

Rising declaratives of the Quality-suspending kind

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Abstract It has been proposed that speakers of English use final rising intonation to indicate a suspension (potential violation) of a conversational maxim (Westera 2013; 2014). We show that a certain kind of rising declarative, one which has been prominent in the literature (e.g., Gunlogson 2008), can be adequately understood as involving a suspension of the maxim of Quality. By explicating certain minimal assumptions about pragmatics, this understanding accounts for three core features of such rising declaratives: their question-likeness, the speaker bias they express and their badness out of the blue. The account is compared in detail to various existing accounts of rising declaratives of the relevant sort, highlighting explanatory and empirical differences.

Keywords: Rising declarative; intonational meaning, speaker commitment; bias; conversational maxim; clash; question under discussion.

1 Introduction

This paper provides a detailed semantic/pragmatic account of rising declaratives of the following type (originally from Gunlogson 2003):¹

(1) (*B sees A enter the room with an umbrella.*)

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B: It's raining?
 H* H%

The uttered sentence has syntactic declarative mood, which is characteristic of assertions, but the utterance feels more like a question, e.g., in written form it is quite naturally punctuated with a question mark. We will refer to such utterances as “rising declaratives”, though we will sometimes add “of the relevant sort” because not all rising declaratives serve the same pragmatic function as (1) – as we will see. Examples of rising declaratives in the literature may also have a low (L*) or rising (L*H) accent, resulting in rises of subtly different shapes. For present purposes such differences and their potential semantic/pragmatic effects will be set aside; we concentrate on their common denominator, the final high boundary tone (H%). We will also set aside possible dialectal differences in the form and meaning of different rises (e.g., ‘uptalk’, for a recent study see [Ritchart & Arvaniti 2014](#)), though we think that our account might provide useful handles for characterizing and perhaps in part explaining such variation.

We adopt the proposal from [Westera \(2013; 2014\)](#) that speakers of English and related languages use final falls and rises for marking compliance and potential non-compliance with the conversational maxims ([Grice 1975](#)):

Assumption 1. (From [Westera 2014](#))

- A low right boundary tone (L%) conveys that the speaker takes the utterance (up to this boundary) to comply with the maxims.
- A high right boundary tone (H%) conveys that the speaker does not take the utterance (up to this boundary) to comply with the maxims, or, as we will say, *suspends* a maxim (i.e., risks violating or knowingly violates it).

[Westera \(2014\)](#) proposes that trailing tones (or rising/falling accents) are likewise used for compliance marking, but relative to a potentially different, secondary goal (or secondary *question under discussion*). For present purposes we can set this refinement aside and remain agnostic about the contribution of accents; what matters for us are the right boundary tones. We think that assumption 1 is in line with much of the literature. Final rises or high right boundary tones are often taken to indicate that the utterance is “unfinished”, “forward-looking”, “continuation-dependent”, or “contingent” on some subsequent discourse move (e.g., [Bolinger 1982](#); [Pierrehumbert & Hirschberg 1990](#); [Bartels 1999](#); [Gunlogson 2008](#); [Lai 2012](#)), or that a “metalinguistic issue” is raised,

or judgment suspended, about some aspect of the utterance (Imai 1998; Malamud & Stephenson 2015). Maxim suspensions can arguably be regarded as the various respects in which an utterance may relevantly count as unfinished, forward-looking, contingent and so on – we will explore this relation a bit further in due course.

At first sight assumption 1 appears quite plausible. For instance, example (1) above could easily involve a suspension of the maxim of Quality: this maxim requires that the speaker believes that the information they provide is true, hence its suspension implies the absence of such a belief. And as Westera (2013) notes, similar examples can be conceived for the other Gricean maxims:

- (2) M.L.: (*to a receptionist*) Hello, my name is Mark Liberman. (H%)
- (3) (*English tourist in a French café.*)
A: I'd like... err... je veux... a black coffee? (H%)
- (4) (*A isn't sure if B wants to know about neighborliness or suitability for dating.*)
B: What do you think of your new neighbor?
A: He's attractive? (H%)

Example (2) is discussed in Pierrehumbert 1980; (3) is a constructed example from Westera 2013; (4) is from Malamud & Stephenson 2015. In (2) the suspended maxim might be Quantity: the speaker might be unsure whether his name alone is sufficient for the receptionist to be able to help him, or perhaps he feigns this for reasons of politeness.² In (3) the suspended maxim is plausibly Manner, and in particular its submaxim of Clarity: the tourist is unsure whether they made themselves understood. In (4) the suspended maxim could be Relation: speaker A is unsure about the relevance of the neighbor's attractiveness.

While the foregoing suffices as a first illustration, the suggested understanding of these examples does not constitute a proper theory unless we are precise about what the maxims are, when a speaker may reasonably suspend one and how an addressee might in each case figure out which maxim is to blame. As a consequence, it is difficult to see how the proposal in Westera 2014 compares to accounts of rising declaratives in the more formal semantics literature (e.g., Nilsonova 2006; Truckenbrodt 2006; Gunlogson 2008; Farkas & Roelofsen 2017). In the present paper we aim to resolve this difficulty by combining assumption 1 with certain minimal assumptions about

² This suggestion seems to resonate well with a characterization of 'uptalk' given in Eckert & McConnell-Ginet 2003; we briefly return to this link in section 6.

pragmatics, resulting in a more detailed analysis of rising declaratives of the relevant sort (e.g., (1)). In particular, as we aim to show, an analysis of rising declaratives like (1) in terms of a suspension of the maxim of Quality can account for three core features that such rising declaratives have been deemed to have in the literature: (i) that they function much like questions, (ii) that they convey a speaker bias in favor of the proposition expressed, and (iii) that they are rather bad out of the blue. Similarly detailed predictions could in principle be derived with regard to other kinds of rising declaratives, like (2), (3) and (4), but we will leave these for another occasion for reasons of space.

Outline Section 2 presents the empirical picture by introducing the three core features of rising declaratives of the relevant sort and discussing some additional empirical complexities. Section 3 outlines the pragmatic framework we use, and explicates our core assumptions about declarative vs. interrogative syntax, the maxims, and the circumstances in which a speaker may reasonably suspend a maxim. Section 4 then unfolds our account of the three features of rising declaratives of the relevant sort, based on assumption 1 from Westera 2014. Section 5 relates our proposal in detail to existing accounts of rising declaratives of the relevant sort (e.g., Gunlogson 2003; 2008; Truckenbrodt 2006; Nilsenova 2006; Trinh & Crnić 2011; Malamud & Stephenson 2015; Farkas & Roelofsen 2017; Krifka 2017). Section 6 concludes.

2 The empirical picture

As announced, we aim to account for three core properties of rising declaratives of the relevant sort (e.g., Gunlogson 2008):

- (i) **question-likeness:** rising declaratives of the relevant sort intuitively feel like questions about the truth of the proposition expressed, i.e., they do not commit the speaker to the truth of the proposition expressed, and invite a “yes”/“no” response;
- (ii) **speaker bias:** they express an epistemic bias in favor of the proposition expressed, i.e., the speaker must consider it likely; and
- (iii) **badness out of the blue:** they are strange without appropriate contextual setup, e.g., a preceding utterance or other event introducing the topic.

We take aspect (i) to characterize which rising declaratives are ‘of the relevant sort’, i.e., like (1) but not like (2), (3) and (4). The lack of commitment is apparent for instance in the following example (from (3) in Malamud & Stephenson 2015):

- (5) (*Belinda and Chris are looking at a sunset. Belinda says to Chris:*)
- a. This is a beautiful sunset. (L%)
 - b. (?) Is this a beautiful sunset?
 - c. (?) This is a beautiful sunset? (H%)
 - d. This is a beautiful sunset, isn’t it?

The rising declarative (c.) is strange here – about as strange as the interrogative (b.) – because the lack of commitment it expresses is odd given the fact that people normally know whether they find a sunset beautiful or not. The example also shows that the rising declarative is more ‘question-like’ than a tag question (d.) in this regard (this will play a minor role in our account of aspect (iii) in section 4.3). In what follows we will try to show that aspects (ii) and (iii) are also generally true of rising declaratives of the relevant sort – in line with most of the literature, and without intending to make any novel empirical claims.

In order to establish the empirical reality of aspect (ii), Gunlogson (2003; 2008) notes that rising declaratives are strange in contexts like police hearings and examinations, in which the questioner is supposed to be ignorant or neutral. In the same vein, but, we think, slightly more transparently, we can assess the felicity of a rising declarative in a constructed context where the speaker just happens to be ignorant (and explicitly so):

- (6) (*The weather’s been very variable lately. Gina to her officemate Harry, whom she sees reading the weather forecast:*)
- G: Harry, please enlighten me. John told me it would be sunny, Mary that it would rain, and I haven’t read a forecast in days! I have no idea...
- a. ... Is it supposed to be good this weekend?
 - b. (?) ... It’s supposed to be good this weekend? (H%)

In line with Gunlogson’s observation, it seems to us that the rising declarative (6b) is strange.³ If we assume that appropriateness conditions on rising declaratives could

³ An anonymous reviewer notes that (6b) improves considerably if we imagine it as a kind of guessing/quiz context. Such an improvement will indeed be predicted by our account, as we will show in section 4.3.

be accommodated if compatible with the given context description, the strangeness of (6b) can be blamed only on the impossibility of accommodating a bias – indeed, a biased question like “isn’t the weather supposed to be good this weekend?” seems to us equally strange here.⁴ Most authors have assumed what (6) is intended to show, i.e., the reality of aspect (ii) (e.g., Gunlogson 2003; 2008; Truckenbrodt 2006; Nilsenova 2006; Trinh & Crnić 2011; Malamud & Stephenson 2015); an exception is Farkas & Roelofsen 2017, and we will discuss their argument against aspect (ii) shortly.

Evidence in favor of aspect (iii) is provided by the following example, the converse of (6), where speaker bias is possible but contextual setup is denied (taken from example (6) in Gunlogson 2008):

- (7) (*Gina to her officemate Harry, with no contextual setup:*)
- a. G: Is the weather supposed to be good this weekend?
 - b. (?) G: The weather’s supposed to be good this weekend? (H%)

We agree with Gunlogson that the interrogative (7a) is fine out of the blue while the rising declarative (7b) is strange. The felicity of (7a) means that the strangeness of (7b) cannot be due to its question-likeness (i.e., aspect (i)). Nor can it be due to the requirement of a speaker bias (i.e., aspect (ii)), since the context description in the example does not prevent us from accommodating one – for instance, Gina may have been expecting good weather on the basis of yesterday’s long-term forecast. Indeed, Gunlogson notes that other types of biased, question-like utterances are perfectly fine in (7), e.g., “Isn’t the weather supposed to be good this weekend?” (Gunlogson’s (7)). Rather, it appears that the strangeness of (7b) is due to the explicitly described absence of contextual setup, i.e., aspect (iii). To clarify: it is important to distinguish (Gina’s understanding of) the actual context of utterance from the (more partial) *description* of that context available to the one who reads the examples and judges their felicity (say, the reader): although the context description in (7) does not mention that Gina is biased, she may well be (e.g., she may have read it in yesterday’s long-term forecast), so the strangeness of (7b) cannot be explained in terms of the supposed absence of such a bias. This important distinction, between an actual context of utterance and a (partial)

⁴ Rising declaratives are not the only types of utterances that express a bias. Other purportedly biased types of utterances, such as negative questions and tag questions (cf. 5), fall outside the intended scope of this paper (for recent work on this more general topic, see for instance Büring & Gunlogson 2000; Gunlogson 2003; Sudo 2013; Northrup 2014; Malamud & Stephenson 2015; Farkas & Roelofsen 2017); we do not suppose that a single mechanism would be responsible for all types of biases.

description of that context to a reader, is sometimes overlooked in the literature on rising declaratives (see section 5); we will return to it in section 4.3 to clarify a certain prediction of our account.

Several authors conflate aspects (ii) and (iii) by assuming that the bias itself must be ‘contextual’, i.e., that the direct context of a rising declarative (though not necessarily the context *description*) must provide the speaker with some evidence for the proposition expressed (e.g., Gunlogson 2003; Trinh & Crnić 2011; Malamud & Stephenson 2015). Indeed, this may appear to be suggested by example (1) above: A’s entering the room with an umbrella accounts for both the source of B’s bias and the required contextual setup. But as Poschmann (2008) notes, the bias need not be contextual in general, i.e., the speaker may be biased on grounds other than evidence provided directly prior to the utterance; for instance, the caller’s bias in the following scenario is not due to any evidence in the directly preceding context, but appears to originate from what the caller remembers from earlier flights (from Poschmann 2008, adapted from Beun 2000):

(8) (*On the phone.*)

Agent: Schiphol Information.

Caller: Hello, this is G.M. I have to go to Helsinki, from Amsterdam.
Can you tell me which flights leave next Sunday?

Agent: Just a moment. ... Yes, there are several flights. One leaves at 9.10, one at 11.10, and one at 17.30.

Caller: The flight takes about three hours? (H%)

This shows that the type of contextual setup that is required for a rising declarative to be felicitous can be distinct from whatever causes the speaker’s bias (Gunlogson (2008) agrees with Poschmann’s argument; for more evidence see Northrup 2014, p.162). The only type of contextual setup present in (8) seems to be that, after the question of departure times has been resolved, the question of flight duration is a natural follow-up, a natural new *question under discussion* (QUD, Roberts 1996; see section 3). The same type of contextual setup is present in (1): someone’s entering with an umbrella may quite naturally evoke the question of whether it is raining. Similarly, the rising declarative in (7) improves, or so it seems to us, if Gina sees Harry read the weather

section in a newspaper, an observation which plausibly evoke the question of what the weather is like.⁵ A particularly clear test case should be the following:

(9) (*Gina to her officemate Harry, with no contextual setup:*)

G: Hey Harry, do you know what the weather will be like this weekend? It's supposed to be good? (H%)

This seems to us fine, in contrast with (7b). If our judgment here is representative, this would confirm that the type of contextual setup required for a rising declarative is indeed the presence of an appropriate QUD, whether implicitly evoked by the context or introduced explicitly. Based primarily on (8), and more tentatively on (9) pending a more proper empirical evaluation in future work, this is what we will assume.

It is important to note that we do not need to assume, with regard to (8), that resolving the question of departure times *always* puts the question of flight duration on the table; in some cases a speaker may find other questions more important (e.g., which of the departure times offers the cheapest seats) or may simply be indifferent with regard to flight duration. It is more accurate to think of the context in (8) as offering an opportunity for the caller to conceive of the question of flight duration as being already on the table, an opportunity which the caller may or may not use, for various possible rhetorical reasons, some of which we list in section 4.3. Similarly, the arrival of A with an umbrella in (1) need not always automatically evoke the question of whether it is raining, but it does offer speaker B the opportunity to conceive of it as such. This contextual opportunity for a speaker to present a question as being already on the table (rather than the presence in the context of evidence for a particular answer to that question, as assumed by Gunlogson (2003), a.o.) seems to be what a rising declarative requires, i.e., why they are bad out of the blue.

The empirical landscape is a bit more complex than the foregoing did justice do. This is because a number of ill-understood pragmatic factors may influence the superficial pragmatic appearance of rising declaratives. For instance, speakers may in certain circumstances *feign* a certain belief or lack thereof in order to achieve some rhetorical

⁵ Gunlogson (2008) notes a similar improvement, but only with regard to a variant of (7) where Gina also sees, from a distance, several 'sun' symbols in the newspaper, i.e., where also the speaker bias is contextual, such that aspects (ii) and (iii) falsely appear to be one and the same.

effect, as presumably in the following example (brought to our awareness by an anonymous reviewer; similar examples in the literature are sometimes called “incredulous questions” (Gunlogson 2003)):

- (10) *(A sees B standing over the bin, eating a cake remnant she put into it a while ago:)*
 A: You're eating from the bin? (H%) This is not how we should be living!

Supposedly, given that A sees B eat from the bin, A cannot be genuinely unsure whether B is eating from the bin; that is, this rising declarative cannot convey a genuine lack of commitment; and neither is a “yes” response from B needed for the dialogue to continue. But this doesn't necessarily mean that we should abandon question-likeness, i.e., aspect (i), as a general property of rising declaratives of the relevant sort, or that (10) cannot be of the relevant sort. We can maintain this empirical generalization by assuming, as seems plausible to us, that the speaker in (10) is for some rhetorical reason feigning to be less informed than they actually are. Now, we are unaware of a general and precise theory of the rhetorical functions of pretense (though see Grice 1975 on pretense and politeness, Clark & Gerrig 1984 on irony, and Northrup 2014 (ch.3) on quiz and rhetorical questions), and in the absence of such a theory it may not always be easy to tell whether an appeal to pretense, in order to save an empirical generalization like aspect (i), is really warranted or ad hoc. But some tentative support for a pretense treatment of (10) is the naturalness of a more explicit variant like “I cannot believe my eyes!” or “I cannot believe we are living like this!”, which would involve the same type of pretense and with a similar rhetorical effect of surprise or disapproval. More generally, it seems plausible, as Gunlogson (2003, p.88) also notes, that feigning disbelief, whether explicitly or by means of a rising declarative (or an interrogative, for that matter), can be a suitable rhetorical device for indicating surprise. Although a more detailed analysis of cases like (10) lies outside the present scope, a pretense analysis of (10) seems to us sufficiently plausible for the example not to directly undermine our attempt to explain aspect (i), i.e., the question-likeness, as a general feature of rising declaratives of the relevant sort.

Another factor that makes the empirical landscape more complex is that utterances can be implicitly metalinguistic (or metacommunicative), which may be the case in

some (but not necessarily all) roughly echoic uses of rising declaratives, such as the following:⁶

(11) (*B knows that John doesn't have a sister.*)

A: John went to the airport to pick up his sister.

B: John has a sister? (H%) You must be thinking of his cousin.

Not only is B not genuinely unsure whether John has a sister (aspect (i)), as in (10), this time there can be no genuine speaker bias either (aspect (ii)), for B knows that John doesn't have a sister. In principle pretense could again offer a way out, i.e., B might be pretending to tentatively go along with A's presupposition, prior to correcting it, but it is unclear in this case what sort of rhetorical purpose such pretense would serve, and this time a more explicit paraphrase seems rather strange: "I cannot believe that John has a sister; you must be thinking of his cousin". We think that a more natural paraphrase of (11) would be the following: "John has a sister *you say*? You must be thinking of his cousin." That is, following [Gunlogson 2003](#), we may construe B's initial response as metalinguistic, i.e., as a comment on what A said rather than on what the world is like. If so, then the bias supposedly expressed by the rising declarative in (11) is not in favor of John having a sister, but in favor of speaker A having said so, and this is compatible with B's knowledge that John doesn't have a sister. Note that, on top of this, (11) may well involve a form of pretense: B could either be genuinely unsure whether A really said "sister", or could pretend to be unsure for rhetorical reasons, which would be the same type of pretense as in (10), with the same rhetorical effect of conveying surprise. Again, it is too early to say whether a metalinguistic analysis of (11) can be made to work within a hypothetical broader theory of metalinguisticness. But a metalinguistic analysis seems to us sufficiently promising at least for (11) not to undermine our current attempt to explain the speaker bias, i.e., aspect (ii), as a general feature of rising declaratives of the relevant sort.

As we mentioned, the necessity of a speaker bias (aspect (ii)) for rising declaratives of the relevant sort was recently called into question by [Farkas & Roelofsen \(2017\)](#), on the basis of the following examples (their (69), (55), (68) and (78)):

(12) (*A father asks his child to set the table; the child does a particularly bad job of it but appears to consider the chore finished.*)

⁶ Example (11) was suggested to us by an anonymous reviewer; it is similar to, but slightly more explicit than, several echoic examples in [Gunlogson 2003](#), p.81 onwards.

- Father: This table is set? (H%) Where are the wine glasses? The napkins?
- (13) Student: [...] because the square root of 9 is 2 and $2 + 3$ is 5.
Teacher: The square root of 9 is 2? (H%)
- (14) (*Sam is not Bill's son, but the neighbours', and the therapist knows this.*)
Bill: Should I help Sam pay his loans?
Therapist: You are his father? (H%)
- (15) (*Mother sees child putting on cleats.*)
Mother: What? You are going to play soccer? (H%) No way! You are staying home and doing your homework.

Clearly, in (12) the father knows that the table is not in fact set, hence he cannot be genuinely biased towards the proposition expressed by her rising declarative. Similarly, in (13) the teacher of course knows that the square root of 9 is not 2; in (14) the therapist knows that Bill is not Sam's father; and in (15) the mother knows very well that she is the authority and that the child is not going to play soccer. Now, a striking property of examples (12) to (15) is that they all involve a strong asymmetry in authority: parent-child (twice), teacher-student, and therapist-patient. It seems plausible to us – though in the absence of a comprehensive theory of pretense this remains speculative – that pretense may serve an important rhetorical function in such asymmetrical interactions, namely, to invite the less knowledgeable or less experienced addressee to think for themselves (e.g., as an anonymous reviewer notes, in (12) the father is effectively making the child responsible for fixing the apparent common ground). A pretense-based treatment seems to us particularly plausible for (12), where the rising declarative is followed by two interrogative questions that cannot be genuinely questioning either (for the father knows that the wine glasses and the napkins are still in the cupboard). Example (13) could involve a similar type of pretense, but a metalinguistic treatment of the sort illustrated by (11) could also be worth exploring, i.e., a natural paraphrase for (13) could be “You're saying the square root of 9 is 2?”. For (14) pretended ignorance seems plausible to us; a metalinguistic analysis less so, because Bill isn't saying/implying in any way that he is Sam's father. Lastly, (15) could either involve pretense of the same kind as in (12), though it is not maintained as long, or be metacommunicative in the same way as (11), with the difference that (15) would target what is implied by the child's nonlinguistic behavior rather than what is implied by a prior utterance.

Summing up, the apparent absence of a genuine bias in examples like the foregoing does not rule out the presence of a pretended or metalinguistic bias, and as such these

examples do not directly undermine our current aim to explain speaker bias, i.e., aspect (ii), as a general feature of rising declaratives of the relevant sort. In the remainder of this paper we will therefore follow most of the literature in assuming that aspect (ii) is indeed real, and try to account for it (along with aspects (i) and (iii)). We acknowledge that this commits us (and most existing accounts, the exception being [Farkas & Roelofsen 2017](#)) to treating examples (10) to (15) as involving something like pretense or metalinguisticness, a type of treatment that we hope to have made sufficiently plausible for present purposes but which cannot be properly evaluated without an independent theory of when pretense and metalinguisticness are rational/cooperative discourse strategies. The latter must be left for another occasion. On a more positive note: under the assumption that our account of rising declaratives is on the right track, our prediction that certain examples must involve pretense or metalinguisticness can provide a valuable empirical window on these mechanisms.

3 Pragmatic framework & the maxims

Our starting assumption about intonational meaning, i.e., assumption 1, makes reference to the conversational maxims. This presupposes a perspective on conversation along the following lines, which we think is quite generally adopted:

Assumption 2. Dialogue can be modeled as the outcome of an optimization process of speakers trying to maximize compliance with a set of constraints that can be understood as characterizing (or deriving from) intentional, goal-directed behavior.

The maxims are a certain natural subset of these constraints, namely those that constrain a speaker's communicative intention in terms of the speaker's beliefs and (the speaker's understanding of) the conversational goals. The maxims governing assertions will be defined below. The maxims being only a subset of constraints on dialogue, other constraints must restrict, for instance, which goals can be pursued. The assumption that intonation reflects compliance specifically with the maxims, and not with any of the other constraints, is a substantive one, which together with the definition of the maxims to be given below will be what gives our account its empirical bite. Our assumptions about constraints other than the maxims, in particular constraints on which goals can be pursued, will be quite minimal, and we will introduce them when relevant. As is common in the pragmatics literature, we assume that conversational goals are organized

in *questions under discussion* (QUD; e.g., Roberts 1996; Ginzburg 1996); a QUD can be understood as a set of pieces of information that are each worth making common ground and the truth of which is simultaneously pursued. The pieces of information in a QUD will normally share some subject matter or pragmatic function, so that it makes sense to want to establish those pieces of information in a single piece of discourse.

Different types of speech acts are subject to potentially quite different sets of maxims. Hence, to understand what assumption 1 entails with regard to rising declaratives, we must decide what speech act they primarily express. We follow Gunlogson's (2003) 'true to form' arguments and assume that the primary speech act type of an utterance is reflected by syntactic form:⁷

Assumption 3. Utterances of sentences with declarative syntax are technically assertions; the speaker's most prominent intention is to share a piece of information, subject to the assertion maxims (given below). Utterances of sentences with interrogative syntax are technically questions; the speaker's most prominent intention is (say) to ask a question, subject to a different set of maxims.

By "technically" we mean to allow for the fact that utterances with declarative syntax may well serve a questioning function in a more intuitive sense – rising declaratives would be a prime example – and vice versa. What assumption 3 mandates is that we try to account for such pragmatic flexibility on the basis of a fixed, semantic backbone reflected by syntactic form. Indeed, in this paper we will offer a pragmatic explanation of this sort for the question-likeness of rising declaratives, by combining assumption 3 – that rising declaratives are technically assertions – with assumption 1 about intonational meaning. Since we assume that rising declaratives are technically assertions, our account of rising declaratives will rely almost entirely on the assertion maxims, defined below. It will not matter too much what exactly questions are and what the maxims look like that govern them (we will mention just one such maxim in section 4.3). However, it is worth noting that assumption 1 about intonational meaning isn't intended to be restricted to intonation on assertions; in the concluding section we will highlight its potential application to questions as a topic for future work, and briefly illustrate what such an application may look like.

⁷ See Gunlogson 2003, chapter 2, for a number of ways in which rising declaratives pattern with falling declaratives rather than interrogatives – e.g., rising declaratives but not interrogatives license bias markers like "of course" and evidentials like "apparently", and vice versa for negative polarity items like "any" and disjunctions like "...or not".

The assertion maxims essentially follow Grice’s (1975) original proposal, as well as more recent works cited below:

Definition 1.

1. **Quality:** assert only information that is true.
2. **Relation:** assert only propositions that are in the question under discussion (QUD; where QUDs are closed under intersection; e.g., Spector 2007).
3. **Quantity:** assert something that entails all propositions in the QUD that you believe are true.
4. **Manner:** convey the information clearly, and be as concise as ensuring compliance with the other maxims allows.

While informal, our definition is sufficiently precise for explaining the three core properties of rising declaratives, as we hope to show.⁸ There are several small, mostly presentational differences compared to Grice’s original definition, which we will briefly clarify.

With regard to Quality, our maxim captures only Grice’s ‘supermaxim’, not his two submaxims “do not say what you believe to be false” and “do not say that for which you lack adequate evidence”, because these submaxims don’t really add anything; they are already entailed by trying to comply with the supermaxim, i.e., by trying to convey only true information.^{9,10} Another difference regarding Quality is that Grice precedes it by “try to...”, whereas we assume that this qualification should apply to all the maxims and omit it from the maxims themselves, capturing it instead in assumption 2. This is so that suspending Quality entails ‘not being sure of having spoken the truth’; otherwise it

⁸ An anonymous reviewer notes that Grice (1975) intended the maxims as broad generalizations, permissive of exceptions and subject to context-dependent variation. This is fine in principle; our approach then predicts that the precise usage of rises and falls will vary accordingly, and we will see an example of this further below, example (16). By adopting a particular set of maxims, we commit merely to these being an adequate characterization of what conversational rationality amounts to in the most typical, ordinary circumstances, and only at the level of precision required for present purposes.

⁹ For the same reason we do not separately assume Gunlogson’s (2008) Source Maxim, “do not commit to that which lacks a source”, which, Gunlogson notes, likewise follows from the core of Quality.

¹⁰ An anonymous reviewer notes that what counts as ‘true’ in a given context depends on the contextual standard for certainty, or *Quality threshold* in the sense of Davis et al. 2007. We acknowledge this important qualification but leave it implicit in our formulation of the maxims, because in this paper it will not play a role: although the strength of predicted beliefs and biases will covary with the Quality threshold, the way in which these beliefs and biases are predicted, i.e., our explanations for them, remain essentially unchanged.

would have meant ‘not being sure of even having tried to speak the truth’, which makes little sense. In the maxim of Relation we have replaced Grice’s ‘relevance’, which he left unanalyzed, by the marginally more informative notion of QUD (following, e.g., Roberts 1996), to be governed, as we mentioned, by a separate set of constraints. From the maxim of Quantity, we have omitted Grice’s ban on *overinformativity*, taking this to be sufficiently covered by Relation (following Grice’s own suggestion); and we have framed Grice’s requirement to “be as informative as required for the purposes of the exchange” in terms of a QUD. The fact that Quantity contains reference to what the speaker believes rather than what is objectively true (unlike Quality, but following Harnish 1976; Gamut 1991) ensures that Quantity will never *clash* with Quality, as we will see below, which is needed to predict (in ways we can skip) that so-called ‘Quantity implicatures’ (e.g., Geurts 2011) occur with falling intonation – but this does not strictly matter for present purposes. Lastly, with regard to the maxim of Manner, our requirement of clarity corresponds to Grice’s supermaxim “be perspicuous”, and we take this to cover Grice’s submaxims to avoid obscurity/ambiguity and to be orderly. In formulating the conciseness requirement of Manner we have followed (Russell 2006) in defining it such that it will never clash with the other maxims, in order to predict that, as we suspect, there is not normally a rising declarative paraphrasable as ‘I’m not sure if I’ve been concise enough’ – but this too is inessential for present purposes.

Besides making reference to the maxims, assumption 1 invokes the notion of *suspending* a maxim, i.e., of not taking one’s utterance to comply with the maxims with certainty. This means that our predictions regarding rising declaratives will depend not only on how one defines the maxims, but also on when it is appropriate to suspend one (as opposed to, say, ‘flouting’ a maxim or ‘opting out’, see below). We intend it to follow from assumption 2 that speakers will normally suspend a maxim – which means knowingly violate or risk violating it – only if they are unable to ensure compliance with it. Hence, rising declaratives are predicted only for those maxims with which certain compliance is not always possible, as such or due to a *clash* with another maxim, in the sense of Grice 1975. For easy of speaking, let us adopt the following definition of a clash (slightly warping the ordinary usage of “clash” to have it apply also to single maxims):¹¹

¹¹ Some authors have criticized the possibility of clashes in the Gricean, maxim-based approach as compromising its predictive power (e.g., Sperber & Wilson 1986; Davis 1998), which may be true in some accounts, but only if one ignores the ways in which speakers indicate maxim suspensions, one of these ways arguably being intonation.

Suspending a maxim is not the only possible way of coping with a clash, hence to understand when a rising declarative may occur and derive predictions from it we must be aware of the alternatives. Within the framework adopted here, there are three main ways of dealing with a clash:

- a. suspend (i.e., knowingly violate or risk violating) one of the clashing maxims;
- b. opt out of the relevant maxims, by making a type of contribution to which they do not apply, e.g., asking a question (interrogative) rather than making an assertion;
- c. opt out of the problematic QUD altogether, by addressing a different (but somehow related) QUD relative to which there is no clash.

To conceive of questions as opting out of making an informational contribution aligns with the approaches in [Roberts 1996](#) and [Farkas & Bruce 2010](#) (although they do not use this term), according to which both questions and assertions relate to (and may serve to introduce) a QUD, but assertions in addition put forward a piece of information. In contrast, ‘opting out’ in the sense of [Grice 1975](#), which he illustrates for instance by “my lips are sealed”, would in the present framework be a special case of opting out of the QUD, i.e., option c., with as the new QUD something like “Can you give us any information at all (about X)?”. For the sake of completeness, let us discuss two additional types of maneuvers discussed by Grice, namely *silently* violating a maxim, which would involve a form of pretense or lying, and *flouting* a maxim, i.e., violating a maxim in a way that is obvious from the absurdity of the resulting utterance. In section 2 we proposed that certain rising declaratives from the literature involve a form of pretense, but other than that we will set this type of maneuver aside, because we think that pretense is an appropriate discourse move only in certain special circumstances (one of which could be an asymmetry of authority, cf. examples (12)-(15)). We will also set aside flouting in this paper, because to our understanding it has certain special pragmatic effects that aren’t always appropriate, e.g., most of Grice’s examples of flouting are somewhat humorous.

An important question is to what extent our account of rising declaratives is compatible with the existence of maxims on assertions other than the ones we have defined. For instance, [Leech 1983](#) formulates certain maxims of politeness, a dimension of dialogue which we will largely ignore. Superficially it might seem that the more maxims there are, the more uses of rising declaratives we predict, but this is too simplistic: rising declaratives are predicted only for those maxims with which compliance is not always possible, which depends on the predicted range of possible clashes. Any maxim can in principle be defined in a more absolute way such that ensuring compliance is not always possible, or in a more relativistic way, by prefixing something like “as far as the other

maxims allow...”, such that it never clashes and compliance is always possible. We speculate that independent criteria of intentional, goal-oriented behavior may favor one type of definition over the other, depending on the specific maxim, and thus constrain the theory’s predictions. But what matters for now is that the adoption of additional maxims can, depending on how they are defined, either expand the predicted range of rising declaratives or leave it exactly as it currently is.

4 Explaining the three features

4.1 (i) Question-likeness

In the introduction we suggested that rising declaratives of the relevant sort suspend the maxim of Quality. We need to explain how an audience might figure this out, and how it accounts for the question-likeness of rising declaratives, namely, the lack of speaker commitment and a strong invitation to the audience to reply with “yes” or “no”.

To illustrate how an audience might figure out that the suspended maxim is Quality, let us consider example (1), repeated here:

(1) (*B sees A enter the room with an umbrella.*)

B: It’s raining?

H* H%

Let us assume that there are no communication problems in (1), i.e., that the interlocutors (know that they) are fluent, there is no background noise and the proposition expressed (that it is raining) isn’t particularly complex. It seems safe to assume, furthermore, that speakers are normally fairly certain about what they themselves want to talk about, i.e., that uncertainty about the QUD tends to occur only when one speaker doesn’t quite understand what some *other* speaker wants to talk about. Assuming that speaker A does not enter the room with a questioning look, speaker B is the one choosing a QUD, hence, plausibly, B isn’t uncertain about the QUD in (1). It follows from these assumptions, together with the definition of the maxims given above and the resulting range of clashes, that the only clash that could be responsible for the rising intonation in (1) is one between Quality and Relation, and in particular a Quality-Relation clash of the ‘hopeless’ or ‘truth-uncertain’ type.

Following our discussion in the previous section, a hopeless or truth-uncertain Quality-Relation clash can be coped with by:

- a. suspending (i.e., knowingly violate or risk violating) one of the clashing maxims, that is, either:
 - i. suspending Quality, i.e., conveying something that is in the QUD which is potentially false; or
 - ii. knowingly violating Relation, i.e., conveying something true that is not in the QUD;
- b. opting out of the relevant maxims, by making a type of contribution to which they do not apply, e.g., asking a question rather than making an assertion;
- c. opting out of the problematic QUD altogether, by addressing a different (but somehow related) QUD relative to which there is no clash.

Option a.ii. and c. would be somewhat strange; both would entail, for (1), that speaker B initially chose a different QUD, say, one that wasn't about the weather, but then brought up the rain because of a clash. This seems implausible: since there was no preceding discourse, speaker B could simply have chosen the weather QUD right away. Option b. is not possible in (1), given that the sentence has declarative mood, which we assumed marks assertions. That leaves only option a.i., that is, suspending Quality: the speaker must be unsure whether it is raining. It follows that the high boundary tone in (1) must indeed be blamed on a Quality suspension, as we announced in the introduction. It follows also that the responsible Quality/Relation clash must have been of the 'truth-uncertain' type: the speaker was unsure which relevant propositions are true – and in (1), plausibly, whether the single relevant proposition is true, i.e., whether it is raining.¹²

The foregoing derivation relied on the assumption that the speaker knows what the QUD is, and that clear communication isn't compromised in any way. This predicts that rising declaratives may have different (i.e., not Quality-suspending) uses when these assumptions are not warranted. Indeed, we already saw three such examples, repeated here:

(2) M.L.: (*to a receptionist*) Hello, my name is Mark Liberman. (H%)

¹² To clarify, the lack of commitment is predicted to pertain not to the literal semantic content of the sentence, but to the asserted content, i.e., what the speaker centrally means by it. This follows from our account, because the conversational maxims apply to what the speaker centrally means (Grice's (1975) "what is said"), not to the literal semantic content (cf. Neale 1992). The speaker bias will likewise be predicted to pertain to the asserted content.

- (3) (*English tourist in a French café.*)
 A: I'd like... err... je veux... a black coffee? (H%)
- (4) (*A isn't sure if B wants to know about neighborliness or suitability for dating.*)
 B: What do you think of your new neighbor?
 A: He's attractive? (H%)

The speaker in (2) is plausibly unsure (or pretending to be unsure, for reasons of politeness) how much information is relevant, i.e., whether the receptionist needs any other information to be able to help him, giving rise to a clash of Relation and Quantity, which is coped with by suspending Quantity. In (3) the tourist is not a native speaker, resulting in a 'linguistic' clash between Manner and the other maxims (assuming that the tourist is able to express *some* things in French), which is coped with by suspending the clarity submaxim of Manner, the final rise effectively conveying "I'm not sure if I made myself clear". In (4) there is again uncertainty about the QUD, this time resulting in a suspension of Relation. For each of these examples one could investigate which assumptions would be needed for an audience to be able to identify the suspended maxim; but we leave this for another occasion.

In practice, disambiguating between the various uses of rising declaratives may rely not only on assumptions like fluency or certainty about the QUD, but also, perhaps even primarily, on paralinguistic cues (as stressed in [Bolinger 1985](#)). These are some of the paralinguistic cues that we found ourselves producing for the different examples:

- for (1): raised eyebrows, high final pitch, head slightly withdrawn;
- for (2) and (4): eyebrows slightly raised, final pitch not as high, head turned sideways a bit; and
- for (3): uncertain grin, eyebrows not raised, quite high final pitch, head lowered, mouth remains open after speaking.

These cues may reflect curiosity/surprise in (1), tentativeness in (2) and (4), and submissiveness and nervousness in (3). For a much longer list of similar exercises see [Bolinger 1985](#). For now, what we mean to emphasize is only that disambiguating an intonation contour, say, finding out which maxim suspension is to blame for a final rise, is at least in spoken language not as difficult as it may appear from looking only at the purely linguistic signal.

That rising declaratives of the relevant sort involve a suspension of the maxim of Quality accounts for their question-likeness, i.e., aspect (i), in the following way. First, although we assumed that a rising declarative is an assertion in the sense that it primarily serves to convey a piece of information, a suspension of the maxim of Quality entails that the speaker isn't sure that this information is true. This accounts for the lack of speaker commitment. Furthermore, although the assertion suspends Quality, it does comply with the maxim of Relation, which entails that the speaker must take the proposition expressed to be part of the QUD. As such, a rising declarative conveys two things: the proposition expressed is part of the QUD, hence considered worth making common ground, but the speaker lacks the necessary information to do so. Faced with these implications, a cooperative audience will of course try to be of service and provide the relevant information if their epistemic state does support it, which explains the invitation of a positive response.

As for the invitation of a negative response, one might be tempted to just assume that QUDs are closed under negation, as has sometimes been suggested (e.g., Kroch 1972, concerning 'relevance'). However, we do not find this particularly plausible, and since other authors have argued against this (e.g., Leech 1983; Horn 1989), let us find an explanation that will work regardless. To that end, let us assume that conversational goals must be considered achievable in principle:

Assumption 4. Conversational goals should be considered (at least) potentially achievable; at the very least, this means that the propositions in the QUD must be considered possible.

A similar assumption is shared, for instance, by Roberts 1996 (incorporated in her definition of "QUD" and also in her "pragmatics of questions"). We intend it to follow from assumption 4 that a cooperative speaker will, besides trying to establish the propositions in the QUD, also remove propositions from a QUD that they consider false, so as to keep the conversational goals tidy. As such, even if the negations of relevant propositions aren't (necessarily) relevant for their own sake, i.e., part of the main QUD, they are still worth sharing for discourse-internal reasons (as argued also in Leech 1983; Horn 1989). This explains why rising declaratives also invite a negative response, regardless of whether the QUD addressed by the rising declarative already contained the negative proposition to begin with.¹³ Summing up, by virtue of their

¹³ A similar assumption may be required (i) for negative responses to polar interrogatives, if one assumes, as Biezma & Rawlins (2012) do, that these denote a singleton set rather than a bipartition; and also

lack of speaker commitment, rising declaratives of the relevant sort effectively serve merely to highlight a proposition as being worth making common ground, thereby pragmatically inviting responses that either affirm or deny it. We take this to explain their question-likeness.

To clarify, a *falling* declarative likewise implies, through the maxim of Relation, that the proposition expressed is part of the QUD, but in addition, unlike a rising declarative, by indicating compliance with Quality, it also commits the speaker to this proposition. As a consequence, although explicit support “yes” and disagreement “no” are possible after a falling declarative, they aren’t strictly necessary for the dialogue to continue; in most cases mere acknowledgment (“oh”/“okay”) suffices, and even that can sometimes be left implicit (Groenendijk & Roelofsen 2009).¹⁴ Rising declaratives invite a “yes” or “no” response more strongly because of the lack of speaker commitment they signal.¹⁵

(ii) to explain why so-called ‘Quantity implicature’ (Geurts 2011) would indeed be a conversational implicature, i.e., part of what is meant, rather than a mere implication.

¹⁴ Let us note, following Farkas & Bruce (2010), that “no” can have several slightly different pragmatic functions: in response to a rising declarative it may serve either to give a negative answer to the original QUD (if the original QUD contained the negative proposition), or to prevent the pursuit of an unachievable goal (if the original QUD didn’t contain the negative proposition); but in response to a falling declarative it serves (instead or in addition) to prevent the positive information from appearing to enter the common ground.

¹⁵ As Gunlogson (2008) notes, falling declaratives can serve something like a questioning function as well, when there is a clear asymmetry in knowledgeability, as in the following example (her (8)):

- (i) (*Laura has just entered the room, where Max sees her for the first time that day.*)
 - a. Max: Did you get a haircut?
 - b. Max: You got a haircut? (H%)
 - c. Max: You got a haircut. (L%)

We will not try to offer a definitive explanation of this question-like use of rising declaratives in this paper. But plausible starting points may be to say either (i) that, in contexts with a clear difference in knowledgeability, Quality suspensions by the less informed speaker need not be intonationally marked (this is essentially the explanation proposed in Gunlogson 2003), or (ii) that in such contexts the Quality threshold (Davis et al. 2007) for the less informed person can safely be lowered, such that for that person even a mere informed guess would count as complying with Quality (though a completely blind guesses might still demand a rise).

4.2 (ii) Speaker bias

We intend it to follow from assumption 2 that speakers will not only try to comply with all the maxims, but also, when faced with a clash, decide which maxim to suspend based on the relative importance of the clashing maxims and the comparative likelihoods of complying with them. For instance, a speaker should prefer an improbable violation over a near-certain violation, and should prefer suspending a less important over a more important maxim. This lets us explain the speaker bias expressed by rising declaratives of the relevant sort, provided we also assume the following:

Assumption 5. Quality is normally more important (i.e., compliance more rewarding, violations more costly) than Relation, and sufficiently so (see below).

It follows that a rational speaker will, in case of a clash between Quality and Relation, choose to suspend Quality rather than Relation only if the probability of the proposition expressed being true (i.e., compliance with Quality) outweighs the cost associated with it being false (i.e., violating Quality). The first half of assumption 5 is, to our awareness, uncontroversial (e.g., Grice 1975; Davis et al. 2007); the second part, “sufficiently so”, is crucial for explaining the bias, so let us clarify what we mean by it.

For concreteness, suppose that Quality is three times as important as Relation. An unsophisticated way of computing expected compliance for these two maxims could then be the following (with prob some probability measure, and p the proposition expressed):

$$3 \cdot \text{prob}(p \text{ is true}) + 1 \cdot \text{prob}(p \text{ is in the QUD})$$

For the sake of illustration, suppose that the speaker knows exactly what is and isn’t in the QUD, i.e., that the rightmost probability is either one or zero. In that case, knowingly violating Relation in order to ensure compliance with Quality yields an expected compliance of 3 (since $3 \cdot 1 + 1 \cdot 0 = 3$). The other option, suspending Quality (risking a violation) in order to ensure compliance with Relation can yield an expected compliance higher than 3 only if the probability of the proposition expressed being true is greater than two thirds (since $3 \cdot \frac{2}{3} + 1 \cdot 1 = 3$) – and this threshold probability, i.e., the predicted bias, will be higher if Quality is in fact more than three times as important as Relation. A more insightful fact: if we conceive of a bias very minimally as a greater-than-half probability, then for this unsophisticated way of computing expected compliance to predict that Quality suspensions require a bias, Quality must be at least twice as

important as Relation. This seems reasonable, given that violating Quality amounts to making no real contribution at all (Grice 1989, p.371; see also Gunlogson ms.).

Summing up, the epistemic speaker bias in (1) is potentially explained as follows. Based on the current definition of the maxims plus background assumptions (fluency, certainty about what the QUD) and/or paralinguistic cues, it follows that the rising declarative in (1) must involve a suspension of Quality that is due to a clash with Relation. Now, given assumption 2, that speakers try to maximize compliance, and assumption 5, that Quality is more important than Relation, it follows that the speaker in (1) must consider it sufficiently likely that it is indeed raining – otherwise knowingly violating Relation would have been preferred. The precise value of ‘sufficiently likely’, and hence whether the foregoing explanation really generates a bias, will depend on the relative importance of the maxims and on how exactly expected compliance is maximized (we considered only a very unsophisticated way). Exploring and evaluating the possibilities in this regard – and finding out what exactly the second part of assumption 5 commits us to – must be left for another occasion; but if our account of the bias is on the right track, then rising declaratives of the relevant sort provide us with an important window on these more general questions in pragmatics.

Lastly, the relative importance of Quality and Relation can depend on the particular context of utterance, and our account predicts that the presence and/or strength of the bias can vary accordingly. For instance, an anonymous reviewer suggests the following variant of (6), where Gina is equally uninformed as before but made to guess, and the rising declarative becomes fine:

(16) (*The weather’s been very variable lately.*)

H: Hey Gina, can you guess what the weather forecast says?

G: John told me it would be sunny, Mary that it would rain, and I haven’t read a forecast in days! I have no idea...

H: Guess!!!

G: I don’t know... The weather’s supposed to be good this weekend? (H%)

A guessing or quiz context like this is a typical circumstance where violating Relation rather than suspending Quality, i.e., saying something true that doesn’t address the QUD is not really an option; Harry in (16) insists that Gina answers his question even if she is ignorant. Put differently, in a quiz contexts Relation is always more important than Quality: it’s better to guess an answer than to not give an answer to the question

at all. Accordingly, for such contexts our account does not predict a speaker bias; the speaker can be completely ignorant. This is not to say of course that ‘anything goes’ in a quiz context; people will still try to maximize compliance (assumption 2), hence they will opt for the answer that they deem most likely to be true; what’s different about a quiz is that this likelihood need not be higher than complete ignorance.

4.3 (iii) Badness out of the blue

We will explain the badness of rising declaratives out of the blue by arguing that, without the required contextual setup, there is a better, alternative way of coping with a Quality/Relation clash, i.e., better than suspending Quality.¹⁶ The relevant alternative in this case, we propose, is to utter an interrogative question, which as we suggested in section 3 can be understood as *opting out* of making an informational contribution. The idea is that, without the relevant sort of contextual setup, opting out of the assertion-maxims (by uttering an interrogative) is better than taking the risk of violating one. For this to explain the badness out of the blue of rising declaratives, two questions need to be answered:

1. Why are interrogatives preferred to a rising declarative out of the blue, but not necessarily with the relevant type of contextual setup?
2. Aren’t there other alternatives that, with contextual setup, are preferred over suspending Quality (i.e., why do rising declaratives of the relevant sort exist at all)?

Although our answers will rely on fairly minimal assumptions, it will take some space to explore their implications and highlight certain open ends, central difficulties being the lack of a comprehensive pragmatic theory of QUDs and the in principle infinitely many alternative utterances that exist.

Question 1: interrogative out of the blue With regard to question 1., recall from section 2 that the type of contextual setup that appears to warrant a rising declarative is the existence of an opportunity for the speaker to conceive of the QUD it would address as being already ‘on the table’. When this opportunity arises, a speaker may choose to use it and conceive of the QUD as being already on the table, or ‘given’, or not use it and present it as ‘new’; without such an opportunity, i.e., if the relevant contextual setup is

¹⁶ We use the term “alternative” in a broader sense, closer to its ordinary usage, than what is common in the literature on focus (e.g., Rooth 1985) and Quantity implicature (e.g., Geurts 2011).

missing, the speaker has no choice but to present the QUD as new (and further below we will see an example where the speaker has no choice but to present the QUD as given). The newness or givenness of a QUD is expected to directly affect the felicity of an interrogative, whose sole or primary purpose after all is to ask a question (assumption 3): just as one shouldn't assert what is already common ground (goals disappear once accomplished, hence propositions that are common ground cannot be in a QUD), one shouldn't ask a question that was already on the table (e.g., Groenendijk & Roelofsen 2009). For this reason interrogatives are bad if the question they raise is conceived to be already on the table. More precisely, what we must assume is the following:

Assumption 6. Rather than suspend an assertion maxim as important as Quality, it is better to opt out of making an assertion altogether (i.e., utter an interrogative), *unless* doing so would result in not making any contribution at all (namely, if the QUD is already on the table). In the latter case, making a tentative contribution, even an assertion that suspends Quality, is better than not making any contribution at all.

This is quite a mouthful, but what is assumed is, we think, difficult to avoid under any approach based on a similar conception of declaratives and interrogatives (i.e., similar to assumption 3).¹⁷ What it entails is that, in the relevant types of contexts (say, where a truth-uncertain Quality/Relation clash occurs and the speaker is sufficiently biased), a rising declarative is preferred to an interrogative if the QUD is conceived of as given, whereas an interrogative is preferred if the QUD is conceived of as new. This predicts that without the relevant type of contextual setup, i.e., without an opportunity to conceive of the QUD as being already on the table, rising declaratives are bad, because interrogatives are preferred.

If there is an opportunity for the speaker to present the QUD as being already on the table, a speaker may or may not make use of this. This is why in many examples from the literature both a rising declarative and an interrogative appear felicitous, as in (1), repeated here with an interrogative (as in Gunlogson 2003):

(17) (*B sees A enter the room with an umbrella.*)

¹⁷ Note that we do not assume, and do not need to assume, that declaratives are never used for introducing a new QUD; only that interrogatives normally are. Declaratives may well occasionally serve this purpose, but in addition, and primarily, they make an informational contribution, which may be worthwhile even if (and perhaps especially if) the QUD they address was already there.

- a. B: It's raining? (H%)
- b. B: Is it raining?

The felicity of (17b) means that presenting the QUD as new was an option here. This is expected: someone entering the room with an umbrella, may, but need not, evoke the question of whether it is raining. But it raises the question of why (17a) is felicitous, i.e., why would the speaker present the QUD as being already on the table, thereby causing a Quality suspension, despite the apparent possibility to do otherwise? Although choices of whether to present something as new or given must be implicit in any theory involving QUDs, we are unaware of any explicit treatment in the literature, and as a consequence we can, within the scope of this paper, only mention some factors that one would expect to play a role. One such factor is that a speaker who introduces a new QUD (or presents the QUD as new) may give the impression of being themselves interested in resolving the question, i.e., the impression that the requested information will serve some extra-conversational goals of the speaker (as opposed to small talk, for instance). Another factor is that presenting a QUD as already given may serve to highlight its relation to some prior event. A third factor could be that a Quality suspension in itself offers certain secondary advantages, e.g., a rising declarative may be a good means for expressing bias without making this the main point (as opposed to, e.g., "It is probably raining"). Other factors that may influence a speaker's choice are, e.g., the salience/wetness of A's umbrella (as [Gunlogson \(2008: p.120\)](#) notes) – the wetter, the more difficult it will be to present the QUD as new – and perhaps whether A appears (to B) to be aware of potentially having evoked the question of whether it is raining. Leaving many details for future work, it seems plausible that a speaker in (17) could have some reasons, not explicit in the context description, for presenting the QUD as given rather than new despite the Quality suspension this brings about – and for present purposes this suffices.¹⁸

¹⁸ A similar flexibility in the speaker's choice of QUD can explain why sometimes both rising and falling declaratives appear to be fine – but only in cases where the suspended maxim would be Quantity or Relation, which depend on the QUD (unlike Quality). For instance, an anonymous reviewer notes that in example (2), repeated here, a falling declarative would also have been fine:

(2) M.L.: (*to a receptionist*) Hello, my name is Mark Liberman. (H%) (L% would also be fine)

Let us suppose that, as we tentatively suggested in the introduction, the suspended maxim here is Quantity, i.e., the speaker is (or feigns to be) unsure as to whether it entails all propositions in the QUD that the speaker takes to be true. A plausible QUD with which this may occur would be, e.g., "How may I help you?". The fact that a falling declarative appears to be fine suggests that pursuing a less demanding QUD was also an option here, e.g., "What is your name?", relative to which the utterance

According to Gunlogson (2003, ch.4) any context that licenses a rising declarative also licenses its interrogative counterpart (barring some exceptions involving metalinguisticness that we can set aside). Although we predict that this may appear to be the case – context descriptions as in (1) appear to offer the speaker a choice as to whether to present the QUD as new or as given – in reality the speaker’s choice is of course expected not to be random, but to be determined by various subtler features of the context and the speaker’s goals that happen to be left implicit in most context descriptions. It is impractical and perhaps impossible to extend the context description in (17) with all subtle cues that may make a difference. What we can do, however, is modify the example so as to make it difficult for B to genuinely intend the QUD as new:

(18) (*B sees A enter the room with an umbrella; C is also in the room, but doesn’t notice A entering.*)

C: Hey B, you might know this: what’s the weather like?

a. B: It’s raining? (H%) (But you could ask A over there to make sure.)

b. B: ? Is it raining? (You could ask A over there, who just entered.)

We think that (18a) is perfectly fine, and certainly preferred to (18b), which seems to us rather uncooperative in normal circumstances (in a way that even B’s friendly subsequent advice for C to ask A cannot really compensate for). Of course our judgments do not constitute a definitive empirical assessment, so let us merely highlight this example as an important test case for future work: if our judgments turn out to be representative, it would be exactly the sort of counterevidence to the distributional claim in Gunlogson 2003 that our account predicts should exist. Note that this prediction stems from a rather minimal (albeit wordy) assumption, i.e., assumption 6, which may be hard to avoid regardless of one’s precise account of rising declaratives.

Question 2: other alternatives The remaining question, recall, is whether, when there *is* contextual setup, there aren’t any alternatives that are preferred over suspending Quality, i.e., why rising declaratives of the Quality-suspending sort exist at all. To address this question, let us consider alternative ways of coping with a Quality/Relation

would have easily complied with all the maxims. In line with the reviewer’s impression of the rising vs. falling declarative in (2), we speculate that the choice to address a more open-ended, uncertain QUD with a Quantity-suspending rising declarative, rather than addressing a more clearly delineated QUD with a falling declarative, may serve as a way of acknowledging the existence of some overarching goal and the addressee’s authority in establishing whether the speaker’s contribution suffices for that goal.

clash. Within the framework outlined in section 3 there are three main, cooperative ways:

- (a) suspend one of the clashing maxims;
- (b) opt out of the information-governing maxims, refraining from making an informational contribution;
- (c) opt out of the problematic QUD altogether, changing the topic to a (somehow related) QUD relative to which there is no clash (or a less problematic one).

As we explained in section 3 we will set aside maneuvers involving pretense or flouting, which are pragmatically less ordinary; we will discuss only the three options (a), (b) and (c). What we need to explain is why these may not always be suitable alternatives to a rising declarative.

Option (a), to suspend one of the clashing maxims, may seem to suggest that suspending or knowingly violating Relation would be a valid alternative to suspending Quality, but this is only really the case if the relative importance of the maxims and the strength of the bias, which would normally yield a preference for suspending one over the other (as argued in section 4.2), are *exactly* balanced, a type of coincidence that we can set aside without real loss of generality.

Option (b), opting out of making an assertion, is what we assume would normally be conveyed by interrogative syntax (section 3). We have already argued that this isn't a valid alternative to a rising declarative in cases where the speaker intends to present the QUD as being already on the table. That leaves only option (c).

Option (c) is more difficult to cover, given that there are in principle infinitely many QUDs to shift to. We will consider a number of conceivable types of QUD shifts, but because to our awareness no sufficiently precise pragmatic theory of QUDs exists we must leave a more systematic discussion for future work. Common QUD shifts are, for instance, from a QUD that has been resolved to a QUD asking for elaboration (e.g., "How come?" or "How do you know this?") or continuing the narration (e.g., "And then what happened?"), but these are not applicable in the relevant examples, where the problem is precisely that the first QUD cannot be resolved (a Quality/Relation clash). We can think of three types of QUD shifts that can occur in this case. The first is to simply change the QUD to something unrelated (e.g., "Hi A, how's your mother doing?"), which may be an option if the prior QUD wasn't really that interesting or pressing to begin with, but otherwise will not be a reasonable, cooperative maneuver. Two more constrained shifts are from the problematic QUD to a *strategic* sub-QUD

(Roberts 1996), and from the problematic QUD to a QUD about one's epistemic state, i.e., the kind of shift that warrants answering a question with, e.g., "I don't know". In a situation like (1) neither of these two shifts seems particularly natural:

- (19) (*B sees A enter the room with an umbrella. B intends the main QUD to be "Is it raining?"*.)
- a. ? B: You brought an umbrella... / Why did you bring an umbrella?
 - b. ? B: I don't know if it's raining. / It's probably raining!

The reason these are slightly off, we think, is that these kinds of shifts are premature if the possibility exists that one of the interlocutors *can* directly resolve the prior QUD – here it is only speaker B who is known to run into a Quality/Relation clash, after all. That is, no strategy is required until no other discourse participants can directly resolve the prior QUD either; and whether something is probable or not isn't really interesting unless it is known that no greater certainty can be achieved. Much remains to be investigated, but we hope to have made plausible that shifting a QUD isn't always a suitable option, i.e., that a speaker may have reasons for suspending Quality rather than shifting the QUD. If our account of rising declaratives is correct, then the distribution of rising declaratives will provide an important window on what exactly these reasons may be – but a further exploration of this issue must be left for future research.

We have tried to cover the alternatives to a rising declarative quite systematically by considering the three main ways of coping with a clash. An alternative approach is just to look at some concrete utterances that differ from a rising declarative in some minimal way, e.g.:

- (20)
- a. B: It isn't raining? (H%)
 - b. B: It's raining. (L%)
 - c. B: It's raining, isn't it? (H%)
 - d. B: It's raining, is it? (H%)

Of these, (20a) is not a suitable alternative to a rising declarative because it expresses the wrong bias (in favor of it not raining), and neither is (20b), because, according to assumption 1 (from Westera 2014, and also in line with, e.g., Gunlogson 2003) it expresses full commitment to the fact that it is raining, neither of which is compatible

with the sort of epistemic state that licenses a rising declarative of the relevant sort.¹⁹ With regard to the ‘reverse-polarity’ tag question in (20c), we follow Malamud & Stephenson (2015) and Farkas & Roelofsen (2017) in assuming that it expresses a stronger type of commitment than a rising declarative, roughly like a plain falling declarative followed by an invitation to agree. This was apparent from example (5), and it also explains why, if the context description makes clear that there can be a bias but no real commitment, the rising declarative is fine but the tag question is strange (example (2) from Malamud & Stephenson 2015):

- (21) (*A doesn’t know anything about B’s neighbor. B says, blushing, “You’ve got to see this picture of my new neighbor!”.* **Without looking**, A replies:)
- a. A: He’s attractive? (H%)
 - b. (?) A: He’s attractive, isn’t he?
 - c. A: He’s attractive, is he?

Lastly, the ‘same-polarity’ tag question in (20d) does express a similar lack of commitment as a rising declarative, as suggested by the felicity of (21c). But, as Malamud & Stephenson (2015) note, same-polarity tag questions function more like guesses concerning the addressee’s knowledge or opinion, and are strange if the addressee doesn’t seem to have such an opinion (their (5)):

- (22) (*A and B are sorting paint cans into a “red” bin and an “orange” bin. B points to orangish-red paint and says, “What color would you say this is?”.* A replies:)
- a. (?) A: It’s red, is it? (H%)
 - b. A: It’s red? (H%)

This suggests that whereas rising declaratives express a speaker bias simply in favor of the proposition expressed being true, same-polarity tag questions express a speaker bias in favor of *the addressee’s thinking that* the proposition expressed is true (see Malamud & Stephenson 2015 for a possible implementation). Perhaps same-polarity tag questions can be understood as an alternative way of indicating a Quality suspension

¹⁹ To clarify: falling declaratives like (20b) (and something similar will apply to (20c)) *can* be used by speakers with the sort of epistemic state that would normally license a rising declarative, but only in contexts where the Quality threshold (Davis et al. 2007), i.e., the standard for certainty, can reasonably be understood as being lower than usual, such that even a mere educated guess can be deemed to comply with Quality – we saw a possible example of this type of situation, “You got a haircut?” in footnote 15.

that, in addition, qualifies the type of bias (perhaps similarly to evidentials, see below). We can speculate about the various reasons a speaker may have for expressing one type of bias rather than another, but what matters for present purposes is that all alternatives in (20) are either subtly or more substantially pragmatically different from rising declaratives, such that they aren't always suitable alternatives to a Quality-suspending rising declarative.²⁰

Lastly, possible alternatives to a rising declarative are hedges like “allegedly...” and “it seems to me that...”, as well as modal verbs and adverbs, like “probably” in (19b). In our discussion of (19b) we assumed that “probably” contributes to the main, asserted (or ‘at issue’) content of the utterance, making it an epistemic statement and hence presupposing a shift to a QUD about the speaker’s epistemic state – and a similar analysis could be appropriate for other hedges as well. But perhaps hedges are, in certain circumstances, best analyzed as making a *non-at-issue* contribution, like evidential markers cross-linguistically (e.g., Murray 2010). For instance, perhaps the main content of (19b) is simply “it is raining” (which would not require a QUD shift), with “probably” serving only as a comment on the pragmatic status of this main content, much like a final high boundary tone. We do not know whether such an analysis would be plausible for English hedges. But if so (and, if not, then at least with regard to languages that do have genuine evidentials) let us note that such expressions wouldn't be alternatives to suspending Quality, but, rather, alternative ways of *indicating* a suspension of Quality. They may differ from a final rising pitch in conveying, besides a Quality suspension, additional, more fine-grained information about, e.g., the likelihood of the main content being true (the strength of the bias), the sources of evidence, or the reasons for doubt. If so – but this becomes rather speculative – then it may be reasonable to expect that intonational compliance marking will generally be preferred for reasons of conciseness, with more explicit hedges being used only if more fine-grained information about the suspension is called for, or, conceivably, for reasons of politeness.

²⁰ To clarify, multiple alternatives may of course appear felicitous in one and the same example, namely if the context description does not explicate the factors relevant to the speaker’s choice among the alternatives, e.g., the strength of the speaker’s bias, the Quality threshold, and whether the addressee is expected to be opinionated.

4.4 Summary

Altogether, our account can be summed up as follows: a rising declarative of the relevant sort is predicted to be fine if and only if the speaker wishes to address some QUD that yields a Quality/Relation clash, compliance with Quality is not known but deemed sufficiently likely (speaker bias), and the speaker intends to present the QUD as being already on the table (we listed some possible reasons why), where the latter typically requires contextual setup. We explained the question-likeness of rising declaratives (aspect (i)) pragmatically in terms of the lack of speaker commitment that accompanies a Quality suspension. We explained the speaker bias (ii) in terms of the greater importance of Quality compared to Relation: one would not suspend Quality unless compliance is deemed sufficiently likely. We explained the required contextual setup (iii) by arguing that, without it, interrogatives are a preferred way of coping with a clash, for these serve precisely to introduce new QUDs. We also offered a partial account of why rising declaratives exist at all, namely by means of a reasonably comprehensive but inevitably non-exhaustive discussion of other possible ways of coping with a clash, explaining why these may not always be suitable alternatives.

5 Comparison to existing accounts

There is considerable variation among existing accounts of rising declaratives of the relevant sort. This is in part due to the use of different frameworks. Just to give an impression – we will discuss these in more detail shortly – the accounts of [Gunlogson \(2003; 2008\)](#), [Nilsenova \(2006\)](#) and [Malamud & Stephenson \(2015\)](#) are framed in a ‘dynamic’ semantic/pragmatic framework, which describes the meaning of an utterance in terms of its requirements and effects on a context; the approach of [Farkas & Roelofsen \(2017\)](#) combines this with ‘inquisitive semantics’, according to which the semantic meaning of declaratives and interrogatives alike may comprise both ‘informative’ and ‘inquisitive’ content; and the approaches of [Trinh & Crnič \(2011\)](#) and [Krifka \(2017\)](#) rely on ‘speech act operators’ like ASSERT and REQUEST in the semantics. Some variation is due also to different assumptions about the nature of intonational meaning. Most approaches treat intonation as modifying not the main, at-issue content of the utterance but only the pragmatic effects of the utterance, which some implement by having rising intonation insert or modify a ‘speech act operator’ in the semantics ([Trinh & Crnič 2011](#); [Krifka 2017](#)) and others by specifying a separate, ‘non-at-issue’ meaning for rising

intonation and/or a set of felicity conditions (Gunlogson 2003; 2008; Truckenbrodt 2006; Malamud & Stephenson 2015), akin to our approach. In contrast, Nilsenova (2006) treats rising intonation as contributing a wide-scope epistemic possibility modal (akin to “might”) to the main semantic content, and Farkas & Roelofsen (2017) treat rising intonation as effectively turning the main semantic content of a declarative into that of a question, namely, a set containing the proposition expressed and its negation.

As we mentioned in the introduction, our central assumption about intonational meaning (assumption 1, from Westera 2014) can be understood as explicating, in a particular way, the common assumption that rising intonation marks an utterance as being pragmatically ‘incomplete’, ‘forward-looking’, etc. (Bolinger 1982; Pierrehumbert & Hirschberg 1990; Bartels 1999 and many others): if a maxim is suspended, then some further information is required about, e.g., the truth or relevance of the utterance, before its contribution to the dialogue can be fully understood, say, before the common ground can be definitively updated. (Though recall from section 3 that our restriction to the maxims isn’t vacuous, as it excludes constraints on the choice of QUDs, for instance.) The basic idea that intonation would serve to mark (non-)compliance with some subset of constraints on dialogue does not necessarily commit one to the particular, maxim-based framework that we have adopted. Depending on one’s framework, pragmatic ‘incompleteness’ could be explicated in terms of, e.g., failing to definitively update the common ground (Gunlogson 2008; Malamud & Stephenson 2015, see below), or requiring some subsequent utterance to complete the discourse tree (cf. Schlöder & Lascarides 2015). As long as a given framework shares assumption 2, i.e., that dialogue can be understood as the outcome of speakers trying to maximize expected compliance with a set of constraints, and is in principle expressive enough to cover the same empirical ground, our account of rising declaratives should be implementable in each of them. However, the subset of constraints to which intonation would be sensitive may not constitute an equally natural subset of constraints in every framework, hence considerations of modularity or explanatory potential could favor a maxim-based framework over the others. But we will not explore this further at present.

Previous accounts differ also in their intended empirical scope. The intended scope of the current paper aligns with that of Gunlogson 2003, Nilsenova 2006 and Gunlogson 2008, namely, rising declaratives of the relevant sort, embedded in a more general understanding of declaratives, the meaning of rising intonation and pragmatics. Pierrehumbert & Hirschberg (1990) and Bartels (1999), as well as Westera (2014), from which we took assumption 1, offer more general theories of intonational meaning, but

without providing detailed accounts of, say, rising declaratives of the relevant sort. The account of rising declaratives in [Truckenbrodt 2006](#) is part of a broader theory of the semantic meanings and discourse effects associated with the different sentence types (in German). Lastly, [Malamud & Stephenson \(2015\)](#) and [Farkas & Roelofsen \(2017\)](#) aim to model in a single framework the discourse effects not only of rising declaratives but also of interrogatives and tag questions, which we discussed only briefly in the previous section, namely as potential alternatives to a rising declarative.

Despite the aforementioned variation there is considerable overlap among previous accounts in how they aim to explain the question-likeness of rising declaratives and their badness out of the blue; though explanations of the speaker bias vary more considerably. Below we will discuss and compare these explanations in a way that is mostly independent of the aforementioned differences in framework, the supposed nature of intonational meaning and intended scope. As we will see, our explanation of the question-likeness of rising declaratives aligns with most previous accounts, but offers a more precise characterization of how rising declaratives of the relevant (i.e., Quality-suspending) sort relate to other kinds of rising declaratives. Our explanations of the speaker bias and badness out of the blue are more novel, and we will highlight some potential challenges for previous approaches that our explanations help overcome. A recurring theme in what follows will be that existing accounts rely on stipulations specific to rising declaratives (though sometimes guised as what seem to be more general assumptions) where we rely more on, we think, mostly uncontroversial assumptions about pragmatics in general.

Previous accounts of the question-likeness of rising declaratives Most accounts of rising declaratives, including the current one (assumption 3), follow the ‘true-to-form’ approach of [Gunlogson 2003](#) in taking them to be assertions at heart (e.g., [Truckenbrodt 2006](#); [Nilsenova 2006](#); [Gunlogson 2008](#); [Trinh & Crnič 2011](#); [Malamud & Stephenson 2015](#)). Exceptions are [Krifka \(2017\)](#) and [Farkas & Roelofsen \(2017\)](#), who treat rising declaratives as expressing requests or questions. These non-true-to-form approaches encode the question-likeness of rising declaratives directly in the semantic contribution of rising intonation. The true-to-form approaches, in contrast, seek to account for the question-likeness of rising declaratives more indirectly: rising intonation would serve to signal a lack of speaker commitment to the proposition expressed, and this lack of commitment would naturally invite any more informed audience to step in. The latter corresponds to how we explained the question-likeness.

Among the true-to-form approaches, which treat rising declaratives essentially as assertions, different accounts exist of how the rising intonation would signal a lack of commitment. Truckenbrodt (2006) simply stipulates this to be the effect of rising intonation on declaratives, and similarly for Gunlogson (2003) and Trinh & Crnić (2011), who treat rising intonation as signaling that not the speaker but the addressee is committed to the proposition expressed. Nilsenova (2006) tries to derive it pragmatically from a slightly weaker contribution, namely the epistemic possibility modal: considering something possible does not entail a lack of commitment, it only pragmatically implies it (in certain cases). Nilsenova motivates this weakening in terms of examples like (2) (“My name is Mark Liberman?”), for which a lack of commitment to the truth indeed seems inadequate – though let us note, in line with Trinh & Crnić’s criticism of Nilsenova’s account, that “My name might be Mark Liberman.” is not an adequate paraphrase of (2) either, and similarly for other rising declaratives (as Nilsenova acknowledges). Closer to the present account, Gunlogson (2008) conceives of the lack of commitment as a ‘contingent commitment’, i.e., a commitment pending subsequent ratification by the addressee, which she regards, in order to cover examples like (2) (as well as (3) and (4) for that matter), as a special case of the more general function of rising intonation as marking an utterance as ‘contingent’, and Malamud & Stephenson (2015) assume essentially the same.²¹

Neither Gunlogson (2008) nor Malamud & Stephenson (2015) explicate the various respects in which an utterance could be ‘contingent’ (much like earlier approaches in terms of ‘incompleteness’, ‘forward-lookingness’, etc.), and as a consequence their predictions regarding which types of rising declaratives exist and how an audience can identify a rising declarative as being of the (in current terms) Quality-suspending kind are not very precise. Gunlogson (2008) proposes that various contextual factors may reinforce a question-like interpretation of rising declaratives, one example of which would be a contextually obvious knowledgeability on the side of the addressee. Malamud & Stephenson (2015) assume instead that the question-like interpretation of a rising declarative arises by default, with other interpretations arising only if the context makes the default interpretation sufficiently implausible. But without a clear specification of the factors that may make the various interpretations more or less plausible (which presumably include paralinguistic cues), neither proposal gives us much more than the truism that ambiguity resolution is a matter of considerations of plausibility. In

²¹ What Gunlogson (2008) calls a ‘contingent commitment’, Malamud & Stephenson (2015) spell out as a ‘projected commitment to the truth of the proposition expressed’; what Gunlogson calls ‘contingent’, Malamud & Stephenson spell out as ‘projected commitment to the pragmatic felicity of the utterance’, of which truth would be one aspect.

comparison, by identifying the relevant respects of ‘incompleteness’ (or ‘contingency’) with an explicit set of maxims, we were able to state exactly in which circumstances each of the maxims can reasonably be suspended (i.e., the range of clashes). This enabled us to characterize more precisely which background assumptions are necessary (if any, given paralinguistic cues; section 4.1) for identifying a rising declarative as being of the Quality-suspending kind.

Previous accounts of the speaker bias To our awareness four types of explanations of the speaker bias have been proposed: Truckenbrodt 2006, Nilsenova 2006, Gunlogson 2003 (adapted in Trinh & Crnić 2011) and Gunlogson 2008 (adopted in Malamud & Stephenson 2015). We will briefly discuss each.

Truckenbrodt (2006) proposes to derive the bias from the fact that declaratives express a desire for the proposition expressed to become common ground, a fact which, to our understanding, is typically captured by the maxim of Relation (also in our approach): the propositions in the QUD are the ones considered worth making common ground. But desirability does not entail probability – some of our wishes are unlikely to be fulfilled – so it seems that desirability alone does not suffice to predict an epistemic bias. Now, one could perhaps simply stipulate that the desirability expressed by declaratives is of a special kind, one which does entail sufficiently probable realizability, but this would essentially amount to simply stipulating a bias rather than, as we have tried, explaining it (in our account, recall, the bias directly reflects the greater importance of the maxim of Quality compared to Relation). Besides this concern of explanatory value, an empirical challenge is signaled by Nilsenova (2006), albeit in response to Gunlogson 2003 (see below); Nilsenova notes that, in the following example from Gunlogson 2003, B appears to be merely stating a likely hypothesis, without necessarily expecting A to know more about it than B herself (example (22) given earlier showed something similar):²²

²² An anonymous reviewer notes that (23) becomes a bit strange if it is clear that A doesn’t know, e.g.:

- (i) A: I don’t know when he’s going to leave, but he’s going to leave before midnight.
- B: He’ll miss the toast at 8pm then?
- A: I don’t know.

B appears to have missed or ignored A’s initial statement of ignorance. This mild strangeness is expected, given that conversational goals should be considered potentially achievable (our assumption 4). What (23) and (i) jointly show is that goals are normally considered potentially achievable, but that, as Nilsenova (2006) notes, achieving them need not be considered likely.

- (23) A: John has to leave early.
 B: He'll miss the party then? (H%)

This appears to be a case where speaker B considers the proposition sufficiently likely, but doesn't necessarily consider it likely that it will become common ground (for safety, let us imagine that A and B themselves aren't actually at the party, hence won't find out when John leaves). In light of this, Truckenbrodt's attempt to derive sufficiently likely truth from sufficiently likely achievability (and this, in turn, from desirability) appears not to be on the right track.

A different explanation is proposed by Nilsenova (2006), based on the assumption that the proposition expressed by a rising declarative (minus, on her account, the epistemic modal operator contributed by the rising intonation) must not be already common ground, i.e., a conversational maxim against redundancy. However, her derivation of the bias from this assumption is not entirely clear. As Trinh & Crnić (2011) note, an unlikely proposition may well be non-redundant in the sense intended by Nilsenova (we refer to Trinh & Crnić 2011 for a more technical proof).

Gunlogson (2003) assumes that rising declaratives commit not the speaker but the addressee to the proposition expressed, and considers this to be equivalent to expressing a bias: she defines a context as biased towards a proposition if and only if at least one interlocutor is already committed to the proposition. It is not clear that this is a reasonable definition: in case of two disagreeing interlocutors, for instance, one could be committed to a proposition and the other to its negation, canceling each other out, as it were. A more concrete empirical challenge is, again, (23) above, where as noted by Nilsenova (2006) the type of asymmetry assumed by Gunlogson is lacking – and see Trinh & Crnić (2011) for similar arguments against Gunlogson's assumption that the utterer of a rising declarative must take the addressee to be already committed. Trinh & Crnić seek to avoid this problem by assuming that assertions are mere *proposals* for updating the common ground, and that, hence, rising declaratives are mere *proposals* for the addressee to commit. However, this reasoning seems to confuse a proposal to make something common ground (i.e., an assertion) with a proposal to make something the case (e.g., a command or request) – and their assumption that rising declaratives are of the latter kind would go against the true-to-form thesis on which Trinh & Crnić's is centrally based.

Gunlogson (2008) herself also drops the 'addressee commitment' component of her earlier account. Gunlogson (2008) treats rising declaratives of the relevant sort as

expressing a ‘contingent commitment’, i.e., they automatically commit the speaker *provided* some subsequent interlocutor commits (this is essentially adopted in [Malamud & Stephenson 2015](#)). To account for the speaker bias she assumes that contingent commitments, just like actual commitments, require some evidence in their favor. But it is not clear to us why contingently committing to a proposition would require evidence, e.g., “I have no idea, so I will believe whatever you tell me.” seems to us an explicit report of a contingent commitment, and it is perfectly fine despite the fact that (or: precisely because) the speaker herself is completely ignorant. Hence, for Gunlogson’s explanation to work it must rely on an un-ordinary notion of contingent commitment, namely one which has a built-in requirement of evidence. As such, it seems to us that Gunlogson’s account basically stipulates, albeit in two steps, that rising declaratives express a bias, rather than explaining it.

The foregoing approaches all belong in the ‘true-to-form’ category. As for the non-true-to-form approaches, to our awareness no explanation of the bias has been proposed. The account in [Krifka 2017](#) is not worked out in detail, as a consequence of which, as [Farkas & Roelofsen \(2017\)](#) note, it is unclear what it predicts in this regard. [Farkas & Roelofsen](#) themselves do not predict a speaker bias, and intentionally so: as we mentioned in section 2, [Farkas & Roelofsen](#) take examples (12)-(15) to show that rising declaratives of the relevant sort do not generally express a speaker bias. We explained why we did not go along in their argument, favoring an analysis of such examples in terms of pretense or metalinguisticness instead. In any case, following [Gunlogson 2008](#), [Farkas](#) and [Roelofsen](#) do assume that a rising declarative requires some evidence in favor of the proposition expressed. But they do so only to explain the badness out of the blue (see further below); to avoid predicting a bias they assume that the speaker need not have any ‘credence’ in the evidenced proposition, i.e., that in the case of rising declaratives credence is ‘at most low’, i.e., zero to low (as opposed to ‘high’ for tag questions in their account). It is worth noting that [Farkas & Roelofsen](#) partially motivate the requirement of evidence (albeit not necessarily credence) by arguing that rising declaratives are ‘marked’ (by which they mean “formally[/verbally] more complex or [...] more prone to misinterpretation” than falling declaratives or rising interrogatives, p.14), and assuming that marked expressions must have ‘special discourse effects’, which in the case of rising declaratives would happen to be the requirement of evidence with at most low credence. Although they assume a similar (though not identical) markedness effect for tag questions, which increases the relative parsimony of their approach, they do not explain why markedness would have this special effect rather than any other, i.e., it seems to be a stipulation intended purely for empirical coverage.

A challenge for Farkas and Roelofsen is that, while having ‘at most low’ credence is in principle compatible with a bias (for even the tiniest amount of credence means that one is not totally ignorant), Farkas & Roelofsen do not seem to predict a bias in examples where there does appear to be a genuine one. This also means that their account predicts that the rising declarative in (6), repeated here, should be fine:

(6) *(The weather’s been very variable lately. Gina to her officemate Harry, whom she sees reading the weather forecast:)*

G: Harry, please enlighten me. John told me it would be sunny, Mary that it would rain, and I haven’t read a forecast in days! I have no idea...

- a. ...is it supposed to be good this weekend?
- b. (?) ...it’s supposed to be good this weekend? (H%)

The rising declarative seems to us strange, recall, unless, as noted by a reviewer, this is construed as a guessing/quiz context (see (16) given earlier). But Farkas and Roelofsen’s account predicts this to be fine because Gina’s complete ignorance is compatible with her having some evidence without credence, e.g., in this case because she happens to have equal evidence for and against.²³ As when we introduced example (6), let us stress that a more proper empirical assessment of cases like (6) is needed; it is a case where the predictions of our accounts differ.

Previous accounts of the badness out of the blue We mentioned in section 2 that several authors conflate the badness out of the blue of rising declaratives with the speaker bias (Gunlogson 2003; Trinh & Crnić 2011; Malamud & Stephenson 2015); but we followed Poschmann (2008) and Gunlogson (2008) in assuming that they are distinct. Still, to our awareness only one line of explanation exists in the literature. No previous work tries to explain the badness out of the blue, as we did, in terms of a kind of competition between rising declaratives and interrogatives.

Gunlogson (2003) tries to explain the badness of rising declaratives out of the blue in terms of her ‘contextual bias condition’, i.e., that in the discourse the addressee is

²³ Although we agree with Farkas and Roelofsen that a speaker can have evidence for a certain proposition but still be completely unbiased about whether it is true (i.e., zero credence), we believe that this can only be the case if there happens to be equally strong evidence against the proposition, which is how we have set up (6). In contrast, Farkas and Roelofsen assume that there can be evidence without credence even without such counter-evidence, which means that their notion of evidence might be more properly called “apparent evidence”.

already publicly committed to the proposition expressed. Gunlogson (2008), despite acknowledging that the speaker bias need not be contextual, in the end pursues a similar explanation, albeit on the basis of a slightly weaker assumption: that declaratives are acceptable only to the extent that the discourse context is consistent the speaker's having some evidence for the proposition expressed (p.120).²⁴ Trinh & Crnić (2011), to our understanding, do not explicate an explanation for the badness out of the blue (although they do discuss this aspect of rising declaratives). Malamud & Stephenson (2015) adopt Gunlogson's (2008) approach essentially unchanged. Lastly, Farkas & Roelofsen (2017) also adopt Gunlogson's approach, but with the modification, discussed above, that evidence may have zero credence – this avoids predicting a bias, but otherwise it plays the same role as in Gunlogson 2008 and Malamud & Stephenson 2015.

To our understanding, these explanations of the badness out of the blue all face a similar shortcoming. They do not in fact predict that the rising declarative in our initial 'out of the blue' example is infelicitous, i.e., (7) from section 2:

- (7) (*Gina to her officemate Harry, with no contextual setup:*)
- a. Is the weather supposed to be good this weekend?
 - b. (?) The weather's supposed to be good this weekend? (H%)

Take, for instance, Gunlogson's (2008) proposal, that the context should be consistent with Gina having some evidence for the good weather – this is the case in (7): Gina may well have read a long-term weather forecast yesterday. This is also shown, for instance, by the fact that a falling declarative would have been fine, as well as biased interrogatives, as Gunlogson (2008) notes. The problem is that, contrary it seems to Gunlogson's intention, her assumption falls short of ensuring that the evidence itself should come from the context. Gunlogson's earlier proposal (2003), in terms of discourse commitments, faces a similar challenge. As Gunlogson herself notes, discourse commitments need not stem from the directly preceding context; they may well originate from an earlier conversation, or from a shared pool of background knowledge. Because of this, and because the description of the context in (8) does not rule out that Harry was indeed publicly committed from an earlier conversation, it should be possible to accommodate this information when evaluating (7b) – leaving its infelicity unexplained.

²⁴ Earlier Gunlogson (2008) considers "acceptable only to the extent that the context *supports* an inference" (our emphasis), but she explains why this is too strong.

In fact, [Gunlogson \(2003\)](#) relies on exactly this kind of accommodation in order to explain why the rising declarative is fine in (8), “The flight takes about three hours?”. She then tries to explain why accommodation would be possible in (8) but not in (7), by noting the asymmetry of authority in (8): she proposes that without such an asymmetry, as in (7), an audience would not be able to understand that the rising declarative is of the (in our terms) Quality-suspending kind, and resulting ambiguity would be what renders it infelicitous. But our impression is that ambiguity isn’t the problem with (7b): it seems sufficiently clear that Gina’s rising declarative is intended to be of the Quality-suspending kind, at least if we imagine appropriate paralinguistic cues (see section 4.1) – and clearer paralinguistic cues do not seem to improve it. Besides this impression, which we acknowledge cannot be a definitive empirical assessment, [Gunlogson’s \(2003\)](#) claim that rising declaratives are ambiguous out of the blue unless there is an obvious asymmetry of authority is essentially just stipulated, since she does not explicate which alternative interpretations of rising declaratives exist that would cause the ambiguity. In contrast, our account does provide a listing of the various uses of rising declaratives, as well as an understanding of when each use may occur (clashes), and it did not follow from our account that an asymmetry of authority was necessary, even without paralinguistic cues.

6 Conclusion and outlook

This paper presented a detailed analysis of a certain subclass of rising declaratives, namely those that, we claim, involve a suspension of the maxim of Quality. Our starting point was the proposal in [Westera 2013; 2014](#) that final rises indicate maxim suspensions, which we combined with a set of, we think, rather minimal assumptions about pragmatics (e.g., that Quality is more important than Relation; that interrogatives shouldn’t be redundant). The resulting account reproduces from more basic principles the core of certain existing accounts, namely a lack of speaker belief, but conceives of it differently: as a suspension of the maxim of Quality. This enabled us to offer new explanations for both the speaker bias expressed by rising declaratives and their badness out of the blue, namely by considering why a rational speaker would suspend such an important maxim rather than violating Relation, and rather than avoiding the problematic maxims altogether by asking an interrogative question instead. Important open questions and predictions that we highlighted concerned, foremost, our assumption that the relevant sort of contextual setup for rising declaratives is the opportunity to present the QUD as given, the purported metalinguistic or pretense status of rising declaratives

that lack a genuine bias, the precise relative importance of the maxims of Quality and Relation and the procedure for maximizing compliance, and the possible reasons speakers may have for presenting a question under discussion as given rather than new.

We conjecture that intonation on interrogatives has the same meta-pragmatic function as on declaratives, i.e., compliance marking. Nevertheless, our explanations concerning rising declaratives will not (and should not, empirically) generalize to rising interrogatives. The reason is that, as we assumed in section 3, interrogative utterances are not subject to the Gricean, assertion-governing maxims but to a different set of maxims that govern the cooperative asking of questions. Accordingly, rising interrogatives are expected to involve a suspension of these ‘question maxims’ instead. Such maxims could require, for instance, that one should request all and only propositions that one considers relevant and possible – in which case a final rise on an interrogative could convey, for instance, that other relevant, possible propositions may exist (in line, for instance, with the account of question intonation in [Biezma & Rawlins 2012](#)). We believe that such an approach could be fruitful, and that intonation could be used accordingly as a window on the pragmatics of questions, but we leave its exploration for another occasion.

Finally, we hope that our account will prove useful for the study of dialectal variation in rising declaratives as well as for the study of meta-pragmatic markers cross-linguistically. With regard to the former, one might conjecture, for instance, that the more habitual nature of rising declaratives in some dialects (‘uptalk’) originates not from a conventionalized pressure to sound more uncertain about the truth (Quality suspension) but rather from a conventionalized preference to sound as if the QUD potentially remains open (Quantity suspension), perhaps, as [Eckert & McConnell-Ginet \(2003\)](#) suggest, as a way of signaling that one wouldn’t mind continuing the topic. With regard to languages other than English, we conjecture that, if discrepancies between trying to maximize compliance and actually achieving it are worth marking in English, one would expect similar discrepancies to be worth marking in other languages, whether intonationally or, say, verbally, by means of discourse particles. Because of this, even though the inventory of available intonational phonemes (and morphemes) and discourse particles varies enormously across languages, and even though there might in principle be some cross-linguistic variation in how exactly the maxims are defined and how clashes are supposed to be coped with, we hope that certain elements of our approach can be applied to the analysis of meta-pragmatic markers cross-linguistically.

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