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RHETORICAL QUESTIONS AS ENTHYMEMATIC ARGUMENTS

An Interactional Approach

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Abstract

Purpose: Presenting an exploratory study of rhetorical questions from an interactional perspective.

Theory: Rhetorical questions are analyzed in the framework of dialogical reasoning using the notions of enthymemes and topoi.

Method: A corpus study was carried out using an existing corpus of dialogues discussing a moral dilemma.

Result: Rhetorical questions are used to introduce enthymematic arguments and to facilitate linking together parts of arguments over several utterances.

Acknowledgements

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Introduction

This essay is intended as a pilot study to explore the phenomenon of rhetorical questions (henceforth RQs), regarding their pragmatic and argumentative function in dialogue. The subject of RQs generally has been adressed from different perspectives in linguistics, from Discourse Analysis and Speech Act Theory to transformational approaches, yet the interactional aspect of RQs has been neglected. I aim to investigate the roles RQs play in the context of dialogue from an interactional approach, what functions they fulfill, in particular as a device for delivering arguments.

In Speech Act Theory RQs are regarded as indirect speech acts – that by asking a question without expecting an answer (or rather, leaving the answer 'hanging in the air', not needing to be verbalized), a speaker breaks the sincerity condition for questions and gives rise to a conversational implicature, typically conveying a statement (among other functions in discourse an imperative, a piece of advice, a criticism, a threat to face or an argument, etc.) (Grice, 1975; Searle, 1975; Brown & Levinson, 1987). The RQ makes its answer obvious, through context or by syntactic markers, to the exclusion of other possible answers to the literal meaning of the question. The statement that answers a RQ (and is implied by it) in the majority of cases exhibits the opposite polarity, that is the answer is settled in the negative in the mind of the hearer (Egg, 2007; Pope, 1972; Ilie, 1994; Han, 1998). In order to explain the mechanism of delivering arguments through RQs, one needs a way to derive the statement or imperative to explicate the illocutionary force of the RQ – the so called polarity shift or reversal being one of the main tools for glossing the implied statement the RQ carries, and a useful clue to evaluate the felicitousness of a RQ in a given context.

Consider the example below of a RQ that delivers a statement of the speaker's opinion, (the immediate context is whether throwing out a child from an air balloon could prevent it from crashing):

(1)   *She's nine years old, she's so light anyway – is she really gonna make a difference?*

<div align="right">(GP12, 38)</div>

The speaker provides a reason for the statement by the RQ: *"she isn't really gonna make a difference"*. It is also good as an implicit answer RQ the expects, but it can of course also be simply *"no"*, or the elliptical *"she isn't"*. The obviousness of this answer makes the rhetorical reading of the question certain – we have no issue understanding the whole utterance to mean that she isn't going to make a difference whether the balloon lifts or not because *"she's nine years old, she's so light anyway"*. There are markers like negative polarity items that can force a rhetorical reading, as well as modals such as *really* in this case indicating surprise or sarcasm, and *anyway* in the premise part of the utterance as an emphasis that it holds regardless.

In the absence of syntactic markers or conventionalized expressions, even with sufficient context, it may be difficult rule to out the possibility of a non-rhetorical reading. A RQ's ambiguity of having the properties of both interrogative and statement can be exploited, for instance, by the hearer to counter-challenge an implicature evoked by the RQ such as a threat to face, or by the speaker to backtrack from a threat to face their RQ posed. Moreover, polarity reversal in the implied statement is a very commonplace but not an absolute rule, as there are cases of positively formulated RQs that pick out an obvious and specific answer, not straightforwardly derivable from a transformation of the interrogative into an assertive form. In this essay polarity reversal is important to gloss examples of RQs, but examples of *'exceptions'* to this pattern also get special consideration, both in the background and in the analysis of their occurrence in our material.

The wider context of the utterance exemplified above is a balloon task discussion, a moral dilemma where participants have to discuss and motivate making a morally tough descision to sacrifice one out of four passengers on a balloon to be thrown out of it, in order to prevent the balloon from crashing and all passengers dying. The task is designed to elicit verbalization of participants' reasoning in trying to reach consensus on their choice. Transcriptions of four such dialogues are used

in the analysis in this essay, all of which are from the DRiPS project – Dialogical Reasoning in Patients with Schizophrenia, the aim of which is to model and study reasoning in dialogue in order to explain social cognition impairments in schizophrenic patients (DRiPS, 2016).

Since one of the main functions of RQs is making and providing support for arguments, and since the balloon task is designed to elicit argumentation, it also is an environment where the use of RQs are common, As part of the DRiPS project this paper aims to relate RQs to *enthymemes* – common-sense inferences that characterize dialogical reasoning. Enthymematic inferences are not logically strict ones, instead, their validity or acceptability relies on underpinning of an enthymeme by a suitable warrant, a *topos* (plural: *topoi*) in the mind of conversation participants. Every individual has a set of topoi in their rhetorical resources, a collection of notions or generalizations in their mind about what holds for different types of situations. Some topoi are general to any situation, some in a particular speech event as they are incrementally evoked to warrant inferences made by conversation participants. When an argument is made in a dialogue an applicable topos needs to be found, of which the enthymeme is an instantiation, for a hearer understand and to accept or reject it. An argument can be accepted on the grounds of a different topos than the speaker intended, or the topos the speaker had in mind can for a hearer be the reason to reject the very same argument. Mismatches between participants' take on what topoi are evoked serve as explanation for misunderstandings, in the case of which participants can amend the situation through specifying the enthymeme, narrowing down the possible situation where a warranting topos is applicable (Breitholtz et al., 2020).

In example (1) above the RQ provides a consequent of the enthymeme *"she is too light, so throwing her out won't make a difference"* warranted by a topos like *"if x isn't heavy enough, throwing out x from the balloon won't help it fly"*. This topos could be accommodated as valid but the enthymeme nevertheless rejected, by questioning the premise *"she is too light"* as a consequence of *"she is nine years old"*. Alternatively, the hearer could agree for a completely different reason, like it being morally wrong to throw a child out of the balloon. In the four dialogues I've examined RQs often make up the antecedent, consequent and in some cases express an entire enthymeme. I hypothesize that RQs actually are a way to make enthymematic inferences and that their interrogative form is consequential to the accommodation of the topos that warrants the enthymeme the RQ constitutes (or constitutes a part of), which could serve to account for the use of RQs to make arguments more persuasive and their prevalence in the dialogues in this essay, or argumentative contexts generally.

      In the Background section the state of current research on RQs will be presented, focusing on covering previous studies and providing the theoretical tools necessary for our treatment of RQs, as well assessing their strengths and weaknesses in accounting for the properties of RQs that are the focus of the analysis here.

In the section on material and method I describe the data used in this qualitative pilot study on the link RQs and enthymematic reasoning as well as details on how RQs were identified in the transcripts.

In the Results section I will present a basic analysis of occurrences of RQs in the 4 dialogues, provide glossing as implied statements, and present clues from the content of the utterance as well as from the discourse context for the purpose of motivating the rhetorical reading. Rhetorical yes/no questions (henceforth *yes/no-RQs*) and rhetorical wh-questions (henceforth *wh-RQs*) are treated separately, as the polarity reversal between them and their implicit answers works differently, however, where understanding of the context necessitates it, they will be treated in conjunction. Exceptions where a statement can not be derived despite a rhetorical reading being obvious or highly likely have their own dedicated section.

Discussion of the examples will be provided in conjunction with the results where some RQs will be treated in depth, tying observations on how RQs imply statements to their role in the structure of the chain of reasoning.

In the last section I draw conclusions mandated by observations of the patterns exhibited in the examples extracted from the data, mainly that RQs do introduce enthymemes and facilitate evocation of topoi by their function as interrogatives to string together several utterances in a chain of reasoning. I also make suggestions for future work, what conclusions that can not be asserted for certain due to the limitations in the data, mainly regarding the finer aspects of adjunct wh-RQs conveying scalar implicatures and regarding how the topoi evoked are accommodated in the discourse.

Research Questions

This research aims to explore the following questions:

1) How do RQs express enthymemes?

2) What role does the relation between RQs and their implied statement play for the expression of an enthymeme as or through a RQ?

3) What other functions and features of RQs observable in the material at hand play a role for the expression of enthymemes through RQs?

Specifically I investigate:

1) That RQs can express enthymematic arguments, or parts of them,

2) that their use can make the warranting topoi likelier to be accommodated by participants, alternatively make more acceptable the topos that would warrant the enthymematic argument expressed in this manner,

3) and that the expression of enthymemes through RQs (as well as the structural correspondence between enthymemes and RQs, and their argumentative power) is linked to RQs having the illocutionary force the statements it implies.

Background

Speech Act Theory and RQs

In terms of Searle's (1975) requirements for performing felicitous speech acts, they violate the sincerity and the essential condition for requests.[1] By posing a RQ, the speaker is not seeking an informational answer, but to emphatically make a statement, with whatever illocutionary force such a statement would have, be it making an assertion, providing an argument in debate, giving advice, warning, sarcasm, threatening face, etc. Moreover, posing a RQ leaves open the possibility for the hearer to challenge or reject the implied statement by responding to the direct speech act and provide an informational response to the literal, locutionary meaning of the interrogative. This option is also open to the speaker, for instance when the choice of using a RQ backfires, for example if an argument presented as a question fails to convince or the statement conveyed by the RQ turns out to be a too strong a threat to face for the hearer and gets called out.

Brown & Levinson (1987) list using RQs as one of several strategies for making face-threatening acts such that they also are off-record, or plausibly deniable by the speaker. Because RQs have the locutionary meaning of a question due to the syntactic form of an interrogative, and the illocutionary force of an assertion or imperative, and because it is impossible to read thoughts, the speaker of the RQ has the option to claim innocence, to say that they meant it literally, as a sincere question. The hearer may, of course, not truly believe it, but as face is a matter of appearance, responsibility for threatening it can still be avoided, depending on how viable the other interpretation is in context, and what clues to the interpretation are given. Such clues include the mutual knowledge of speaker and hearer, their attitudes, sequencing of the conversation, and also there are conventionalized forms of, or syntactic markers of the illocutionary force of the utterance that would make, for instance, the only viable interpretation of a question rhetorical, and the use of the RQ actually on-record in context (Brown & Levinson, 1987). This dual nature of RQs is a property shared with some of other off-record strategies that trigger conversational implicatures by violating different Gricean Maxims. Brown & Levinson (1987) group RQs under violations of the Quality Maxims together with using metaphors (prompting deciphering of what literally is false), contradictions (i.e. responding with *"yes and no"*, indicating the need of nuance for interpreting what follows), or delivering the utterance with irony (meaning the opposite of what is said, signaled by tone of voice, body language or being obvious in context). The latter case, that of irony and sarcasm, shares the property of "saying the opposite" with RQs, noticeable in the examples of ironic utterances given by Brown & Levinson (1987) which include at least one RQ, and more formulated as an exclamation.

Markus Egg (2007) considers RQs indirect speech acts and ascribes their illocutionary force as emphatic statements to their literal meaning as question. The starting point of Egg's analysis is how the presence of strong *negative polarity items* (henceforth NPI) in questions forces a rhetorical reading by restricting the answer set of the RQ, which is derived from that of the corresponding ordinary information-seeking question. The rhetoricity of yes/no-RQs is implied by a presupposition that the question is already decided in the negative, which is explained by a change in the partitioning between possible worlds with affirmative and negative answers. For a felicitous use of the RQ *"Did you lift a finger to help Max?"* to be possible, the NPI *lift a finger* renders contextually relevant only those answers where no help or only a minimal amount of help was offered. The addition of a strong NPI to wh-questions lowers the threshold for what is an affirmative answer, making answer sets with elements that hold good in a rhetorical reading so large that the question becomes so general and uninteresting that only a null answer becomes relevant in the rhetorical reading.

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1   The sincerity condition for a request to be felicitous is that the speaker is sincere about their request to have the hearer perform the requested act, and the essential condition is that this speech actually counts as an attempt to have the hearer perform the act (Searle, 1975).

Eggs take is that the meaning of RQs is evaluated against the common ground and interpreted as negative statements – since only negative elements of the answer set turn out to be compatible with the common ground. Egg rules out the personal opinion of the speaker and the hearers background as relevant for the interpretation of RQs as statements, because RQs do not request information from the hearer, but offers little justification for this exclusion beyond the fact that the hearers background may be different from the common ground. He rules the presenting of ones opinions in the form of RQs as a means to make the hearer accommodate its implied statement to the common ground as *"abuse"* of the mechanism. Egg also briefly mentions that his analysis accounts for wh-RQs such as *"Well, who is responsible for this mess?"* prompting a non-negative answer (*"You are"*), by an application of this analysis (2007). The absence of an explication of an analogous mechanism begs the question of how it would be carried over to such cases, especially considering that the description of RQs delimiting the answer set does not extend beyond providing cases where a rhetorical reading is not forced by an NPI, but merely are rendered more probable by contextual cues.

In my view, interpretation of RQs necessitates relating their functions to the common ground, but writing off cases where RQs are employed to influence the common ground is to ignore their use as argumentative devices. In this paper I will be considering how RQs evoke conditional relationships between propositions, whether these inferences are accommodated because of an already present generalization of an argument presented by a RQ, or whether the RQ (by its content, syntactic form or place in the discourse context) makes participants introduce new propositions to their commitments, despite the fact that this may be the same kind mechanism by which participants manipulate each other. Argumentation in dialogue by its very nature ranges from being fallacious to being based on evidence or exhibiting a degree logical stringency.

Discourse context and RQs

Cerovic (2016) investigates the use of rhetorical questions in the institutional setting of a police interrogation, where a suspect uses RQs to challenge allegations posed by the detectives, and to demonstrate epistemic primacy regarding the crime, vis-a-vis the detectives interrogating him – the suspect asks *"What do I know?"* to assert *"I know nothing"* about his knowledge of the crime. The use of RQs instead of responding directly, poses a challenge to authority in a setting where it is detectives who are supposed to be "asking the questions" (Cerovic, 2016). In accordance with this, Frank (1990) argues for the primary role of RQs being persuasive devices attenuating the social cost of face-threatening acts, by "strengthening assertions and mitigating potential threats to face" (Frank, 1990: p.738). Frank (1990) proposes combining Speech Act Theory and Discourse Analysis to determine whether an interrogative should be read rhetorically, as from an analyst's perspective only more or less informed guesses about the intent of the speaker are possible. The ambiguity of the functionality of RQs is Franks main argument for employing a combined approach in order to correctly classify RQs. Since RQs often convey sarcasm and are otherwise ambiguous regarding interpretation, subjective and easily misunderstood, the intent of a speaker isn't always clear-cut. Relying on SAT alone, a researcher would mistakenly classify as RQs cases where only context can cue such a reading. An assessment needs to be made not only of the speaker's intent but of the contextual environment and of the hearers response. made possible by Discourse Analysis (Frank, 1990).

Ilie's (1994) take is that RQs are not a special category of questions that needs not or can not be answered, but rather primarily pragmatic units that *"are neither answerless, nor unanswerable questions, and that they display varying degrees of validity as argumentative acts"* (Ilie, 1994:ii). Ilie distinguishes five identifying features as criteria for RQs. These are taken to be cognition oriented – a RQ evokes a cognitive process in the mind of the addressee that mirrors the process in their own and arrives at the same conclusion, inducing the addressee to reconsider their own held assumptions. These five criteria are (p.45-46): (i) the discrepancy between the interrogative form of the rhetorical question and its communicative function as a statement, (ii) the polarity shift between the rhetorical question

and its implied statement, (iii) the implicitness and the exclusiveness of the answer to the rhetorical question, (iv) the speaker's commitment to the implicit answer, and (v) the multifunctionality of rhetorical questions.

(i) refers to the difference between the interrogative syntactic form, and the speech act intended. Since RQs, unlike ordinary questions (henceforth OQs), intend statements they can be agreed or disagreed with, and also be valid answers to genuine questions (Ilie. 1994, p.49-51). (ii) refers to the polarity of the RQ being opposite of its implied statement. The polarity shift occurs in one step in yes/no rhetorical questions and affirmative wh-questions. For affirmative wh-RQs, the referent is identified with a null entity:*"Who cares?"* implies *"Nobody cares"*. Polarity shift in negative wh-RQs is a two-step process. The first step is the same as positive wh-RQs, which results in a double negation, then transformed into an affirmation: *Who doesn't have problems?* → *No one doesn't have problems.*→ *Everyone has problems.* (iii) refers to the RQ having only one possible implicit answer. In some cases it is explicit, which emphasizes (iv) – the speakers commitment to the statement they are implying, communicated by drawing on common beliefs shared by speaker and addressee, **s**uccessful conveyance of which depends on the relation between speaker and addressee and on their roles and goals. In some contexts, such as institutional ones, participants are not equal in their roles and may differ in goals. A defender that uses a RQ may be called upon to answer it directly. Since they express a commitment to their implied answer, they are in this sense argumentative. (v) – Ilie presents empirical data for RQs to have functions other than challenging: "giving information, conveying irony, expressing an opinion and eliciting agreement" (1994:59-60).

Nuances and subtypes of RQs

Pope (1972, pp.45-96), makes the point that RQs do have answers, and that they are specific and obvious, while OQs may only have a strong bias towards a particular answer. She observes that in the case of yes/no-RQs, the implicit answer is determined by syntactic form, where the polarity of the answer is in agreement with the polarity of the presupposed assertion behind the RQ, simply, negative RQs expect positive answers and positive RQs expect negative ones. She notes some exceptions, however: *"positive and negative polarity items can bias the expectation the other way by making one answer more grammatical than the other" (p. 47).*

According to Pope, wh-RQs either have an obvious (to both interlocutors) specific positive answer or an empty set for an answer (i.e. *nobody* or *nothing*). Unlike yes/no-RQs, the syntax of the question isn't as strong a clue about the expected answer, an exception being polarity items – a wh-RQ containing a negative polarity item would generally expect a null set for an answer, for comparison, here is one with and without an NPI (p.60):

(2)   A: *Why should anybody fight communism?*
            B: *There is no reason for anybody to fight communism.*

(3)   A: *Why should we fight communism?*
            B: *No reason, obviously.*
            B':   *Because it is the greatest evil imaginable, obviously.*

The same question without the NPI *anybody* has no syntactic clue to the expected answer, which is ambiguous between a specific positive one or a null set. What answer is expected depends on aspects like context and prosody (as does the interpretation of the question as a RQ). A wh-RQ with a positive polarity item picks out a specific individual as an obvious answer. The answers *"Nobody"* and *"Nothing"*, respectively, are not be expected in rhetorical reading of these questions (pp.61-62):

(4)   A: *Who is far more powerful than this fiend?*
            B: *Spiderman (is far more powerful than this fiend).*

(5)   A: *What is going to happen sometime soon?*
        B: *The people will revolt (sometime soon).*

Han (1998) proposes a derivation of the opposite polarity implied statements of RQs. She notes that polarity shift is generally the case for negative yes/no-OQs as well: *"Didn't John finish the paper?"* expects the *"John finished the paper"*. This isn't generally so for positive yes/no-OQs, but when it is, the answer is negative. Han ascribes polarity to the speaker's expectation of the answer to be as informative as possible, according to the first part of the Gricean maxim of Quantity (Grice, 1975). The speaker's expectation that *"John finished the paper"* is because the opposite answer *"John didn't finish the paper"* would be uninformative. Hans notion of what answer is considered to be informative is one which makes the speaker change their belief about the world – the most informative being the negation of a strongly held belief or opinion. In the case of yes/no-RQs polarity shift has a similar explanation to the case of negative yes/no-OQs, as the answer the speaker expects in RQs is strongly asserted as the speaker's belief, opposite to the polarity of the question.

Analogously, Han exemplifies that for negative wh-OQs the speaker expects that the set of referents for which the question holds is smaller than for those it doesn't – *"Who didn't finish the paper?"* expects a pointing out of those that didn't, as the speaker expects an informative answer. For wh-RQs then, the wh-phrase maps onto an empty set, semantically equivalent to a negative quantifier and so the expected answer is a null set. In the case of negative wh-RQs this results in a double negation and then an assertion. In these examples, the wh-phrase is mapped onto a negative quantifier (p.10):

(6)   A positive wh-RQs:
                "What has John done for you?"
        implies the assertion:
                $\neg\exists x[\text{John has done x for you}]$

(7)   and a negative wh-RQs:
                "What hasn't John done for you?"
        results in a double negation:
                $\neg\exists x[\neg(\text{John has done x for you})]$
                $\forall x[\text{John has done x for you}]$

Ilie (1994) notes some properties of rhetorical questions intersect with *queclaratives* (which were coined by Sadock (1971) and share semantic similarities to tag questions), insofar as queclaratives also imply a statement of opposite polarity, express speaker's commitment to the implied assertion and as Ilie demonstrates, tag questions (with checking tags, as in (8)) can be used rhetorically. In the following example of a queclarative (Sadock, 1971, p.224) the speaker intends to express his or her opinion that syntax is, in fact, easy:

(8)   Queclarative: *Isn't syntax easy?*
        Tag question: *Syntax is easy, isn't it?*

The tag question corresponding to the queclarative in the example above displays a tag having the same polarity as the queclarative and the base of the tag question having the same polarity as the assertion corresponding to the queclarative. Based on the similarity to RQs, Pope suggests a common source of derivation for both, for instance:

(9)   *'Syntax is easy, isn't syntax easy?'*

The RQ is then derived by deleting the statement part, and the tag sentence by deleting all but the auxiliary and the subject of the question, and pronominalizing the subject (Pope, 1972, pp.55-59). The drawback mentioned by Pope is that wh-RQs can't be derived in the same way, as they don't have

corresponding tag questions, and no corresponding statement source. In an attempt to construct such a source Pope takes wh-questions to suppose one of multiple answers, instead of having presuppositions (1971, p.72):

(10)   A: 'Who likes peanuts?'
          B: 'Somebody likes peanuts.'
          B':   'Nobody likes peanuts.'

Wh-RQs that expect a null set answer also presuppose it in the same manner as yes/no-RQs whose answer and presupposition are identical. Pope suggests a definite-indefinite distinction should be used in addition to the positive-negative distinction for yes/no-RQs. In other words, if *"Who likes peanuts?"* is a RQ, it presupposes B', a null set. When a wh-RQ presupposes existence, the specific referent in the answer set must actually be given, not merely expressed as non-empty (possibly a result of adherence to Gricean maxims of Quantity, that one must not tell less than one knows (Grice, 1975)). As a source for wh-RQs, Pope proposes the following construction, where the RQ is derived through deleting the first of the juxtaposed sentences:

(11)   wh-RQ: Where are such things found?
          Source: Such things are found THere, such things are found WHere?
          Source: Such things are found Nowhere, such things are found WHere?

The RQ *"Where are such things found?"* is ambiguous, gets two possible sources of derivation. Less ambiguous wh-RQs like the one with a negative bias below, share the same source as pseudo-clefts (1971, p.80):

(12)   wh-RQ: When have you ever done anything nice?
          Source: You have Never done anything nice, WHen have you ever done anything nice?
                        *You have (THen) ever done anything nice, WHen have you ever done anything nice?
          Pseudo-cleft: Never is when you have done anything nice.

The purpose of the exposition of this transformational approach to RQs was to show the nature of some of the semantics of RQs, but as Ilie points out (p.17), it fails to account for the major role of context in the interpretation of a question as rhetorical and to distinguish between rhetorical and non-rhetorical questions at deep structure level.

      Hannah Rohde (2006) treats RQs as redundant interrogatives that serve to synchronize speaker and addressee commitments, confirming their shared beliefs about the world – RQs are uninformative, picking out the most predictable answer from the answer set. Rohde gives three conditions for the felicity of RQs: (1) the presence of an obvious answer (i.e. that in RQs, in contrast to OQs, the answer sets of both speaker and addressee are predictable and need not be verbalized), (2) uninformativity of the answer (meaning all participants know the answer and know they know it, leading to no updates to their commitments), and (3) sufficient similarity between the speaker's and addressee's answers (defined as being either identical or sharing a similarly extreme position on a contextually relevant scale). This approach accounts for cases where yes/no-RQs have answers of the same polarity, wh-RQs picking out positive non-null answers, and multiple answers (that are similar in being on an extreme position on a scale) without relying exclusively on negative quantifiers or restriction of the answer set to the extreme end of a scale by negative polarity items. She takes such pragmatic scales as invoked by the context and content of the question and need not be overtly specified by a NPI or closed class wh-phrase. Rohde also presents data on adjunct wh-questions, to which implied answers can not be represented by mapping onto a quantifiers since it is the adjective in the wh-phrase that

orders answers according the dimension of time, place, reason or manner: *"these questions are not represented in the form ?xPx because variables over times/places/reasons/manners are not constituent arguments of the predicate P."* (p.146) Here is an example:

(13) 1: The thing is, how easy, or difficult it is to actually teach how to fly a balloon, I mean it's just two things really. What does a pilot do? It's not like flying a Boeing 727 is it?

2: Well, yeah it is just two things like.

<div align="right">(GP08, 167-171)</div>

In order for the interrogative above to function rhetorically, the answers in both the speaker's and the addressee's common ground must share an extreme position on a scale of difficulty, in this case *"very easy"* or *"not very difficult"*.

Having covered different types of RQs regarding their implicit answer: yes/no-RQs meaning answers of the opposite polarity, positive wh-RQs answers negating the existence of any member in the answer set, negative wh-RQs the existence of an obvious specific member in the answer set, a few "exceptions" to these general patterns need to be mentioned. First, regarding wh-RQs without polarity shift, the following is a positive wh-RQs expecting an obvious specific answer denoting one element. Pope (1972)

(14) A: *Who brought you into this world, anyway? Who taught you everything you know, took care of you, worked her fingers to the bone for you?*

B: *You, Mama.*

<div align="right">(Pope, 1972, p.59)</div>

This positive answer isn't derivable from the form of the question, and its obviousness is such due to the context of the utterance. In this case, there is only one individual for whom the answer holds and is obvious to the hearer, this individual being the speaker – the mother addressing her son. The converse case – a negative wh-RQ with a specific negative answer, is also dependent on context for a rhetorical interpretation, and is exemplified by Rudanko (1993): "*Who never complains? – I never complain*". According to Rudanko (1993), in the case of a lack of a context in which a specific answer is obvious, the wh-element is replaced by a negative quantifier, as is the case generally for negative wh-RQs but also in the case of constituent negation.

Second, RQs can serve as answers to other questions, here, to OQs:

(15) A: *Is Clinton a liberal?*   C: *Does Sam like pizza?*

B: *Is the Pope Catholic?*   D: *Do horses like grass?*

<div align="center">(Han, 1998, p.8)   (Pope, 1972, p.46)</div>

The answers to these RQs isn't negative, in both cases the answer is an affirmation, and this affirmation serves as the answer to the OQ. The RQs indicate that relationship between the subject and object is the same in the OQ as it is in the RQ. An analogous relationship also holds between answers, they are obviously affirmations for both questions.

Third, some RQs lack answers: *"What are we going to do with all the soldiers over there?"*, having to do with troops in Eastern Europe after the cold war (Rohde, 2006, p.149), expecting an answer like *"I don't know"*. Rohde notes this case doesn't fulfill her condition for felicity of the RQ that the contextually relevant information to available to all participants. I will offer an analysis of such cases based on an example from one of the dialogues, on how the RQ is conveying the inconclusiveness of any possible answer.

Last, RQs are often replied to by the speaker themselves, and often these replies don't match a derivation of an implicit answer from the form of the question, regular or not. Instead the speaker is answering their own RQ in order to explicate their chain of reasoning.

(16) 1: Don't you think that if she's been married to him she might have a little bit of piloting?
      3: Yeah, exactly.
      1: She might have been on a hot air balloon more than once.
      3: Yeah.
      1: So she might sort of know the general idea of how to land one.

<div align="right">(GP12, 105-112)</div>

Here, the reply is directed to the implication of the RQ, it is a conclusion in the conditional relationship between the statement implied by the RQ, roughly *"Surely you would think that if she's been married to him she might have a little bit of piloting?"*. The reply to the RQ serves a purpose for the argument put forth by the speaker,. Ilie (1994) provides such examples from political speeches, describing the replies to RQs as *"causal explanation, an illustration, a logical consequence, a relation of concession"*. The opposite is also possible, when the reply serves as a premise to the RQ's implication, as we will see in the analysis of the dialogues. This phenomenon of RQs serving rhetorical purposes isn't accounted for by approaches providing only derivational rules for the implicit answer (Han, 1998), or where the rhetoricity of the question depends on its answer being the least informative in the answer set, these answers being accessible in common ground and the answer being obvious to all participants (Rohde, 2006). I propose that RQs play an important role in introducing new information, with varying degrees of predictability, informativity and fallaciousness, especially when expressing or being a part of an inferential relationship the speaker holds to be valid, and wants the addressee to adopt as their own.

Rhetorical questions as enthymematic arguments

In argumentation as it occurs in natural dialogue participants often rely on common sense rather than strictly logical deduction in order to interpret the arguments made. In order for an argument in a dialogue to be accepted as valid it is not necessarily required for the principle that warrants the inference to be explicated. In the DRiPS project (DRiPS 2016, Breitholtz et al., 2020) the notions of *enthymemes* and *topoi* are presented as key concepts in describing the way in which this type of reasoning functions in dialogue. Such an inference, an enthymeme, leaves a premise, the topos of the syllogism unstated. Instead, the topoi are either already part of the common ground or are incrementally accommodated throughout the conversation. Different topoi can underpin one and the same enthymeme, which can lead to misunderstanding, disagreement, or agreement on completely different grounds. Some topoi are common to any situation, and some, while still generally acceptable, are particular only to the context in which they are relevant. When it comes to the material used in this paper, the topoi drawn upon are common topoi and those that are applicable to the moral dilemma presented in the balloon task (DRiPS 2016, Breitholtz et al., 2020).

Topoi exist as a set of rhetorical resources determined by the collected experiences of an individual. In a speech event they are in the common ground, and can either be common – general to any kind of context or they can be particular to the conversation at hand and be accommodated to the set of rhetorical resources of the participants as further topoi are evoked by the introduction of enthymemes during the dialogue. Enthymemes are instantiations of topoi, or topoi are more general forms of the inference rules in conversation called enthymemes. When presented with an inference in a conversation the participants need to find among their rhetorical resources an applicable general principle would make sense of it, that is to both interpret and to validate it.

Ilie (1994) calls enthymemes those RQs that function as whole arguments, that is, imply conditional statements. She distinguishes three types of RQs that are enthymemes according to what kind of inference they correspond to, modus ponens, modus tollens and disjunctive syllogism. However I will analyse as parts of enthymematic inferences RQs serve as replies of or are themselves replied to by the speaker, as they can express the premise or conclusion of an argument (except those

that reply to the question itself, i.e that verbalize the implied statement, as they only serve to strengthen the expressed standpoint).

In this example (1) from the introduction – the structure of the argumentation can be described as this enthymeme:

(17)　　　She's nine years old, she's too light

　　　$\therefore$ throwing her out won't make a difference

　　　Topos: if x isn't heavy enough, throwing out x from the balloon won't help it fly

The proposition that *"she's too light"* is itself the conclusion of, *"she's nine years old"*:

(18)　　　she's nine years old

　　　$\therefore$ she's too light

　　　Topos: if x is nine years old, x isn't heavy enough

Taken together, the chain of reasoning would look like this:

(19)　　　she's nine years old

　　　$\therefore$ she's too light

　　　$\therefore$ throwing her out won't make a difference

(GP12, 38)

The wavy line represents defeasibility of the argument – that while there may be a good reason for the conclusion to follow from the premise, it may with additional information be invalidated. For example, one could imagine the child being so heavy that she would constitute an exception to the generalization that nine year olds are lightweight. However, she may not be a typical nine year old and the general rule may not hold true in her case. In other words, the topos may be accepted as valid but not its application. The speaker appears to be aware of this possibility that the topos may not necessarily be accommodated as relevant to the situation, making the generalization more specific later in the dialogue: *"I just think the child is too too light anyway I mean even if the child was morbidly obese"* (GP12, 211).

My intuition is that the employment of the RQ to form an argument, strengthens the argumentative force through a presumption that the topos warranting it should already be as acceptable to the addressee as it is to the speaker. This isn't simply due to social tension and the risk of threatening face, in the possibility of a challenging response to the RQ in case of eventual disagreement, but to the role of RQs in cognition itself. The speaker, by using a RQ, presumes the notion behind it to be as acceptable to the addressee, thus expresses their own commitment to the implied answer and the expectation of the addressee to do likewise. Casting it as a question to be answered negatively sets off such a process in the mind of the hearer, whether they end up agreeing with the conclusions of this reasoning process or not. I propose that this process can be described as the successful elicitation of a topos that would warrant the enthymeme expressed by a RQ, and the RQ form itself accentuates, or makes salient in discourse the expectation that a topos is already available, and should be acceptable to the other conversation participants.

Schlöder, Breitholtz, and Fernández, (2016) analyze why-questions in dialogue from a rhetorical perspective. A why-question elicits a reason for the issue under discussion: when someone utters a proposition p, the answer to *Why p?* is an enthymeme $q \therefore p$, and the answer presupposes that there is a topos that warrants that enthymeme. A reason is factive, when what is asked about is why p holds, and meta-discursive when inquiring about the reason for the act of saying p.

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There is a special case where the antecedent of a why-question is a conditional statement. Here the why-question elicits a reason for the stated enthymeme, to explicate the topos that underpins it. A why-question can be posed again to elicit a reason for the one already given, again be questioned, and so on, as there may always be *"a topos in the context that the interlocutors do not explicate, but implicitly accommodate"* (Schlöder, Breitholtz, Fernández, 2016, p.4). So, enthymemes can be nested: a reason provided for one inference is itself an unstated premise in a superordinate enthymeme, as it itself presupposes the application of another topos.

Nesting of enthymemes may be useful in the examination of the role of RQs in arguments. The duality of RQs as interrogatives and statements makes it possible for a speaker to answer their own RQ, or to reply with a RQ to their own statements, which allows them to provide backing for the proposition implicit in the RQ, or use RQs to a reject proposition they made.

In the following example, 1 poses two RQs, that can be glossed as the inference *"She has no special quality. (So) there is no reason we want to keep her"*

(20) 1   So then we have the pregnant woman, so it's two people in one.
      2   yeah.
      1   Wh- what's her special quality? Why do we want to keep her at all?
      2   Well, if you threw her out, maybe the pilot might well go mad, through losing his wife and his child.
      3   But if you threw her out, maybe the pilot might jump out as well.
      2   Yeah.
      3   Hence, then you'd have two spaces left in the balloon. So you wouldn't have to throw anyone.

<div align="right">(GP_08, 68-78)</div>

By asking a general question after the fact of stating something that could serve as its answer, 1 implicitly denies that their preceding statement is relevant as an answer. More precisely, 1 is denying that there exists a situation where the inference they made:

(21)   pregnant(s)

       ‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿

       counts_as_two_lives(s)

is a reason for the inference implied by the RQs itself:

(22) $\neg \exists x(\text{special\_quality}(x, s))$

       ‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿

       $\neg$ should_be_saved(s)

Topos: $\neg \exists x(\text{special\_quality}(x)) \therefore \neg$ should_be_saved(x))

In other words, the RQs in their specific context communicate is a rejection of *"the quality of counting as two people because one is pregnant is a special quality"* as a reason to be saved:

(23)   pregnant(x)$\therefore$counts_as_two_lives(x)

       ‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿‿

       $\neg$ applicable(special_quality(x)$\therefore$should_be_saved(x))

Material & Method

The material used in this research is the transcripts of 4 dialogues from the Dialogical Reasoning in Patients with Schizophrenia project (DRiPS, 2016) . The aim of DRiPS is to investigate the difficulties of people with schizophrenia regarding communication in social interactions by exploring reasoning in the setting of real-world dialogues. By using the notions of enthymemes and topoi in analyzing reasoning sequences in triadic dialogues with patients and healthy controls, the DRiPS project seeks to determine their differences in terms of what arguments patients with schizophrenia and their interlocutors use and how they use them (Breitholtz et al., 2016, 2020).

For the purposes of this essay, I explored transcripts of 4 out of the 40 interactions in total in the corpus of DRiPS. 2 out of the 4 interactions involve one patient and two healthy controls and the other 2 three healthy controls. In all dialogues the participants are previously unfamiliar with each other. The interlocutors are given a task to attempt to reach consensus on which passenger in a hot air balloon should be thrown out in order to prevent the balloon from crashing and killing all four passengers. This task is designed as a moral dilemma to elicit reasoning, as there are good reasons for each passenger to not be thrown out. The choice stands between the balloon pilot, his pregnant wife, a scientist who may be close to finding a cure for cancer or a nine-year old child musician rumored to be a modern day Mozart (Breitholtz, Cooper, Howes, & Lavelle, 2020).

This data has been used to address the roles rhetorical questions play in these interactions, relating their dual function as interrogatives and statements to the introduction of enthymemes and to evocation of topoi. In order to capture as many borderline cases as possible, the criteria I use for what questions are regarded as rhetorical are fairly basic. I consider as the subject of analysis simply those questions that, taking context into consideration, do not expect informational answers (as far as can be deemed likely from a non-participants' point of view), including cases where there is a probability of a non-rhetorical reading, or where a rhetorical question is responded to as an ordinary one. The reason for this is that in many cases the likelihood of a rhetorical contra informational reading varies, and since I worked with transcripts only, this likelihood can not be determined without prosodic and non-verbal cues.

Results & Discussion

Below I present excerpts of RQs identified in 3 of the 4 dialogues, one of them lacking any RQs whatsoever. The examples of RQs are glossed as implied statements annotated as enthymemes, and commentary is provided to make sense of the significance of the RQ in each exchange. In the table below the number of occurrences of different types of RQs is listed. Regular wh-RQs are more common than yes/no-RQs, however yes/no-RQs are more common in constructions where a straightforward derivation of the implied statements isn't as obvious (like disjunctive questions and embedded questions):

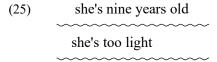| Regular RQs	
Yes/no-RQs	6
Wh-RQs	9
Irregular RQs	
Yes/no-RQs	3
Wh-RQ embedded in Yes/no RQ	1

Yes/no-RQs

Is she really gonna make a difference?

(24) 1: Are we all agreed that the kid's not going?
      2: erm.
      1: She's nine years old, she's so light anyway – <u>is she really gonna make a difference</u>?
      3: Well I'm not throwing a kid out, I just couldn't cope with it.

<div align="right">(GP12, 36-39)</div>

The RQ *"is she really gonna make a difference?"* has the illocutionary force of a statement with a negative polarity *"She isn't really gonna make a difference"*, and it expects only negative answers like an ellipsis of the implied statement: *"She is not"*. The rhetorical reading is motivated by the premise of the implied statement: *"She's nine years old, she's so light anyway"* provided by the speaker, by the modal adverb really, and anyway connecting the premise to the conclusion implicit in the RQ. The entire argument can be glossed as *"She isn't really gonna make a difference [if thrown out], [because] she's nine years old, she's so light anyway"*, and the chain of reasoning can be represented as a nested enthymeme:

(25)   she's nine years old
       ~~~~~~~~~~~~~~~~~~~~~~~~~~~

           she's too light
       ~~~~~~~~~~~~~~~~~~~~~~~~~~~

       ∴ throwing her out isn't really gonna make a difference

"She's nine years old, she's so light anyway" is itself a conditional statement, suggesting that nine-year olds are generally not heavy enough to function as sandbags. This can be represented as the enthymeme in (26), drawing on the topos in (27):

(26)   nine_year_old(c)

          ¬ heavy_enough(c)

(27)   nine_year_old(x)

          ¬ heavy_enough(x)

(28)   ¬ heavy_enough(x)

          ¬ make_a_difference(x)

while the enthymeme (25) is warranted by the topos in (29), derived from (27) and (28):

(29)   nine_year_old(x)

          ¬ make_a_difference(x)

Later in the dialogue, when asked for a reason to throw out the child, 1 repeats the argument that the child is too light, even in the case of morbid obesity, and covers the possibility of the child being an exception to a general notion of nine year olds being lightweight. The tag question in the last line is a yes/no-RQ implying a statement of the opposite polarity of the tag (and identical to the statement part of the tag question):

(30)   1   No no if that kid was a trouble maker
       3   *laughter* No *laughter*
       1   I would throw them out
       3   *laughter* No I i- it's just ethically I I ca- I can't make that choice.
       2   Why?
       1   I just think the child is too too light anyway I mean, even if the child was morbidly obese.
       3:     *laughter*
       1:     <u>They're not gonna be as heavy as a sandbag, are they</u>? So.

                                                                    (GP12, 204-213)

"They're not gonna be as heavy as a sandbag" evokes a topos more specific than the previous one, defining the range of being heavy enough as at least the equal weight of a sandbag:

(31)   ¬ heavy_as_a_sandbag(x)

          ¬ make_a_difference(x)

Don't you think that *p*?

(32)   2   Yeah but the big question is if you throw the pilot out is what to expect, are you expected to be able to land the thing safely.
       3   mmm.
       2   Because if not then it's pointless throwing the pilot out. Because you kill everybody then.
       3   Yes. But there is a chance

1:	<u>Don't you think that if she's been married to him she might have a little bit of piloting</u>?
3:	Yeah, exactly.
1:	She might have been on a hot air balloon more than once.
3:	Yeah.
1:	So she might sort of know the general idea of how to land one.

<div align="right">(GP12, 96-112)</div>

The RQ implies the conditional statement: if *"she's been married to him"* then *"might have a little bit of piloting"*, evoking the enthymeme in (33), warranted by a topos derived from (34) and (35):

(33) married_to_pilot(s)

   experience_piloting(s)

Topos: married_to_pilot(x) ∴ experience_piloting(x)

(34) married_to_pilot(x)

   flown_before(x)

(35) flown_before(x)

   experience_piloting(x)

The following two utterances also constitute the enthymeme in (36), warranted by a topos derived from (35) and (37):

(36) flown_before(s)

   can_land(s)

Topos: flown_before(x) ∴ can_land(x)

(37) experience_piloting(x)

   can_land(x)

The argument 1 is building up to is that the pilot's wife will be able to land the balloon herself (38), its topos derived from (35) and (37):

(38) married_to_pilot(s)

   can_land(s)

Topos married_to_pilot(x) ∴ can_land(x)

In this example I've shown how the speaker makes an argument relevant to the discourse through the use of a RQ to introduce an enthymeme, and further explication of their reasoning (by drawing on implicit topoi: (33), that pilot's wives come along on flights sometimes, (34) that going on flights gives one piloting experience and (36) that piloting experience generally includes ability to land the aircraft).

It can be further noted that the introductory expression *"don't you think that .."* (similar to a question tag) turns a statement into a RQ (whose implication can be derived by removing the tag). The RQ can be glossed as *"Surely you think that if she's been married to him she might have a little bit of piloting"*. The glossing can explain the persuasive power of the RQ – why it expects (and in this case, receives) an affirmation for an answer. The introductory *"don't you think that .."* lays bare an

emblematic property of RQs to make it likelier the for the addressee to mirror the speaker's thinking process and to agree with them.

Would he be able to pilot the balloon?

(39) 1   She's pregnant. So you're killing two people instead of one.
      3:      Yeah, and another thing is: <u>would he be able to pilot the balloon if his wife is overboard</u>?
      1:      Oh yeah true, he wouldn't be.
      3:      <u>'Cause it would effect his ability, wouldn't it</u>?
      2:      He'd be too upset.

<div align="right">(GP12, 57-60)</div>

Here 3 utters two RQs, the first can be glossed as an inference *"He would not be able to pilot the balloon if his wife is overboard"*, conveying the enthymeme (40), warranted by the topos (41):

(40)   wife_overboard(p)
        $\overline{}$
        ¬ able_to_pilot(p)

(41)   wife_overboard(x)
        $\overline{}$
        ¬ able_to_pilot(x)

This topos is derived from (42) and (43):

(42)   wife_overboard(x)
        $\overline{}$
        affected_ability(x)

(43)   affected_ability(x)
        $\overline{}$
        ¬ able_to_pilot(x)

The second RQ conveys (44), again drawing on the topos in (42).

(44)   wife_overboard(p)
        $\overline{}$
        affected_ability(p)

This example exemplifies how a RQ conveys an enthymeme, and how a following RQ provides a reason for it.

Wh-RQs

Who needs a pilot?

(45) 1:   But the scenario still says it's gonna crash. There's nothing, they can't do anything to land it. It's gonna crash. It's got to the point where they've actually thrown the food out, thrown the sandbags. Fully prepared that it's gonna crash, there's no way to land it.

2:	mmm
1:	So it's gonna crash, who needs a pilot?
3:	mmm

<div align="right">(GP12, 113-121)</div>

We can gloss the RQ as *"No one needs a pilot"*, and the whole utterance as *"If the balloon is gonna crash, then no one needs a pilot."*. We can illustrate this as the enthymeme in (46) warranted by a topos like (47) stating that if a balloon is doomed to crash and it has passengers, then no one who is a passenger needs a pilot:

(46)   passenger(x, b) $\land$ doomed_to_crash(b)
         $\overline{}$
            $\neg \exists x$ need_a_pilot(x)

(47)   passenger(x, y) $\land$ doomed_to_crash(y)
         $\overline{}$
            $\neg \exists x$ need_a_pilot(x)

Imagine the RQ *"do they really need a pilot?"* instead of the one above. It is still drawing on the same topos as *"who needs a pilot?"*, but it would be more dependent on it being assumed by other participants.

What's her special quality?

With two wh-RQ in succession, responding to their own statement about the pregnant woman, 1 is conveying the idea that there does not exist a special quality about her, and so there exists no reason to keep her:

(48)	1	So then we have the pregnant woman, so it's two people in one.
	2	yeah.
	1	Wh- what's her special quality? Why do we want to keep her at all?
	2	Well, if you threw her out, maybe the pilot might well go mad, through losing his wife and his child.
	3	But if you threw her out, maybe the pilot might jump out as well.
	2	Yeah.
	3	Hence, then you'd have two spaces left in the balloon. So you wouldn't have to throw anyone.

<div align="right">(GP_08, 68-78)</div>

The rhetorical reading is certain due to the presence of the NPI "at all" in the second of the RQs. We can see that they together make an inference when glossed as statements of non-existence:

 "She has no special quality. (So) there is no reason we want to keep her at all".

1 is drawing upon a notion relevant to the situation described in the balloon task, that a special quality needs to be found to an individual that should be saved. We can express this as an enthymeme (49) drawing upon topos (50):

(49) $\neg \exists x$(special_quality(x, s))
         $\overline{}$
          $\neg$ should_be_saved(s)

(50) $\neg\exists x(special\_quality(x, y))$
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
   $\neg\ should\_be\_saved(y)$

The locutionary act of asking for an instantiation of this topos seemingly contrasts with 1's previous turn where they ascribed the pregnant woman a quality of counting as two (or, her death being equal to two:

(51) $pregnant(s)$
~~~~~~~~~~~~~~~~~~~~~~~~~~
   $\therefore counts\_as\_two\_lives(s)$
   Topos: $pregnant(x)\therefore counts\_as\_two\_lives(x)$

This explains why 2 and 3 in the following turns choose to give the RQs informational answers: to provide a reason for *((pregnant(s)∴counts_as_two_lives(s)) ∴ special_quality(s))*.

Since the RQ implies a null set, the quality that 1 mentioned preceding it isn't found among answers to the inquiry of what her special quality may be, that would motivate saving her. It appears that the RQ allows 1 to reject that being pregnant and counting for two is applicable as a reason to be saved:

(52) $pregnant(s)\therefore counts\_as\_two\_lives(s)$
~~~~~~
   $\neg\ applicable(\exists x(special\_quality(x, y)) \therefore should\_be\_saved(y))$

Who listens to classical music?

The following exchange 3 is arguing for throwing out the child musical prodigy:

(53)   3:   I think they should dash the child
   1:   *laughter*
   3:   It's just a child
   1:   The prodigy, nooo
   3:   Who listens to classical music?
                    (GP_10, 54-58)

3 expresses the standpoint that the child should be thrown out, because she is "just" a child:

(54) $child(c)$
~~~~~~~~~~~~~~~~~~~~~~
   $\neg\ should\_be\_saved(c)$

To which 1 objects when refering to the child as prodigy, as a reason to not throw her out:

(55) $make\_great\_music(c)$
~~~~~~~~~~~~~~~~~~~~~~~~~
   $should\_be\_saved(c)$

3 follows up with the RQ *"Who listens to classical music?"* implicitly stating a hyperbolic *"No one listens to classical music"*, to reject the notion that being a musical prodigy as a quality worth saving her for, as she is a prodigy in classical music. In other words, 3 draws on another, more specific topos than the one that warrants 1's protest. Let's assume 1 finds musical prodigies worth saving in general, as they make great music:

(56)   make_great_music(x)

         $\overset{\wwbar}{\text{should\_be\_saved(x)}}$

         should_be_saved(x)

Then, 3's RQ introduces the enthymeme in (57), drawing upon the topos in (58), saying that if no one likes classical music, and someone is making classical music, they aren't making great music. In other words, the RQ invokes another topos as a reason for why make_great_music(x) is unfounded.

(57)   ¬∃y(likes_classical_music(y)) ∧ make_classical_music(c)

                    ¬ make_great_music(c)

Or, to capture the notion that the RQ implies, the lack of anyone liking classical music:

(58)   ¬∃y(likes_classical_music(y)) ∧ make_classical_music(x)

                    ¬ make_great_music(x)

How difficult is it to fly the balloon?

A common theme in many arguments in the dialogues is that balloons are easy to fly, since operating its propane valve seems like a binary operation – either open or close it:

(59)   1:   <u>How difficult is it to fly the balloon</u>?
         3:      He could train the Mozart.
         1:      It's just going up and down.
                                                                    (GP_08 145-149)

The argument 1 makes is that a task that consists of only two modes of action is not in the upper range for what is complicated, and evokes a topos that delimits the range for what is to be considered a difficult task (*analogous to the pragmatic scales Rohde (2006) describes as being made salient in the context by the RQ (p.155-157)*). This can be described as the enthymeme in (60), evoking the topos in (61):

(60)   binary_operation_to_fly(b)

         ¬ very_difficult_to_fly(b)

(61)   binary_operation_to_fly(x)

         ¬ very_difficult_to_fly(x)

It can be said then, that the topos drawn on can be treated as a generalization of the contextually relevant property of elements in the relevant range of expected answers to the RQ. The same can be observed in the excerpt below. 2 makes an RQ, that corresponds to the enthymeme in (60), evoking the topos in (61):

(62)   2:   <u>How hard is it to, um, navigate a balloon</u>?
         3:      *laughter* I don't know *laughter*
         2:      *laughter* Yeah *laughter*
         1:      *laughter* Exactly, that's what I was thinking, yeah *laughter*
         2:      You let hot air in and when when you wanna go you let hot air out.
         1:      Yeah, it is common sense I suppose.
                                                                    (GP_10, 34-47)

Below we see 1 employing three RQs drawing on the same idea of a balloon not being difficult to fly, providing additional grounds to throw out the pilot – that flying the balloon can be easily taught.

(63)   1:   The thing is, <u>how easy, or difficult it is to actually teach how to fly a balloon</u>, I mean it's just two things really. <u>What does a pilot do?</u> <u>It's not like flying a Boeing 727 is it</u>?
        2:    Well, yeah it is just two things like.
        3   But if the balloon was sinking anyway, you wouldn't wanna train anyone, you'd just wanna jump out.

(GP08, 167-172)

The first RQ, glossed as *"It is not difficult to teach how to fly a balloon"* implies the consequent of the enthymeme in (64), answered the speaker with a statement making up the antecedent. The enthymeme draws on a topos (65) derived from (66) and (61):

(64)   binary_operation_to_fly(b)
        ‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
        ¬ very_difficult_to_teach(b)

(65)   binary_operation_to_fly(x)
        ‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
        ¬ very_difficult_to_teach(x)

(66)   ¬ very_difficult_to_fly(x)
        ‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
        ¬ very_difficult_to_teach(x)

The second RQ expects an empty set as answer, that is the absence of what is difficult. For that reason the presence of a trace *"difficult"* is assumed in the gloss: *"There is nothing [difficult] a pilot does"*. It evokes the topos in (67), derived from (68) and (61):

(67)   binary_operation_to_fly(x)
        ‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
        ¬∃x(difficult_to_fly(x))

(68)   ¬ very_difficult_to_fly(x)
        ‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
        ¬∃x(difficult_to_fly(x))

The implied statement of the third RQ is derived from simply eliminating the question tag:, *"It's not like flying a Boeing 727."* This can be expressed as the enthymeme in (69) warranted by topos (70):

(69)   less_difficult_to_fly(b, g)   passenger_plane(g)
        ‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
        ¬ very_difficult_to_fly(b)

(70)   less_difficult_to_fly(x, y)   complex_operation_to_fly(y)
        ‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
                ¬ very_difficult_to_fly(x)

Of course, that piloting balloon is seen as doing just two things, is already implicit, and accepted as premise:

(70)   less_difficult_to_fly(x, y) ∧ binary_operation_to_fly(x) ∧ complex_operation_to_fly(y)
        ‾‾‾
                ¬ very_difficult_to_fly(x)

Of the three RQs only the first expects answers on the low end of a scale of difficulty. The second two imply cut-off thresholds for the scale, that the difficulty of flying a balloon can not exceed. The second one, a wh-RQ, implies that the whatever a balloon pilot does it is not difficult: *"There is nothing [difficult] a pilot does."* (or rather, its difficulty is so negligible it is below what can considered as such). The third, a tag yes/no-RQ, characterizes the high end of the scale for piloting aircraft, by placing a passenger plane in that end of the scale: *"It's not like flying a Boeing 727"*.

How quickly can it drop?

(71)   1:   I mean <u>how quickly can it drop</u>?

       1:       I mean there is some kind of way it goes down, so if it goes up to you know, at a distance where, it's safe for him to jump, for someone to jump, we can throw out the Mozart, then the pilot could just fly it for a bit, then the rest it just jump over

                                                              (GP_08, 190-199)

1 is proposing a solution where throwing someone out wouldn't kill them, if one can do it at the last minute, as the balloon approaches the ground (**see GP08, 175-189**). The argument is that despite the balloon falling, the speed of its drop is low enough for someone to jump off safely. The RQ implies that there is a limit to the speed it can drop: *"It can't drop too quickly"*, in other words that the range of expected answers to the RQ is restricted to those describing non-extreme cases.

(72) $\neg$ too_quick_drop(b)
       ───────────────────────
       can_jump_safely(b)

The argument is also supported by previous discussion (GP08, 167-172) on a balloon not being very difficult to pilot, as a reason that the drop of the balloon can be slowed down, however, I will not be presenting the entire chain of reasoning here. The enthymeme in (72) is warranted by the topos in (73):

(73) $\neg$ too_quick_drop(x)
       ───────────────────────
       can_jump_safely(x)

A more detailed way of describing the topos would be that if a balloon doesn't drop too quickly, any passenger can jump off safely:

(74)   (balloon (y) $\rightarrow \neg$ too_quick_drop(y)) $\wedge$ passenger(x, y)
       ───
                     can_jump_safely(x)

This is a converse case to the phenomenon of adjunct wh-RQs that expects answers that cluster on an extreme end of a scale. Here we instead see that the expected answers are those to the effect of *"not [too] quickly"* in relation to being able to jump out. In other words, the answer set is restricted to non-extreme answers by what I described in the previous example as a cut-off threshold.

Irregular cases

Is he gonna be kind of generous about it or is he gonna sell the cure?

(75)   1   The guy who is gonna cure cancer isn't everyone almost gonna cure cancer, let's be honest.

       3   yeah.

1	There's always another doctor out there who is I'm I'm almost curing cancer but he hasn't really.
3:	<u>And is he gonna be kind of generous about it or is he gonna sell the cure</u>
2:	<u>Sell the drug to make tons of money</u>
3:	Yeah exactly it's
2	But but yeah those things apart I I I still think he's probably the most important person in in the balloon as he has the power the power to save lives all round the world from then on.
3	Or the power to make money.

<div align="right">(GP12, 22-27)</div>

"And is he gonna be kind of generous about it or is he gonna sell the cure?" is an exception in terms of kind of argument participants usually made in the balloon task and in terms of form. The RQ is in disjunctive form, and a derivation of the implied statement can't be done by a shifting the polarity of the entire statement, as it would lead to a *neither .. nor* construction, if we take A to represent "*he is gonna be kind of generous"* and B "*he is gonna sell the cure"*, the RQ would imply a statement of the falsity of both A and B, which is obviously not the case. Instead consider that a rhetorical reading of the question stems from a reading of the disjunction as exclusive: A $\oplus$ B (*also known as an either/or fallacy*), where posing A leads to a negation of B, and posing B leads to a negation of A.

This doesn't mean that the RQ evokes two topoi at the same time, (generous(x)$\therefore\neg$sell_cure(x)) and (sell_cure(x)$\therefore\neg$generous(x)), rather that the implied statement is an enthymeme that is an instantiation of one of these topoi or the other, in this case, depending on context (in the general, also on utterance content, prosody and syntactic markers that force a RQ reading). Put differently, provided sufficient context is given as to if a rhetorical reading is obvious in the interaction, then it is obvious whether generous(d) or sell_cure(d) is presupposed – and which is negated in the consequent, as well as in the derivation of the implied statement of the RQ.

Consider now the context of the exchange between 1 and 3 where they are providing reasons against saving the doctor, and note the introductory *"and"* in the RQ, connecting it to the previous utterance as yet another argument for not saving the doctor. In other words, the enthymeme implied by the RQ is given as a reason for $\therefore\neg$ should_be_saved(d). In light of the context, we can gloss the RQ as:

"*He isn't gonna be generous about it, because he is gonna sell the cure"*.

We can represent this as a nested enthymeme:

(76)   sell_cure(d)$\therefore\neg$generous(d)
$$\overline{}$$
$\neg$ should_be_saved(d)

The topos drawn on (77), and is derived from (78) and (79):

(77)   sell_cure(x)
$$\overline{}$$
$\neg$ should_be_saved(x)

(78)   sell_cure(x)
$$\overline{}$$
$\neg$ generous(x)

(79) $\neg$ generous(x)
$$\overline{}$$
$\neg$ should_be_saved(x)

The topos drawn on reflects the rhetorical emphasis on the corresponding part of the RQ, that the doctor is going to sell the cure – in the context its converse interpretation lacks rhetorical power, *"He isn't gonna sell the cure, because he is gonna be generous about it"* would not be applicable as a reason to not save the doctor. 2 disagrees with 3, conveying the enthymeme in (80),

(80)   power_to_save_lives(d)

         should_be_saved(d)

on the grounds that the power to save lives is more important than the notion of morality:

(81)   power_to_save_lives(x)

         should_be_saved(x)

3 reiterates their argument illustrated by the enthymeme in (82), drawing upon the topos in (79):

(82)   power_to_make_money(d)

         ¬ should_be_saved(d)

It is another example of an either/or dilemma, like in the RQ, the emphasized alternative stands in exclusive disjunction with power_to_save_lives(d), like this:

(83)   power_to_make_money(d)∴¬power_to_save_lives(x)

          ¬ should_be_saved(d)

RQs without an answer

   Recall the treatment of the discourse context of the RQ *"What's her special quality?"*(GP_08, 68-78) above. 1 defines a pregnant woman as two people in one, but rejects there being a reason to keep her: *"what's her special quality?"* (implying *"She has no special quality"*. 2 argues that letting the pilot's wife jump out carries the risk that the pilot will jump too, 3 agrees and adds that sacrificing her will actually lead to losing two. 2 and 3 disagree with 1 based on 1's own definition of a pregnant woman as two people and to counter the implication of 1's RQ they answer it as a literal question, arguing for keeping her because otherwise there is a risk the pilot jumps, due to loss of both his wife and child. For the sake of simplicity, I will not provide predicate style notation for enthymemes and topoi below. Let's summarize the counter-arguments to 1 as the enthymeme in (84):

(84)   You throw her and her child out

         ∴ The pilot would go mad and jump out as well

         Topos: *losing loved ones may drive one to suicide*

Of course, *"the pilot would go mad and jump out as well"* is the conditional statement *the pilot would go mad ∴ the pilot may jump out*, but a full explication is not necessary here. However, note that the conclusion that she counts as two people is arrived at from another premise than that she's pregnant (or she may have counted as three people in total):

(85)   If you throw her out ∴ the pilot would go mad and jump out as well

         ∴ She counts as two people
         Topos: *if the loss of one life leads to the loss of another, it counts as the loss of two lives*

In any case, the counter-arguments provided by 2 and 3 serve as reasons for why there is a special quality to her, and thus the need to save her, i.e. as applicable to the topos in (42). Keeping this in mind, consider 1's counter-argument to 2 and 3:

(86)   1   <u>Does she count as two people or one person</u>?
        2   *laughter* I I
        1   <u>Is the foetus one person</u>? *laughter* <u>Already, are we counting that we have to throw two out</u>?
        2   *laughter*
        1   But *laughter*
        2   yeah.
        3   mmm.
        1   ah- is a- w- is o- other than her being the the husb- the wife and being pregnant, there's nothing really special about her.

<div align="right">(GP08, 80-88)</div>

Here 1 is further casting doubt on the definition of pregnant as two people. *"Does she count as two people or one person?", "Is the foetus one person?"* and *"Already, are we counting that we have to throw two out?"* function as RQs, as they don't expect informational answers. However, only the last one can be analyzed as a yes/no-RQs that calls into question whether there is a warrant for counting the mother and her unborn child as two people. For the first two there is no obvious statement they imply that can be derived from their form or their set of possible answers.

In the Background section I quoted an example from Rohde (p.149) of such RQs with an unknown answer: *What are we going to do with all the soldiers over there?"*, referring to soldiers remaining in Eastern Europe after the cold war. Cases as these fall outside the scope of Rohde's analysis, which accounts for RQs where participants rely on sharing an obvious answer to a RQs, not RQs that require shared responses – here, the response *"I don't know"* (Rohde, 2006).

However, I propose an analysis that treats the lack of an answer itself, as that which such RQs make obvious. I see the RQs not as having a specific and obvious answer, instead, what is taken as obvious by using these RQs is an implicit notion that their answer can not be decided for certain – or, that taking the answer for decidable is absurd. Instead of emphasizing the obviousness of one specific answer, I see such RQs as ascribing a sense of absurdity or inconcludability to any answer (including the empty set – *"She counts as no people"*), or rejecting any answer as absurd or inconcludable. Put differently, to derive an implied statement, statements P that answer a question Q can in the case of Q being an answerless RQ be glossed as *it is absurd/inconcludable that* P.

Moreover, 1 is using *"Does she count as two people or one person?"* and *"Is the foetus one person?"* to create an analogy, in order to ascribe the inconcludability of any answer to these two RQs to the preceding statements made by 2 and 3. This is similar to another irregular case – that of RQs as answers to other questions, like replying *"Do horses like grass?"* to *"Does Sam like pizza?"* (Pope, 1972, p.46) or replying *"Is the Pope Catholic?"* to *"Is Clinton a liberal?"* (Han 1998, p.8) – conveying that the obvious answer of the RQ also answers the preceding question, and the same relationship holds between the subject (*Pope*) and the property ascribed to it (*Catholic*), as in the question replied to (*Clinton* and *liberal*).

To put the argumentation in the excerpt above in perspective, 2 and 3 are putting forth the notion of *"if sacrificing people is necessary, it is better to sacrifice as few as possible"* (or *"one person rather than two"*), as relevant to the wife of the pilot, because *"if you threw her out, maybe the pilot might jump out as well"*, which would actually mean two people sacrificed instead of only one – so, contrary to 1, arguing that there actually is a special quality to her.

But, as 1 points out by posing two answerless RQs, because there is no agreed upon answer to whether or not a foetus counts as a person (i.e. the issue lacks an answer, or has too many), there is no conclusive answer to whether she, being pregnant, counts as two people or not and likewise whether her death should count as the death of two. It is, in other words, something one should not accept as a known, because it is absurd or undecidable (in our case, it would be more correct to describe it as a too nuanced of a discussion for the participants to settle the question).

By employing RQs that lack answers, 1 argues from analogy that the same property of absurdity/ inconcludability holds between, on one hand, counting her death as two because she's pregnant (since one of the two, the foetus can not for sure be defined as a person), and on the other, counting her death as two because of her husband might jump too – that both of these positions are equally undecidable.

It is in rhetorically questioning whether a foetus counts as a person that 1 is ascribing inconcludability to the topos that *if x is pregnant, x counts as mother and child*, by invoking a topos that *we don't conclusively know when a foetus becomes a conscious individual* – that is, counts as a child. Then, inconcludability is analogously applied to the topos warranting the enthymeme the RQs respond to, which I interpreted as *if the loss of one life leads to the loss of another, it counts as the loss of two lives*.

In other words, if there are no possible answers to one issue, then there are no possible answers to the one analogous to it – if we can't know the foetus counts as one person (it may, for instance, not be developed enough), we likewise can't know the husband will jump (he may, for instance, not go mad). This argument is of course a false analogy, as the question whether the husband would jump (which, by the way, I only assume 1 to implicitly question) depends on parameters irrelevant to the question if a foetus is a person. Nevertheless, the rhetorical use of the question form, creating a humorous effect that emerges out of the sense of absurdity does lend the argument some persuasive force, as it is met with laughter and some silent agreement. The argument resumes after 1 reiterates their original argument, in statement form instead of as RQ, that *"other than her being the wife and being pregnant, there's nothing really special about her"* and accepts that these qualities are special, albeit not *"really special"* (see GP08 91-99).

It is in rhetorically questioning whether a foetus counts as a person that 1 is ascribing inconcludability to is the topos that *if x is pregnant, x counts as mother and child*, by invoking a topos that *we don't conclusively know when a foetus becomes a conscious individual* – that is, counts as a child. Then, inconcludability is analogously applied to the topos warranting the enthymeme the RQs respond to, which I interpreted as *if the loss of one life leads to the loss of another, it counts as the loss of two lives*. In other words, if there are no possible answers to one issue, there are no possible answers to the one analogous to it.

A case of embedded wh-RQs

(87) 3 Well, you could say a child and mother that counts so you just could get rid of the little girl 'cause that's another child that we're saving.
  3 laughter
  1 laughter
  1 yeah, it's difficult 'cause if you throw the guy that's the pilot, I mean he would be, well the mother would be losing the father, the child, I mean, the child would be losing the father I should say, when it's born.
  3: You should probably think about what would save more lives.
  1: The cancer research man would probably save more lives, <u>do you know how many people have cancer</u>? *laughter*
  3: Yeah.
  2: Yeah.

(GP_10, 74-88)

3 is arguing for the importance of saving the mother, arguing that it is a lesser evil to throw out her daughter, because she is pregnant and throwing her out would mean losing her unborn child too, that is two people instead of one, drawing on the topos in (89):

(88)   counts_as_two_lives(s)

        should_be_saved(s)

(89)   counts_as_multiple_lives(x)

        should_be_saved(x)

1, on the other hand argues that the pilot is important as a father to the daughter and a husband to the pregnant woman, drawing on the topos in (91):

(90)   family_man(p)

        should_be_saved(p)

(91)   family_man(x)

        should_be_saved(x)

Then, 3 suggests 1 should think about what would save more lives (92), that their topos (93) is more relevant in this situation. 1 accommodates this topos, but disagrees with 3's argument to save the pregnant woman, because the cancer researcher can save millions, inferring a topos that is more specific:

(92)   counts_as_millions_lives(d)

        should_be_saved(d)

(93)   counts_as_millions_lives(x)

        should_be_saved(x)

Then, 1 is posing the RQ *"Do you know how many people have cancer?"* as an act of imploring 3 to consider the amount of people in the entire world, rather than just the amount of people in the balloon, as relevant to the choice of passenger to save. In other words, the RQ is pointing to the fact that the topos (93) is more relevant than (89).

The statement implied by the RQ can be glossed as "Y*ou should know how many people have cancer"* because it picks out the only possible answer, because in the context, there is no alternative answer expected from the addressee other than an affirmation that the quantity is in the highest range. On the other hand this answer can be specific to different degrees: from a simple *"yeah"* as is the case here, a full affirmation of knowledge of the quantity, like *"Surely I know how many people have cancer"*, to an expression of the quantity itself, varying in strength, like *"Surely I know a lot of people have cancer"* and *"Surely I know millions of people have cancer"*.

(94)   *How many stars are there in the sky?*
                                    (Rohde, 2006)

Rohde (2006) notes that for the RQ in ( ) the participant's answers don't need to be numerically exact or have the exactly same positions on a scale of quantity, as long as those positions are sufficiently similar in extremity (*"a trillion"*, *"a googol"* or *"a whole heck of a lot"*). This condition of sufficient similarity on the clustering of various expectable answers is, in my opinion, a bit circular, as it would

write off as a failure to pose a felicitous RQ due to mismatch of the participants' commitments such cases where what the speaker would be referring to is not an extreme position on a numerical scale, but the notion of innumerability itself (i.e. if the **(above example)** is a RQ expecting the answer *"nobody knows"*), or if a speaker intends to make an imperative statement to consider the very property of extremity on a scale.

Only the preceding context clues on in to a rhetorical reading of *"Do you know how many people have cancer?"* as an imperative to consider the amount of cancer patients in the world as relevant. The form and content serving to accentuate the importance of considering it (*"do you know"*) because of its prevalence in the population (*"how many people have cancer"*) are the same as in a literal reading, Interpreting it as a RQ is dependent on the speaker's preceding argument for saving the cancer researcher from being thrown from the balloon, and deriving the implied imperative statement is possible only once it is related to 3's imperative to think about the imperative to save more lives.

A probabilistic partitioning of the answer set, where the rhetoricity of a question shifts the distribution of answers to either endpoint of a scale, provides no account for the mechanism of the update to the participants' common ground with a topos like "if x is a world-wide problem, x should be given consideration" (or "if an innumerable amount are suffering from x, the solutions to x should be prioritized"). RQs in Rohde's model can only reiterate and draw upon what already is common ground.

Dialogue lacking RQs

There is a topos implicit in the moral dilemma of the balloon task, approximately something to the effect of: *"if one of four passengers is not sacrificed, the balloon will crash and all four will die"*. It is basically a reformulation of the description of what the balloon task requires the participants to discuss and decide on (Breitholtz et al, 2020). I take it that in order for the participants to argue within the bounds of the task they have to at least implicitly accommodate this topos. Otherwise, the situation in the balloon task ceases to be a moral dilemma, requiring participants to make tough decisions. In the dialogues I've worked with in this paper, there are cases where this topos is disagreed to, ranked lower than or weakened by other topoi, for example *"if the pilot is sacrificed, you can not safely prevent a balloon from crashing"*:

(95) 2 yeah but the big question is if you throw the pilot out is what to expect a- are you expected to be able to land the thing safely.

2 Because if not then it's pointless throwing the pilot out.

2 Because you still kill everybody then.

<div align="right">(GP12, 96-101)</div>

Here *"if one of four passengers is not sacrificed, the balloon will crash and all four will die"* is disagreed to as being applicable to the option of throwing out the pilot – if you can not expect to land the balloon without him, then the antecedent is only correct to the degree of *"if one of the three who aren't the pilot is not sacrificed"*.

However, in dialogue GP05, 2 is not willing to accept the premise of the topos, which, if we assume to be a correct representation of the reason to be arguing about the dilemma, explains why most of the turns in the dialogue involve 2 rejecting any arguments suggested to sacrifice anyone, and instead making arguments that involve situations where no one has to jump out of the balloon, most of which are hard to understand, except that they are related to the pilot having control of the balloon and the passengers knowing what the problem with the balloon is. Most of these exchanges is with only one of the other conversation participants, until in line 88, 3 poses a direct question to find out who 2 thinks should go:

88 3 Well who do you think should go? Who do you think should

89	2	Nobody's gonna go they they can control the balloon knows the pilot but he don't want to *unclear*
92	1	But one of them has to go, one of the four has to go. Otherwise they all die.
98	2	I don't know. I don't know. If you're gonna die, the pilot is there.
101	1	But that's the premise of the issue that there a-
102	2	No I don't I don't think they're gonna die.
103	1	*laughter*
104	2	I can *unclear* let's save them with that other people you know how they want to save themselves
105	1	Right. But you're hoping on a miracle then.
108	2	It's not a miracle this thing it's it's like a power. if that power ma- ma- magic power.
110	1	oh really.
111	2	you know what is the power.
112	1	ok. But I don't know
115	2	*laughter*
116	1	if we say that it may not be magic power in this instance, and one of them has to go. Who would it be?
123	2	Then they probably don't know anything about the problems in the balloon
126	1	But we have to accept the assumption, we've been given a scenario
127	2	No that's, that's the part that I know only. That's the only part that I I know I nobody getting thrown out unclear
129	1	laughter
130	2	No
131	1	Fair enough.

(GP05, 88-131)

In line 89-91, 2 rejects the presupposition that someone has to go, and then provides an explanation for why, and draws on an unexpected topos, that there is a magical source of power the passengers are unaware of. It can be argued that RQs are not employed because there is no expectation among the interlocutors that they can draw on topoi common enough to lend a RQ persuasive power. The participants don't manage to develop any longer chains of reasoning because this one basic assumption for the context, is not accommodated by 2.

Conclusions & Suggestions for future work

In the investigation on how RQs express enthymemes I've given an account that RQs can express entire enthymemes, and either the antecedent or consequent of enthymematic inferences. In the latter case, the RQ is linked to another utterance in the surrounding discourse which serves as the other part of the syllogism, this link enabled by the literal function of RQs as interrogatives. An enthymematic inference can be constructed by an RQ (examples 31, 47, 74), the RQ can make up its antecedent (30, 70), or more frequently, its consequent (24, 44, 58, 61). RQs can also make up the antecedent and consequent when used in sequence (47) or responded to with another RQ (62). Moreover, a RQ can provide a reason to invalidate the premises of a topos previously evoked (52), or make up an enthymeme by making salient the lack of concludable answers to the RQ (85).

The only major difference observed between yes/no-RQs and wh-RQs in this regard is that wh-RQs often serve as consequents in inferences, however due to the limited amount of either kind of RQ in the data, this does not warrant any conclusion as to a fundamental difference between them in this regard.

One thing that can be said for wh-RQs contra yes/no-RQs is that the wh-element introduces quantifiers in the statements implied, and by making general statements over groups of individuals having a property they introduce topoi in a more explicit way, whereas yes/no-RQs presuppose this implicitly. Again, drawing any hard conclusions in this matter is difficult due to the small amount of cases of RQs analyzed.

An interesting phenomenon emerges when examining adjunct wh-RQs, such as how-RQs conveying scalar implicatures. In these cases, the RQ implies an inference motivating the gradation of a property of an individual under discussion somewhere along a scale. This analysis gives a more detailed account for the chain of reasoning in such examples, than an approach dealing purely with the probability of distribution of answers to RQs in clusters on an extreme end of presupposed pragmatic scales made salient by the context (Rohde, 2006). However, more work needs to be done regarding the topoi evoked by such RQs, because the high variability of statements implied by them presupposes a very high amount of available topoi as warrants, and how mandated these are in the situation itself varies in relation to generalizations of pragmatic scales invoked (like balloons as easily pilotable aircraft contra Boeings as difficult ones). More work needs to also be done in relation to how RQs function in regards to incrementally updating the state of evoked and accommodated topoi in the dialogue, especially in the case of how-RQs. The only certain conclusion that can be made in this matter as of now is that RQs are very frequently in use in interactional settings, and when used, are met with agreement, succeeding in the purpose of persuasion, the more common the topos they invoke is. More investigation can also be done on why the abundance of RQs in one dialogue contrast with the complete lack of them in another, and how this relates to how common the topoi drawn on are.

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