, since it lowers their uncertainty.

14. Rhetorical questions

Rhetorical questions, also known as *reversed polarity questions* (Koshik 2005), are asked and understood not as seeking but as conveying information to the addressee, specifically a *strong assertion* of the *opposite polarity* to that of the question (Bolinger 1957; Horn 1978; Quirk et al. 1985). For example, the positive questions *What difference does it make?* is equivalent to the negative assertion *It makes no difference*. This is the traditional view.

As far as the questioner's epistemic stance is concerned, Koshik (2005: 12) claims that rhetorical questions display "the epistemic stance of the speaker, i.e., that the speaker knows the answer to the question and knows it with certainty". From the perspective of the KUB model, this means that the strong assertion implicit in a rhetorical question conveys the questioner's Knowing/Certain position (*I know / am certain that p / that non p*).

Koshik (*ibid.*: 13-16) adds that, when a candidate reversed polarity question reveals *doubt* instead of *knowledge* and *certainty*, i.e., when it displays *weakening epistemic strength*, then it cannot function as a rhetorical question but only as a plain question.

We agree with most of Koshik's observations, yet we query her claim that rhetorical questions *always* convey *strong* reverse polarity assertions, i.e., assertions coming from the Knowing position. We claim that some of these can be read as conveying reverse polarity assertions of *mild* strength, i.e., *mitigated* assertions coming from the Believing pole of the Uncertain position, i.e., from a stance which is *less strong* than the Knowing. Even though the *epistemic strength* of the question is downgraded, such questions can still function as rhetorical questions.

As an example of our claim, we referred to a paper by Heritage (2002), who suggests that, in the context of news interviews, negative polar interrogatives (e.g., *Didn't you put the members of your administration in a very vulnerable position?*) are quite commonly treated by both questioners and answerers "as expressing a position or point of view [...], as accomplishing *assertions of opinion*, rather than questioning" (Heritage 2002: 1428, *emphasis added*).

The journalist Helen Thomas uses the negative polar interrogative to assert her *opinion* that Clinton put the members of his administration in a very vulnerable position. Given that Thomas' opinion is opposite in polarity to that of the question (affirmative vs negative), this latter is considered to be a *reverse polarity* question, i.e., a rhetorical question.

From the perspective of the KUB model, Heritage's analysis of the above negative polar interrogative can be translated in the following way: instead of being neutral and information seeking, thus coming from the Not Knowing Whether pole of the Uncertain position, Thomas' question, being an implicit statement of opinion, is non-neutral and confirmation seeking in its design (Chapter 11, section 11.7): it comes from the Believing pole, minimum uncertainty, and can be paraphrased as

I think that you put the members of your administration in a very vulnerable position

This statement is different from

I know that you put the members of your administration in a very vulnerable position

or simply

You put the members of your administration in a very vulnerable position

which both sound as implicit *accusations* (according to Koshik's (2005) reading of Heritage's excerpt) coming from the Knowing position.

Thus, when read (following Heritage) as an implicit expression of opinion, and not as an accusation (following Koshik), Thomas' question is an example that shows how a question displaying *weakening epistemic strength* (Believing position), i.e., a stance which is *less strong* than the Knowing, can still function as a rhetorical question.

Our second, stronger reason in favour of this view is based on empirical data. Usually examples of rhetorical questions, such as that one given at the beginning of this section (*What difference does it make?*), include a verb in the indicative, therefore it is immediately clear that the implicit assertion must also include a verb in the indicative (*it makes no difference*), thus conveying a strong stance, a Knowing position. But we argued that this does not hold true for rhetorical questions which include a conditional modal verb (*would, could, should, etc.*), i.e., rhetorical questions which are addressed to the respondent's Believing position.

Using examples extracted from the Spoken BNC2014, we sought to demonstrate that rhetorical questions featuring a modal conditional also communicate implicit assertions, but that such assertions are milder due to the need to include a conditional in the response.

The question *who would have thought that* [getting your phone stolen] *would be a good thing?* is a mitigated rendering of the underlying proposition *nobody would have thought that* [getting your phone stolen] *would be a good thing* and originates in the speaker's Believing position (notice the conditional *would have thought*).

The conditional in such questions is not restricted to the meaning of the question posed, but is also part of the implicit assertion itself. As a consequence, the implicit assertion cannot originate in the Knowing position, since Knowing cannot be expressed by conditionals.

15. Quantitative analysis of dialogues

In Chapters 3-11 the conversational sequences extracted from the Spoken BNC2014 are analysed *qualitatively*: the speakers' epistemic positions are identified by examining the evidential and epistemic markers, both lexical and grammatical, used in the conversational sequences. This *qualitative* analysis allows to understand the epistemic dynamics among interlocutors in terms of negotiation, alignment/misalignment, etc.

Chapter 12 outlines how to perform a *quantitative* analysis of the interlocutors' epistemic positions in a dialogue.

The quantitative analysis of any dialogue is based on its previous qualitative analysis and consists in singling out the number of words dominated by their respective evidential and epistemic markers, namely the *scope* (Quirk et al. 1985) of such markers, in order to identify how much Known, Unknown and Uncertain there is in each turn and its turn constructional units (TCUs), in each sequence (adjacency pairs, triplets, etc.), in a whole dialogue and also, respectively, for each interlocutor.

We proceed in the following way: for each TCU included in a single turn (e.g., *have I told you about my drinking less?*) we specify

- (1) the speaker's epistemic position conveyed (in our example, *Not Knowing Whether*) and also the epistemic position (of the interlocutor) at which the TCU is directed (\rightarrow *Knowing*),
- (2) the linguistic reason for assigning such epistemic position to that TCU (polar interrogative),
- (3) the number of words representing that epistemic position, i.e., the number of words present in that TCU (8 words).

On this basis, we calculate the percentages of (1) the distribution of words between the interlocutors and, for each interlocutor, (2) the distribution of Known, Unknown and Uncertain concerning both the epistemic origin and destination of their words.

In the dialogue analysed in Chapter 12 (the whole extract entitled *How much did you drink a day?* a partial qualitative analysis of which was carried out in Chapter 3) we quantify the distribution of Known, Unknown and Uncertain between the two interlocutors not only insofar as the epistemic *origin* but also the epistemic *destination* of their words is concerned.

In this way we were able to draw up a complete quantitative map of the epistemic stance involved in the dialogue as a whole.

16. Circles and arrows, partial alignment, non-answer response

In the present book, the four epistemic positions of a speaker have been represented *vertically* with the help of three circles (Figure 7):

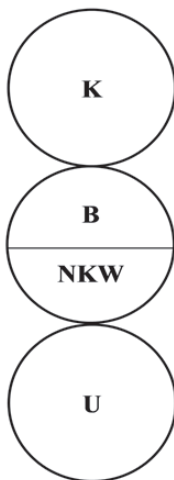


Figure 7. Vertical representation of the four epistemic positions

Were we to represent *horizontally* the epistemic continuum corresponding to those positions, we would use the same order (Figure 8):



Figure 8. Horizontal representation of the epistemic continuum

In both figures, the continuum can be read in both directions, from K to U as well as from U to K.

Were we to represent the same epistemic continuum as being *circular*, we would use Figure 9:

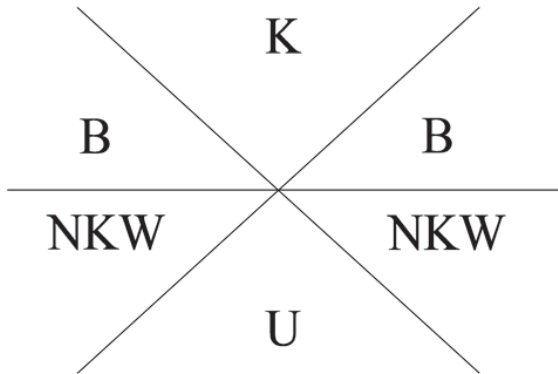


Figure 9. Circular representation of the epistemic continuum

What all the three representations, particularly the third one, aim to stress is that, in our current way of imagining the epistemic continuum, the Knowing and the Unknowing are not in touch, i.e., Knowledge and Ignorance are not neighbouring. The space between them is filled with Uncertainty. Both Knowing and Unknowing border on Uncertainty: Knowledge on Belief, Unknowledge on Doubt.

The epistemic dynamics involved in the question-response sequences extracted as examples from the Spoken BNC2014, or invented ad hoc in some cases, have been illustrated in all the chapters by adding arrows to the circles. Since the question-response sequences concern two interlocutors, the arrows have both an epistemic origin and an epistemic destination.

Circles and arrows are intended to represent visually what is encoded in the communication, what is going on *moment by moment* (turn by turn, even TCU by TCU) between the interlocutors from an epistemic perspective. The Figures allow to see whether an answer aligns or misaligns to the question, whether an answer is an *answer response* or a *non-answer response*, etc.

In Chapter 3, section 3.2.4, we showed that the possible answers to a wh-question like *how much did you drink a day?* (from Unknowing to Knowing) may not only either align (*I drank a lot*, from Knowing to Unknowing, Figure 10) or misalign (*I don't know how much I drank*, from Unknowing to Unknowing, Figure 12) but also *partially align* when they come from the Uncertain position (*three litres maybe?*), either the Believing (*three litres maybe? = I drank three litres maybe?*, declarative question from Believing to Unknowing, Figure 11.1) or Not Knowing Whether (*three litres maybe? = did I drink three litres maybe?*, polar interrogative from Not Knowing Whether to Unknowing, Figure 11.2).

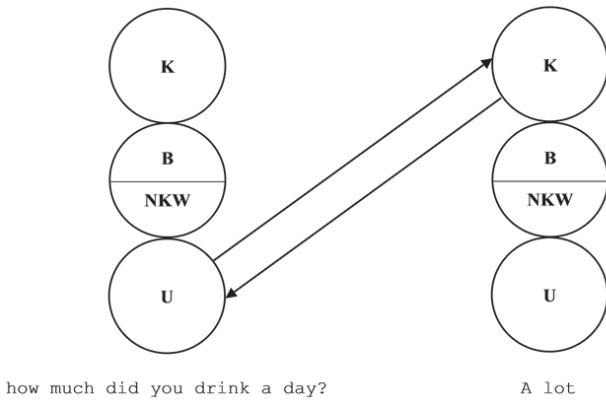


Figure 10. Alignment (parallel arrows)

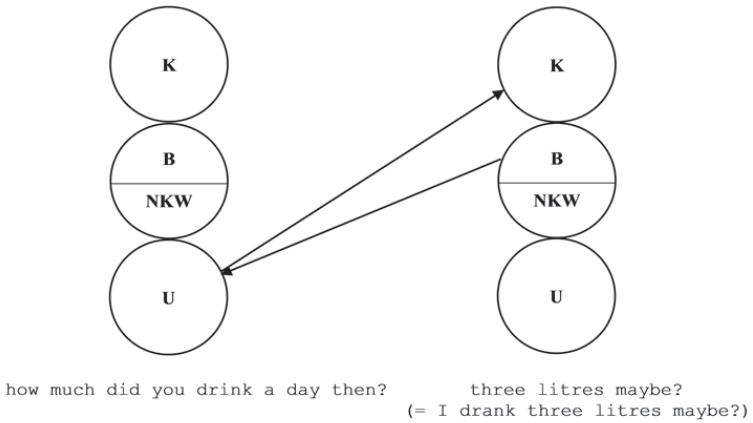
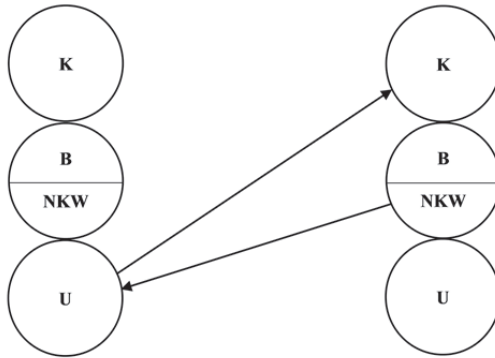
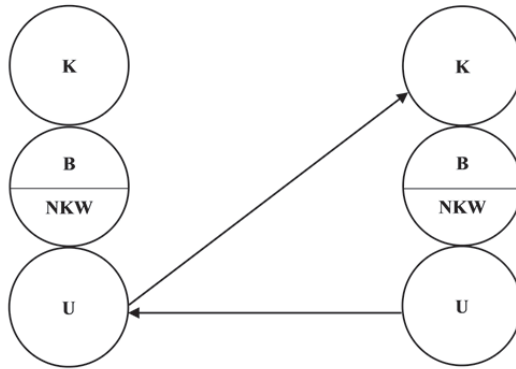


Figure 11.1. The answer is read as a (dubitative) declarative question coming from the Believing position: partial alignment, acute angle



how much did you drink a day then? three litres maybe?
 (= Did I drink three litres maybe?)

Figure 11.2. The answer is read as a (dubitative) polar interrogative coming from the Not Knowing Whether position: partial alignment, the angle is slightly wider than the one in Figure 11.1



how much did you drink a day then? I don't know

Figure 12. Misalignment: the angle is much wider than those in Figures 11.1 and 11.2

The answer *I don't know* to a wh-question like *How much did you drink a day?* can be completed as *I don't know how much I drank a day*, i.e., as corresponding to a declarative sentence coming from the Unknowing position (Figure 12).

In the field of Conversational Analysis, a lack of knowledge claim such as *I don't know* is considered to be a *non-answer response* type, i.e., an answer that fails to directly answer the question (Chapter 2, section 2.3.5) and therefore misaligns with it, as the different directionality of the arrows in Figure 12 shows.

The answer containing *maybe* (Figures 11.1 and 11.2) is also considered to be a *non-answer response* and also in this case the directionality of the arrows is different.

However, in our view, the two non-answer responses substantially differ from one another.

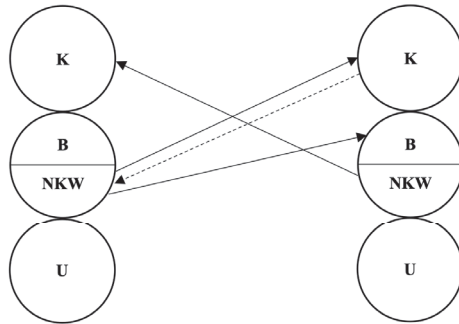
We agree that *I don't know* fails to directly answer the question, since it comes from the Unknowing position: it gives no information at all to the questioner and therefore it misaligns with the question.

Instead, an answer such as *three litres maybe?*, in our view, *partially aligns* with the question, for the following reason: it is true that the supposition *three litres maybe?* does not answer the question directly (as it would if it were simply a plain declarative sentence like *three litres*), but it is also true that it does not completely fail to directly answer it (as it would if it were *I don't know*).

The answer *three litres maybe?* does not give the questioner *certain* (in the epistemic sense) information, unlike information coming from the Knowing position (*three litres*), but neither does it give *unknown* information, i.e., information coming from the Unknowing position (*I don't know*); it gives *some* information, a *possible* amount of drinking, a *supposed* quantity, i.e., *uncertain* information. It is something, not nothing, even though it is not a fully aligned answer.

Therefore, within the type of response known as *non-answer response*, we prefer to distinguish between a response which is *misaligned* (*I don't know / What? / etc.*), and a response which is only *partially aligned* (*Maybe... / Possibly... / I think that... / etc.*).

Something analogous happens with alternative questions (Chapter 4, section 4.8.5), i.e., with questions coming not from the Unknowing but from the Not Knowing Whether (e.g., *shall I put the kettle on or would you prefer coffee?*): an answer-response that directly answers the question (when addressed to the recipient's Knowing position, as in the example) is one that comes from the Knowing position and therefore *aligns* with the question (*I prefer coffee*, Figure 13).

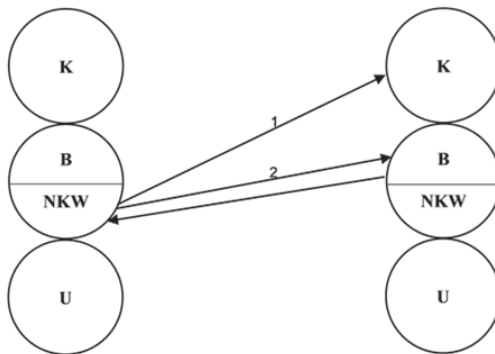


(1) shall I put the Kettle on or
(2) would you prefer coffee?

do you wanna make it or
do you want me to make it?
(= I prefer coffee)

Figure 13. Alignment (parallel arrows). The dotted arrow refers to the implicit answer *I prefer coffee*

A non-answer response that fails to directly answer the question is one that comes from either the Believing pole or the Not Knowing Whether: the former (*I might have a coffee actually*) *partially aligns* with the question (Figure 14, acute angle), the latter (*I dunno*) *misaligns* with it (Figure 15, more open acute angle).



(1) shall I put the kettle on or
(2) would you prefer coffee?

I might have a coffee actually

Figure 14. Partial alignment (acute angle)

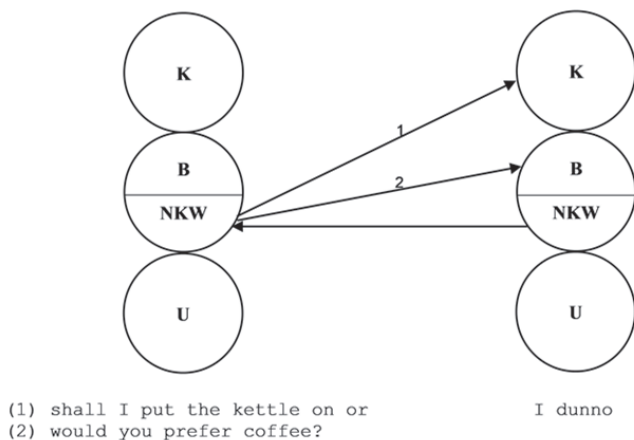


Figure 15. Misalignment (more open acute angle)

Therefore, for alternative questions as well, we distinguish between a non-answer response coming from the Not Knowing Whether which is *misaligned* (*I don't know whether p*), and a response coming from the Believing which is only *partially aligned* (*I believe that p*).

Something similar to what happens with alternative questions also happens with polar interrogatives, tag and declarative questions, *mutatis mutandis*.

In principle, therefore, for both unknowing and uncertain questions, it is possible to say that an answer A aligns with a question Q when A comes from the same epistemic position at which Q is directed, as Figures 10 and 13 show. In this case, the answer is an answer response.

On the contrary, an answer A partially aligns or misaligns with the question Q when A comes from an epistemic position which is different from that at which Q is directed: usually, the wider the angle formed by the two arrows (question and answer) in a figure, the greater the misalignment (Figures 11.1-12 and 14-15). In these cases, the answers consist in two different types of non-answer response.

17. Alignment/misalignment, agreement/disagreement

In the previous sections the notions of alignment, partial alignment and misalignment have been illustrated through Figures 10-15.

Such notions concern two conversational turns at a time and the interlocutors' epistemic positions: the content of the conversational turns is analysed in order to establish what epistemic stance each one conveys.

In the case of question-answer sequences, from the epistemic stance perspective *alignment* means that the answer comes from the same epistemic position as the one that the question was directed to. When the answer comes from a different epistemic position, then we have either a partial alignment or a misalignment.

Two excerpts, analysed respectively in Chapter 6 (tag questions), section 6.4.2, and Chapter 11 (rhetorical questions), section 11.7, gave us the opportunity to investigate how the above mentioned notions sit in relation to the concepts of *agreement/disagreement* and to remark that alignment does not necessarily entail agreement.

The notions of agreement/disagreement are related to those of preferred/dis-preferred answer (Sacks 1987): the content of the conversational turns is analysed in order to establish whether an answer is preferred or not; in the former case, we have agreement between the interlocutors, in the latter disagreement.

The answer *Yes, I think they are* to the question *They're all quite posh, don't you think?* (Chapter 6, section 6.4.2) is a preferred answer: it closes the conversational sequence with the interlocutors' agreement. Since both question and answer come from the same epistemic position (Believing), we have also alignment between them (parallel arrows in the corresponding figure).

The answers *I don't think they're posh* and *They can be* to the same question still come from the Believing position, so question and answer are still aligned, but now we have disagreement, total in the former case and partial in the latter.

18. *I do not know* as a response to unknowing and uncertain questions

We think it appropriate to reiterate the reason why, in the above examples and figures, the same answer *I do not know* is deemed to come from the Unknowing in the case of wh-questions and from the Not Knowing Whether in that of uncertain questions.

I do not know as a direct answer to a wh-question (*how much did you drink?*), i.e., to an unknowing question, necessarily comes from the Unknowing, since it must be completed as *I do not know* how much I drank.

On the contrary, *I do not know* as a direct answer to an uncertain question (*Shall I put the kettle on or would you prefer coffee? / Is it still snowing*

outside? / That's not very fair, is it? / You don't ring them?), necessarily comes from the Not Knowing Whether since it must be completed as *I do not know whether you shall put the kettle on or whether I would prefer coffee / I do not know whether it is still snowing outside* (or not), etc.

Of course, an answer to an uncertain question need not come exclusively from the Not Knowing Whether: it can also come from the Unknowing, but in this case the answer is not a *direct* response to the question: it can only be an *indirect* one (e.g., *Why do you ask me that?*). Thus the misalignment is even greater than that resulting in a direct answer coming from the Not Knowing Whether (Figure 16).

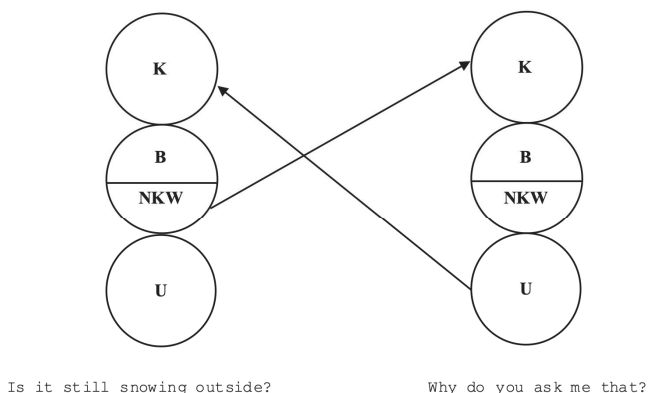


Figure 16. Misalignment/non-answer response (the acute angle is more open than that in Figure 15)

19. Is the epistemic design of questions context-independent?

We said in section 15 that circles and arrows in the figures allow to see, among other things, which epistemic position a question comes from and which one it is directed towards.

For example, we saw that wh-questions come from the Unknowing position. The reason for this epistemic origin concerns, of course, the presuppositions, linguistic design, social action and preference organization of such questions, as we tried to show in the qualitative analysis, but a

further reason is *strictly linguistic*: when transformed into their corresponding indirect forms, they require *I do not know* before their propositional content.

We also saw that wh-questions are usually directed towards the Knowing (*Where is Ulrich?*). When they include a modal conditional (*Where could Ulrich be?*) or the expression *do you think* (*where do you think Ulrich is?*), they are directed towards the Believing. Thus, *ceteris paribus*, the difference in their destination (either Knowing or Believing) is made by their propositional content. Again, a *strictly linguistic* reason.

The same holds true, *mutatis mutandis*, for the uncertain questions: the reason for their epistemic origin concerns their presuppositions, linguistic design, social action and preference organization, but a further reason is *strictly linguistic*: when transformed into their corresponding indirect forms they require *I do not know whether* before their propositional content. The difference in their destination (either Knowing or Believing) also depends on their propositional content, a *strictly linguistic* reason.

Finally, we saw that it is impossible for any question type, both unknowing and uncertain, to be addressed toward the Unknowing and the Not Knowing Whether. This has *logical* reasons.

Therefore, neither the context of occurrence of unknowing and uncertain questions, nor their turn sequential position, nor their intonation prosody seem to influence their epistemic origin and destination.

Once a question has been identified as being, for example, a wh-question, it necessarily comes from the Unknowing and it is directed either towards the Knowing or the Believing. No other possibility is given.

Again, *mutatis mutandis*, the same holds true for uncertain questions: once a question has been identified, for example, as being a tag question, it necessarily comes from the Believing and it is directed either towards the Knowing or the Believing. No other possibility is given.

Thus, from this perspective questions seem to be basically *independent* of their context of occurrence, turn sequential position and even their intonation prosody.

Only polar interrogatives seem to be *context dependent* as far as their neutrality or non-neutrality is concerned (Chapter 5, section 5.6), but this is a matter of their social action (information versus confirmation seeking), not of their epistemic origin and destination.

Indeed, once a polar interrogative has been identified as neutral, i.e., as information seeking, it comes from the Not Knowing Whether; once it has been identified as non-neutral, i.e., as confirmation seeking, it comes from the Believing.

Again, both neutral and non-neutral polar interrogatives may be directed either at the Knowing or at the Believing, nowhere else.

20. Epistemic seesaw, epistemic asymmetry, more or less knowledgeable

The five question types under analysis in this book can come from either the Unknowing or the Not Knowing Whether or the Believing and can be addressed toward either the Knowing or the Believing.

Thus the term *knowledge*, used by Heritage in the epistemic gradient (Figure 2, section 9) to refer to the more knowledgeable answerer (K+), in our model corresponds to the Knowing and the Believing, i.e., it comprises both positions.

This means that the piece of information sought by the questioner K- and given by the answerer K+ can be not only a *certain* (in the epistemic sense) state of affairs, i.e., a piece of *knowledge*, but also an *uncertain* state of affairs, a piece of *belief*, i.e., a hypothesis, supposition, opinion, etc.

For this reason, in the epistemic gradient we prefer to use the term *information* rather than *knowledge* when referring to questioner and answerer: epistemically speaking, the former term encompasses both knowledge and belief, thus being neutral and less specific than the latter. We also prefer to use the terms *informed answerer* and *uninformed questioner* instead of *more knowledgeable answerer* and *less knowledgeable questioner* (Figure 17).

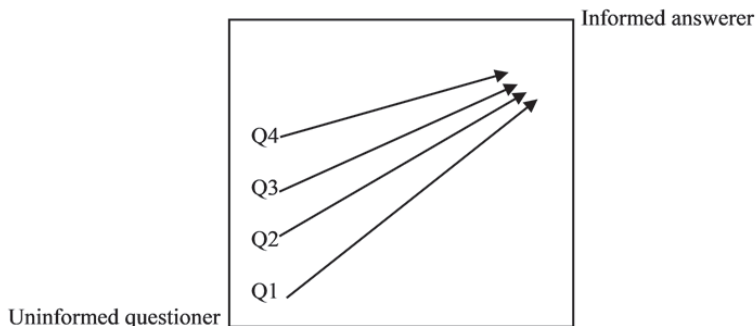


Figure 17. Uninformed questioner and informed answerer

Thus, in our terminology, Heritage's (2012a, 2012b) *epistemic asymmetry* occurs between an *uninformed questioner* (or, more in general, an *uninformed speaker*) and an *informed answerer* (or, more in general, an *informed speaker*), i.e., between an interlocutor A who in a given moment

of the conversational sequence *has* the relevant information and another interlocutor B who *does not*.

The former speaker might also be called the *information-holder*, and the latter the *information-searcher*.¹

Following our terminology, Heritage's *epistemic seesaw* would be represented in the following way: an interlocutor sits on each end of the long board balanced on a fixed part in the middle, and when one end goes up, the other goes down, i.e., the informed speaker/information-holder sits at the upper position while the uninformed speaker/information-searcher sits at the lower position. Of course, these roles are interchangeable, as shown in the following example:

- 1.S0052: have I told you about my drinking less?
2.S0109: no (.) drinking less?
3.S0052: yeah
4.S0109: no

In line 1 (*have I told you about my drinking less?*), S0052 is the uninformed speaker, the information-searcher. In the first TCU (*no*) in line 2, S0109 is the informed speaker, the information-holder, who gives S0052 the requested information (Figure 18).

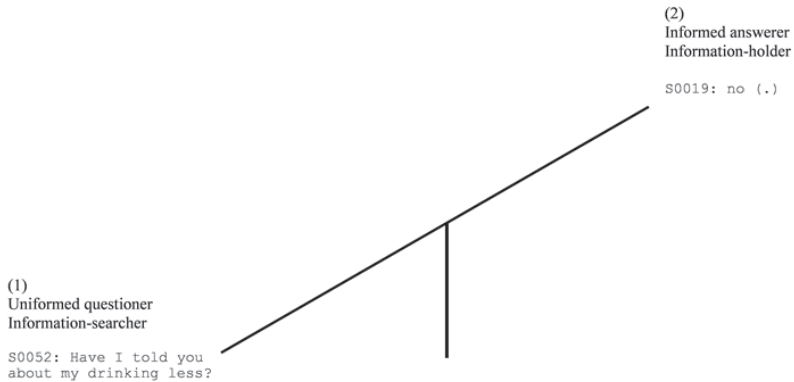


Figure 18. Epistemic seesaw: the uninformed speaker/information-searcher sits at the lower position (1) while the informed speaker/information-holder sits at the upper position (2)

¹ We prefer the term *searcher* rather than *seeker* to avoid assonance with the expression *information seeking* referring to the social action of wh-questions, alternative questions and neutral polar interrogatives.

In the second TCU (*drinking less?*), the speakers' roles change: S0109, who in the previous TCU was the informed speaker, the information-holder, now becomes the uninformed speaker, the information-searcher, and S0052 is invited to take the reciprocal role of information-holder, which she does in line 3 (*yeah*, Figure 19).

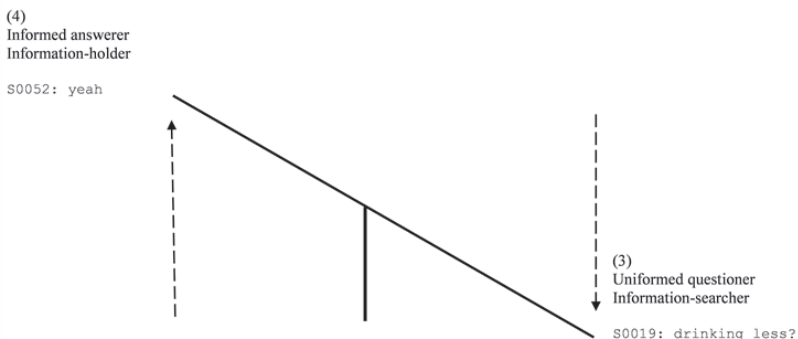


Figure 19. Epistemic seesaw: the speakers' roles and positions on the board change: the information-holder now becomes the information-searcher (3) and goes down (dotted arrow) while the information-searcher becomes the information-holder (4) and goes up (dotted arrow)

In line 4 (*no*), S0109 returns to the information-holder role taken in line 2, first TCU (*no*, Figure 20).

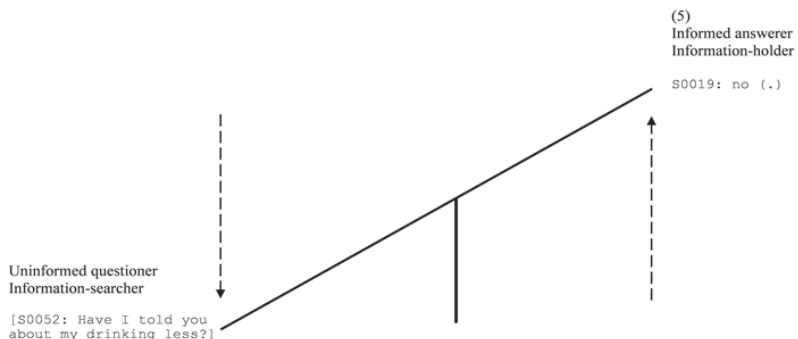


Figure 20. Epistemic seesaw: the speakers' roles and positions on the board change again, going back to the initial ones in Figure 18

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