

## RESEARCH

## Rising declaratives of the Quality-suspending kind

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The theory of Intonational Compliance Marking (ICM) maintains that speakers of English use final rising intonation to indicate a suspension (potential violation) of a conversational maxim (Westera 2013; 2014). This paper aims to show that a certain kind of rising declarative, one which has been prominent in the literature (e.g., Gunlogson 2008), can be adequately understood in ICM's terms 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. In a nutshell, their question-likeness is derived from principles of general cooperative discourse, their bias from the relative importance of the maxim of Quality, and their badness out of the blue from a competition between rising declaratives and interrogatives. 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 Compliance Marking; bias; conversational maxim; 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) (*B sees A enter the room with an umbrella.*)  
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. I will refer to such utterances as “rising declaratives”, though I will sometimes add “of the relevant sort” because not all rising declaratives fall in the same subclass 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; I concentrate on their common denominator, the final high boundary tone (H%). I 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 the account proposed might provide useful handles for characterizing and perhaps in part explaining such variation.

I 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. *Intonational Compliance Marking*** (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 I will say, *suspends* a maxim (i.e., risks violating or knowingly violates it).

In Westera (2014) it is proposed 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*); see Westera (In press) for an application to *rise-fall-rise* intonation as a marker of secondary content. For present purposes this refinement can be set aside and we can remain agnostic about the contribution of accents; what matters for present purposes are the right boundary tones. I will call this general approach to English intonational meaning the **Intonational Compliance Marking** (or ICM) theory.

Assumption 1 of the ICM theory in fact aligns to a large extent 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 (cf. the treatment of hedges in Yule 1996, briefly discussed in section 4.3 below) – this relation will be explored a bit further in due course.

At first sight assumption 1 should appear 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 noted in Westera (2013), 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 by 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.<sup>1</sup> 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.

<sup>1</sup> This suggestion seems to resonate well with a characterization of “uptalk” given in Eckert & McConnell-Ginet (2003); I briefly return to this link in section 6.

While the foregoing suffices as a first illustration, the suggested understanding of these examples does not constitute a proper theory unless one is 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 ICM theory of Westera (2014) compares to accounts of rising declaratives in the more formal semantics literature (e.g., Šafářová 2006; Truckenbrodt 2006; Gunlogson 2008; Farkas & Roelofsen 2017). The present paper aims to resolve this difficulty by combining assumption 1 with certain minimal assumptions about pragmatics, resulting in a more detailed analysis of rising declaratives of the relevant sort (e.g., (1)). In particular, as I aim to show, an ICM-based 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 (though with important differences in their precise characterizations, see below): (i) that they (often) function much like questions, (ii) that they convey a 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 I will leave these for another occasion for reasons of scope.

**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 my 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 my account of the three features of rising declaratives of the relevant sort, based on assumption 1 from Westera (2014). Section 5 relates the proposed account in detail to existing accounts of rising declaratives of the relevant sort (e.g., Gunlogson 2003; Šafářová 2006; Truckenbrodt 2006; Gunlogson 2008; Trinh & Crnič 2011; Malamud & Stephenson 2015; Farkas & Roelofsen 2017; Krifka 2017). Section 6 concludes.

## 2 The empirical picture

How one subdivides the empirical pie, in this case the various types of rising declaratives, is in part a theoretical matter. The present paper proposes to subdivide rising declaratives based on which maxim suspension best accounts for each individual occurrence, and aims to provide a detailed account in particular of rising declaratives for which a suspension of the maxim of Quality offers the best explanation. This class of rising declaratives, while theoretically well-defined, is not empirically uniform, consisting of obvious and less obvious members that are tied together by family resemblance rather than any particular set of necessary and sufficient empirical properties. But certain central examples of this class, like (1), exhibit the following core properties that must be accounted for:

- (i) **question-likeness:** they function much like questions about the truth of the proposition expressed, e.g., they express speaker uncertainty with regard to the truth of the proposition expressed, and (if the addressee is deemed more informed) invite a “yes”/“no” response just like polar interrogatives;
- (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, namely, a preceding utterance or other event conceivable as having introduced the topic.

Below I will motivate this choice of core empirical properties to explain. First, note that this choice does not entail that all rising declaratives of the Quality-suspending kind *must*

have these properties. Rather, it commits me to two things, essentially two sides of the same coin: first, it commits me to demonstrating in detail that assuming a Quality suspension can adequately explain these core properties in cases where they do indeed arise; second, I must explain at least tentatively what is going on in cases where one or more of these core properties are missing, especially cases that do resemble “core” specimens like (1) in other respects.

Although something like the above core properties can be found in most characterizations of rising declaratives like (1) in the literature, accounts differ in their perceived or assumed centrality and exceptionlessness. For instance, Gunlogson (2008) defines the bias associated with rising declaratives, i.e., property (ii), in terms of discourse context rather than a single speaker’s expectations (following Gunlogson 2003), and seeks to explain this contextual bias as a side effect of the assumption that rising declaratives express a “contingent” speaker commitment (related to the lack of commitment listed here in property (i)). Moreover, Gunlogson’s understanding of property (iii), the badness out of the blue, is that what is required for a rising declarative to be felicitous is (the possibility) that the context is biased, rather than the prior presence of a topic as stated in (iii). More recently, Farkas & Roelofsen (2017) take property (i) to be essential, and do not aim to derive property (ii) at all, motivated by their observation that certain rising declaratives lack a speaker bias altogether. I will discuss some of these differences in how the empirical picture is understood in the present section, but postpone others to the detailed literature comparison in section 5. To clarify: in the current paper none of the three properties is considered exceptionless; they are merely deemed sufficiently central to the proposed class of Quality-suspending rising declaratives to warrant concentrating on them for reasons of scope, and to warrant treating counterexamples to the three properties as more peripheral and as (for the moment) demanding only a more tentative explanation.

Let me first illustrate the three core properties assumed, following most of the literature and without intending to make any novel empirical claims. Property (i), the question-likeness of rising declaratives, is widely noted, and it is evident in most examples in this paper including (1): the speaker expresses uncertainty with regard to the truth of the proposition expressed, and (if genuine) this invites a “yes”/“no” response from the person who entered. By contrast, the rising declaratives in (2), (3) and (4), even if they might feel “question-like” in some broader sense, at best raise questions not about the truth of the proposition expressed but rather about its sufficiency, relevance or clarity. To better understand the questioning force of rising declaratives of the relevant sort, an interesting example is the following (from (63) in Farkas & Roelofsen 2017, based on (3) in Malamud & Stephenson 2015), which compares it to various constructions in a context where a genuine question would be strange:<sup>2</sup>

- (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?

<sup>2</sup> I use small parenthesized question marks to represent judgments of pragmatic strangeness (as reported in the literature and/or by a small number of informants), as opposed to the harsher-looking “?”, “#” and “\*”, because all pragmatic oddities in this paper seem resolvable by imagining a less ordinary context, e.g., one involving an implicit preceding dialogue, a running gag, metalinguisticness, an externally caused change in topic, the unlikely absence of certain common sense knowledge, and so on. For instance, as a reviewer notes, both (5b) and (5c) become fine if a context is imagined in which sunset beauty is understood to be up for discussion, for instance one in which Belinda is color blind or for some other reason Chris is the acknowledged expert on the matter.

The rising declarative (5c) is strange here – about as strange as the interrogative (5b) – plausibly because (as pursued in Farkas & Roelofsen 2017) its questioning force is odd given the fact that people normally know whether they find a sunset beautiful or not. The example also shows that, as noted by Farkas & Roelofsen (2017), the rising declarative is more “question-like” than a tag question (5d) in this regard: the tag question doesn’t imply speaker uncertainty about sunset beauty, but functions more like a plain (committing) assertion followed by a mere invitation to agree (this will play a minor role in my account of property (iii) in section 4.3).

As for property (ii), the speaker bias, Gunlogson (2003; 2008) notes that rising declaratives are strange in contexts like police hearings or job interviews, in which the questioner is supposed to be (or at least to act) neutral (example from (4) in Gunlogson 2008):

- (6) *(In a job interview or on an application form:)*  
 a. Have you been convicted of a felony?  
 b. (?) You’ve been convicted of a felony? (H%)

And Gunlogson notes that tag questions, which are known to express bias, are likewise inappropriate here. Although the required neutrality in these kinds of contexts plausibly comprises more than just epistemic neutrality (also, e.g., deontic neutrality seems desirable), rising declaratives seem to conflict in particular with the epistemic part, e.g., (6b) would justify a shocked reply like “No! Why?! Does it say so in my report?”.<sup>3</sup> Besides contexts prohibiting the expression of bias for social reasons, the bias of rising declaratives is noticeable also from their strangeness in cases where the speaker is known to be ignorant, as in the following constructed example:

- (7) *(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, the rising declarative (7b) is reported by my informants as bad or slightly off.<sup>4</sup> If one assumes that appropriateness conditions on rising declaratives could be accommodated if compatible with the given context description, the strangeness of (7b) 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 me equally strange here.<sup>5</sup> Most authors have assumed what (7) is intended to show, i.e., the reality of aspect (ii) (e.g., Gunlogson 2003; Šafářová 2006; Truckenbrodt 2006; Gunlogson 2008; Trinh & Crnić 2011; Malamud & Stephenson 2015), and this aligns also with a cross-linguistic generalization by König & Siemund (2007) that in languages that have rising

<sup>3</sup> Note that the inappropriateness of (6b) does not demonstrate that the interviewer cannot in actuality expect (or even know) that the answer will be “yes”; it demonstrates merely that it would be inappropriate for the interviewer to express such a bias. This distinction seems important for explaining why, as an anonymous reviewer notes, a rising declarative is equally strange at a wedding ceremony, even though there a positive answer is generally expected: “You will take this man to be your husband?” is strange.

<sup>4</sup> An anonymous reviewer notes that (7b) improves considerably if one imagines it as a kind of guessing/quiz context. Such an improvement will indeed be predicted by my account; see section 4.3.

<sup>5</sup> 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 Buring & Gunlogson 2000; Gunlogson 2003; Sudo 2013; Northrup 2014; Malamud & Stephenson 2015; Farkas & Roelofsen 2017); I do not suppose that a single mechanism would be responsible for all types of biases.



declaratives in addition to interrogatives, the former tend to function as biased questions. An exception is Farkas & Roelofsen (2017), as I will briefly discuss further below.

Property (iii) of rising declaratives of the relevant sort is evident in the following example, essentially the converse of (7), where speaker bias is possible but contextual setup is denied (taken from example (6) in Gunlogson 2008):

- (8) (*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%)

Gunlogson notes that the interrogative (8a) is fine out of the blue while the rising declarative (8b) is strange. The felicity of (8a) means that the strangeness of (8b) 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 one 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 (8), e.g., “Isn't the weather supposed to be good this weekend?” (Gunlogson's (7)). Rather, it appears that the strangeness of (8b) 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 (8) 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 (8b) 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) description of that context to a reader, is sometimes overlooked in the literature on rising declaratives (see section 5); it will also matter in section 4.3 to clarify a certain prediction of my account.

As mentioned, some authors combine (something like) properties (ii) and (iii) in an assumption 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, and Gunlogson (2008) following her, 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):

- (9) (*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 (for more evidence see

Northrup 2014: 162). The only type of contextual setup present in (9) 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 2012; 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 (8) improves, or so it seems to me, if Gina sees Harry read the weather section in a newspaper, an observation which plausibly evokes the question of what the weather is like.<sup>6</sup> For more direct evidence, consider an example where the QUD is made explicit (but the source of the speaker bias is not contextual):

(10) *(B suspects, based on independent sources, that it is raining, but isn't sure. Without contextual setup, A asks:)*

A: Hey B, you might know this: what's the weather like?

B: It's raining? (H%) (But you may want to check the forecast to make sure.)

According to my informants this rising declarative is perfectly fine.<sup>7</sup> Hence, based on (9) from the literature, and as corroborated by (10), in this paper I will assume that the required contextual setup can be modeled in terms of the prior presence of an appropriate QUD.<sup>8</sup>

The issue of which QUDs are evoked by a given utterance or situation is of course very complex, but in the current paper my assumptions in this regard will be fairly minimal (for a more sophisticated treatment see Onea 2016). For instance, with regard to (9), it is important to note that one does not need to assume 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 (9) 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 I 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), among others) seems to be what a rising declarative requires, i.e., why they are bad out of the blue.

The empirical landscape is of course more complex than the foregoing could do justice do, as various pragmatic and/or conventionalized mechanisms may influence the surface properties of rising declaratives. For instance, speakers may in certain circumstances express a lack of belief to express, perhaps hyperbolically, surprise rather than genuine disbelief (e.g., "I can't believe my eyes!") hence a similar function is expected of rising declaratives, which on the present view are markers of disbelief as well (i.e., property (i)). This can account for rising declaratives that are in the literature sometimes called "incredulous questions" (e.g., "You're eating from the bin?!"; Gunlogson 2003). Another

<sup>6</sup> Gunlogson (2008) notes a similar improvement, but only with regard to a variant of (8) 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.

<sup>7</sup> One informant reports that more explicit markers of uncertainty would be more polite in (10), like "...I think" or "I'm not sure but...". Presumably this has something to do with the fact that the utterer of the rising declarative in (10), by contrast to the other examples, serves to answer a question posed by the other interlocutor (and fails to definitively do so).

<sup>8</sup> A reviewer notes that (10) is an example where no "yes"/"no" response is expected/invited, so perhaps it can be considered less "question-like" in this regard than other examples. My explanation for the question-likeness of rising declaratives (i.e., property (i)) will allow for such variation.

mechanism is that utterances can be metalinguistic, i.e., convey things not (just) about the literal denotation of the words used but about their (actual or hypothetical) usage, e.g., that their utterance would be based on a false presupposition, pronounced incorrectly, or impolite. Accordingly, any (lack of) speaker belief or epistemic bias that would normally be implied by a rising declarative, must when the words are used metalinguistically be reanalyzed as being about *uttering* those words, rather than (just) their literal meaning. The latter can account for instance for (some) echoic rising declaratives, like the following (Gunlogson 2003: 81):

- (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.

Given B's knowledge that John doesn't have a sister, B cannot be taken to express a bias in favor of John's having a sister – contrary it seems to property (ii). But a metalinguistic analysis would predict, correctly, that B is biased merely towards A having said or presupposed this.

If, following most of the literature, we wish to maintain property (ii) of rising declaratives in spite of examples like (11), then this may commit us to analyzing cases like (11) metalinguistically. By contrast, based on similar (but also in interesting respects different) examples, Farkas & Roelofsen (2017) propose instead to abandon property (ii); they propose that rising declaratives do not in general express speaker bias, and their account does not predict a speaker bias even for the examples that do seem to express one. The current paper is more conservative in this regard. For reasons of space, I cannot compare the two different understandings of the empirical picture in more detail in the present paper (though I will discuss Farkas and Roelofsen's account in detail in section 5), nor does space permit elaborating on how one may independently motivate that a rising declarative would be metalinguistic or hyperbolic, and what additional predictions such an understanding would generate (crucial for falsifiability). I refer to Westera (2017a) for some motivation for the approach taken here, but must leave a more thorough investigation to future work.

### 3 Pragmatic framework & the maxims

The current starting assumption about English intonational meaning, i.e., assumption 1 of the ICM theory, makes reference to the conversational maxims. This presupposes a perspective on conversation along the following lines, which seems to be 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 my account its empirical bite. My assumptions about constraints other than the maxims, in particular constraints on which goals can be pursued, will be quite minimal, and I will introduce them when relevant. As is common in the pragmatics literature, I assume that conversational goals are organized in *questions under discussion* (QUD; e.g., Ginzburg 1996; Roberts 1996/2012); 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, one must decide what speech act they primarily express. I follow Gunlogson's (2003) "true to form" arguments (see below) and assume that the primary speech act type of an utterance is, in English, reflected by syntactic form:

**Assumption 3.** Utterances of sentences with declarative syntax are technically assertions, i.e., 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" I 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 one tries to account for such pragmatic flexibility on the basis of a fixed, semantic backbone reflected by syntactic form. Indeed, the current paper 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 from the ICM theory.

The above "true to form" assumption is attractive given the straightforward mapping it maintains between syntactic forms and the primary, conventional speech acts they would express – though whether this kind of mapping is ultimately tenable depends of course on how it is combined with further assumptions about meaning and pragmatics to account for the relevant empirical phenomena (i.e., the aim of this paper). In further support of the "true to form" assumption, Gunlogson (2003: Chapter 2), lists various other ways (i.e., besides syntax) in which English rising declaratives pattern with falling declaratives rather than interrogatives. For instance, rising declaratives but not interrogatives permit the inclusion of bias markers like "of course" and evidentials like "apparently", and vice versa for negative polarity items like "any" and disjunctions like "...or not", which are fine in interrogatives but very odd in rising (or falling) declaratives.<sup>9</sup>

Since I assume that English rising declaratives are technically assertions, and since this notion will be delineated below in terms of the conversational maxims that govern them, the proposed account of rising declaratives will rely almost entirely on these maxims. In contrast, it will not matter so much what exactly questions are, i.e., what

<sup>9</sup> In apparent contrast to these empirical signs of assertionhood, Farkas & Roelofsen (2017) note that rising declaratives pattern more with interrogatives when they are quoted (their (27)). But since quotation changes the semantics of a sentence from its ordinary meaning to the sentence itself or its utterance, this is not surprising: we already knew that rising declaratives, as utterances, function much like questions, so it is natural to expect that they can be reported as such.

the question-governing maxims may look like (I will mention just one such maxim in section 4.3). However, it is worth noting that assumption 1 from the ICM theory isn't restricted to intonation on assertions (for an application to questions see Westera 2017a; Meertens et al. 2018).<sup>10</sup>

The assertion maxims defined here follow Grice's (1975) general proposal, but for certain details this definition borrows from more recent works, as will be clarified 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.

The maxims in this form are an informal paraphrase of the formalization offered in Westera (2016; 2017a). While informal, this version is sufficiently precise for explaining the three core properties of rising declaratives, as I hope to show. There are several differences compared to Grice's original definition. Some of these differences are merely terminological or reflect slight simplifications. For instance, a terminological difference is that I use the verb "assert" where Grice employed "say", in order to avoid a potential confusion between "say *and also mean*" (i.e., Grice's usage) and "(literally) say *and not necessarily mean*" (cf. Neale 1992). Other differences are more important for current purposes, but can still be regarded as merely superficial as far as Grice's original aims are concerned (i.e., offering a characterization of conversational cooperativity); none of the differences are substantive from that perspective. For this reason, and for reasons of space, I refer the reader to Westera (2017a) for a detailed discussion and motivation of these differences.

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 its 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). I 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 ease of speaking, I will adopt the following definition of a clash (slightly warping the ordinary usage of "clash" to have it apply also to single maxims):

**Definition 2.** A (possibly singleton) set of maxims  $M$  *clashes* if and only if the speaker is unable to comply with certainty with all maxims in  $M$  (simultaneously); and  $M$  *properly clashes* if and only if  $M$  clashes but no proper subset  $M' \subset M$  clashes.

<sup>10</sup> Various languages seem to distinguish questions from assertions not by means of syntactic form but (only) by means of intonation (for an overview of the realization of different speech acts cross-linguistically see König & Siemund 2007). Accordingly, the current two-factor account of English rising declaratives, which like Gunlogson's (2003) seeks to derive their features from the combination of rising intonation and declarative syntax, is not expected to apply to such languages.

With the definition of the maxims given above, it can be shown that all and only the following proper clashes are possible. A partial, informal proof sketch is given directly below; for a formalization of the maxims and detailed proofs of the range of clashes I refer to Westera (2017a). I label the sub-types with somewhat intuitive keywords for easy reference, i.e., one can refer to a “hopeless Relation-Quality clash”, a “contextual Manner clash”, etc.:

1. Relation on its own: if and only if there is no proposition that the speaker takes to be in the QUD with certainty;
2. Relation and Quality: if and only if the speaker...
  - i. is certain that no proposition in the QUD is true; (“hopeless”)
  - ii. is unsure which true propositions are in the QUD; (“QUD-uncertain”)
  - iii. or is unsure which propositions in the QUD are true; (“truth-uncertain”)
3. Relation and Quantity (and Quality): if and only if the speaker is unsure how much of her information is relevant;
4. Manner on its own or with any of the other maxims: if and only if ...
  - i. the interlocutors are not fluent in the language at hand; (“linguistic”)
  - ii. there is loud background noise; (“contextual”)
  - iii. or the information conveyed is particularly complex. (“contentual”)

Two things are worth noting. First, most of these clashes can occur only in particular circumstances; for instance, if clear communication isn’t compromised and the speaker knows exactly which propositions are in the QUD, then the only possible clash is between Relation and Quality, of the hopeless or truth-uncertain kind. Second, many (sets of) maxims don’t clash. Quality does not clash on its own, because to comply with Quality alone the speaker can always convey some arbitrary truth (e.g., a tautology) – it is only together with Relation that Quality may become difficult to satisfy. Quantity does not clash on its own because the speaker can simply convey something arbitrary that is sufficiently strong, such as a contradiction – it is only together with the other maxims that Quantity becomes more difficult to satisfy. The conciseness requirement of Manner doesn’t clash with any maxims because it requires merely that conciseness is maximized as far as ensuring compliance with the other maxims permits. And Quality and Quantity do not clash because given the way Quantity is defined, Quantity is never more demanding than what ensuring compliance with Quality permits. These are only brief, informal explanations/proofs; I refer to Westera (2016; 2017a) for a formalization of the maxims that aligns with the present informal definition, and to Westera (2017a) for formal proofs of the identified range of possible clashes and the circumstances in which each may occur.

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, one 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 (2012) 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)?”. Two additional types of maneuvers discussed by Grice are *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. I will set these types of maneuver aside, because they are appropriate discourse moves only in certain special circumstances (e.g., most of Grice’s examples of flouting are somewhat humorous).

## 4 Explaining the three features

### 4.1 (i) Question-likeness

In the introduction I suggested that rising declaratives of the relevant sort suspend the maxim of Quality. I 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 an audience to reply with “yes” or “no” if they can.

To see how an audience might figure out that the suspended maxim is Quality, 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 and observations, together with the definition of the maxims given above and the resulting range of possible 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 (again, for formal proofs see Westera 2017a).

All of this may seem a little tedious, but overlooking alternatives is arguably a cardinal sin in pragmatics, so let us continue. Following the 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 (not available in case of a “hopeless” clash, see below); 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 I assumed marks assertions. That leaves only option a.i., that is, suspending Quality: the speaker must not be sure that it is raining. It follows that the high boundary tone in (1) must indeed be blamed on a Quality suspension, as I announced in the introduction. Now, let us adopt the common assumption that the maxim of Quality is more important than the maxim of Relation (e.g., Grice 1975) – this will be made more precise in section 4.2 below. When taken together with assumption 2, this implies that a cooperative speaker should not violate Quality with certainty if violating a less important maxim is an option, which in this case would be Relation. Hence, the only way in which a speaker may cooperatively suspend Quality (i.e., option a.i.) is by considering truth uncertain, but not impossible (and it follows also that the responsible Quality/Relation clash must have been of the “truth-uncertain”, not “hopeless” type). Accordingly, from the foregoing assumptions it follows that the speaker in (1) must be unsure as to whether it is raining.

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%)
- (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 I 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 I found myself 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 I 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 I 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, since various authors have argued against this (e.g., Leech 1983; Horn 1989, and more recently Westera 2017b), 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 (2012), incorporated in her definition of "QUD" and also in her "pragmatics of questions". I 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. Summing up, by virtue of their 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. I 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). Rising declaratives invite a “yes” or “no” response more strongly because of the lack of speaker commitment they signal.<sup>11</sup>

#### 4.2 (ii) *Speaker bias*

I intend it to follow from assumption 2 not only that speakers will try to comply with all the maxims, but also that they, 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 me explain the speaker bias expressed by rising declaratives of the relevant sort, provided I 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 my awareness, uncontroversial (e.g., Grice 1975; Davis et al. 2007); the second part, “sufficiently so”, is crucial for explaining the bias, so let me clarify what I 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

<sup>11</sup> 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%)

I will not try to offer a definitive explanation of this question-like use of falling 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 guess might still demand a rise).

bias, will be higher if Quality is in fact more than three times as important as Relation. A more insightful fact: if one conceives 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: 371; see also Gunlogson 2011).

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 (I 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 one to – must be left for another occasion; but if the proposed account of the bias is on the right track, then rising declaratives of the relevant sort provide an important window on these more general questions in pragmatics.<sup>12</sup>

### 4.3 (iii) *Badness out of the blue*

I 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.<sup>13</sup> The relevant alternative in this case, I propose, is to utter an interrogative question, which as I 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 my 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.

<sup>12</sup> The relative importance of Quality and Relation can depend on the particular context of utterance, and the current account predicts that the presence and/or strength of the bias can vary accordingly. Indeed, an anonymous reviewer notes that a quiz variant of (7), where Gina is still uninformed but made to guess, the rising declarative becomes fine. Indeed, a quiz context is a typical case where violating Relation rather than suspending Quality, i.e., saying something true that doesn't address the QUD, is not really an option. That is, in a quiz Relation is more important than Quality, and hence no bias is predicted.

<sup>13</sup> I 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).

**Question 1: Why are interrogatives preferred out of the blue?** 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 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 I 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 seems difficult to avoid under any approach based on a similar conception of declaratives and interrogatives (i.e., similar to assumption 3). 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):

- (12) (*B sees A enter the room with an umbrella.*)
- a. B: It’s raining? (H%)
  - b. B: Is it raining?

The felicity of (12b) 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 (12a) 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, I am unaware of any explicit treatment in the literature, and as a consequence I 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 could conceivably influence a speaker’s choice are, e.g., the salience/wetness of A’s umbrella (as noted in Gunlogson 2008: 120) – 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 (12) 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.

According to Gunlogson (2003: Chapter 4) any context that licenses a rising declarative also licenses its interrogative counterpart (barring some exceptions involving metalinguisticness that we can set aside). Although the present account predicts 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 (12) with all subtle cues that may make a difference. What one can do, however, is consider an example where it is particularly difficult for B to genuinely intend the QUD as new, as in (10), repeated here with an interrogative for comparison:

- (13) *(B suspects, based on independent sources, that it is raining, but isn’t sure. Without contextual setup, A asks:)*  
 A: Hey B, you might know this: what’s the weather like?  
 a. B: It’s raining? (H%) (But you may want to check the forecast to make sure.)  
 b. B: (?) Is it raining? (You may want to check the forecast to make sure.)

Here the rising declarative (13a) is considered fine by my informants, unlike the interrogative (13b), which is uncooperative in normal circumstances (in a way that even B’s friendly subsequent advice for C to check the forecast cannot really compensate). This, then, is exactly the sort of counter-evidence to the distributional claim in Gunlogson (2003) that the present account predicts should exist. Note that this prediction derives 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.

Summing up, the present account goes against (or refines) Gunlogson’s distributional claim by predicting cases like (13), a prediction which appears borne out. Note that this doesn’t mean that the present account predicts a complementary distribution instead: the main predictions in this regard are, in a nutshell, that (i) rising declaratives are bad out of the blue; (ii) interrogatives are bad if the QUD is already undeniably on the table; (iii) both can *appear* fine if contextual factors relevant to the speaker’s choice are left unspecified; and (iv) both can actually *be* fine (rational) if the speaker’s goals and intentions are themselves indeterminate, or if the choice doesn’t matter to the speaker given their goals and intentions.

**Question 2: What about 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 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 I explained in section 3 I will set aside maneuvers involving pretense or flouting, which are pragmatically less ordinary; I will discuss only the three options (a), (b) and (c). What one needs 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 I will set aside without real loss of generality.

Option (b), opting out of making an assertion, is what I assume would normally be conveyed by interrogative syntax (section 3). I 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. I will consider a number of conceivable types of QUD shifts, but because to my awareness no sufficiently precise pragmatic theory of QUDs exists I 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). I 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 2012), 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" (though cf. a "hedge" interpretation, discussed further below). In a situation like (1) neither of these two shifts seems particularly natural:

- (14) (*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, I 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 *none* of the discourse participants can directly resolve the prior

QUD; and whether something is considered probable or not to one of the participants isn't really interesting unless it is known that no greater certainty can be achieved. Much remains to be investigated, but I 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 the current 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.

I 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.:

- (15) 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, (15a) is not a suitable alternative to a rising declarative because it expresses the wrong bias (in favor of it not raining), and neither is (15b), because, according to assumption 1 (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.<sup>14</sup> With regard to the “reverse-polarity” tag question in (15c), I 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):

- (16) *(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 at the picture, 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 (15d) does express a similar lack of commitment as a rising declarative, as suggested by the felicity of (16c). 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)):

- (17) *(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%)

<sup>14</sup> To clarify: falling declaratives like (15b) (and something similar will apply to (15c)) *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 11.

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 that, in addition, qualifies the type of bias (perhaps similarly to hedges, see below). One 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 (15) 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.<sup>15</sup>

Lastly, a potentially unbounded class of possible alternatives to rising declaratives are so-called *hedges* such as “I'm not sure, but...” (Lakoff 1972; for a recent overview see Fraser 2010). How hedges should be treated theoretically is itself a complex question, and I must leave a proper discussion of their relation to intonation for another occasion. For now, let me note just that according to Fraser's definition of hedges, rising intonation (according to the current ICM-based treatment) would itself count as a hedge. Accordingly, the question of why rising declaratives would be used at all then becomes: why would a speaker who suspends Quality choose to signal this with intonation as opposed to (or in addition to) a more explicit hedge? Possible answers may involve considerations of brevity, as well as the fact that more explicit hedges may tend to communicate more than just a Quality suspension (also, e.g., the nature or degree of the uncertainty).

#### 4.4 Summary

The proposed ICM-based account of rising declaratives 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 (I listed some possible reasons why), where the latter typically requires contextual setup. I explained the question-likeness of rising declaratives (core property (i)) pragmatically in terms of the lack of speaker commitment that accompanies a Quality suspension. I 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. I 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. I 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 or marking a Quality suspension, 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 – I will discuss these in more detail shortly – the accounts of Gunlogson (2003; 2008), Šafářová (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)

<sup>15</sup> 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.

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 & Crnić (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 English 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 & Crnić 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 the current approach. By contrast, Šafářová (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 I mentioned in the introduction, my central assumption about English intonational meaning (assumption 1) 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 its 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 I have adopted. Depending on one’s framework, pragmatic “incompleteness” could be explicating 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, the current 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 I 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), Šafářová (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) offer more general theories of English 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 I 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 I will discuss and compare these explanations in a way that is mostly independent of the aforementioned differences in framework, the supposed nature of English intonational meaning and intended scope. As we will see, my 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. The proposed explanations of the speaker bias and badness out of the blue are more novel, and I will highlight some potential challenges for previous approaches that the current 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 I rely more on, I 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., Šafářová 2006; Truckenbrodt 2006; Gunlogson 2008; Trinh & Crnić 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 I 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. Šafářová (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). Šafářová 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 me note, in line with Trinh & Crnić’s account, that “My name might be Mark Liberman.” is not an adequate paraphrase of (2) either, and similarly for other rising declaratives (as Šafářová 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.

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 amounts to much more than the truism that ambiguity resolution is a matter of considerations of plausibility. In comparison, by identifying the relevant respects of “incompleteness” (or “contingency”) with an explicit set of maxims, I was able to state exactly in which circumstances each of the maxims can reasonably be suspended (i.e., the range of clashes). This enabled me 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 my awareness four types of explanations of the speaker bias have been proposed: Truckenbrodt (2006), Šafářová 2006, Gunlogson 2003 (adapted in Trinh & Crnič 2011) and Gunlogson (2008) (adopted in Malamud & Stephenson 2015). I 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 my understanding, is typically captured by the maxim of Relation (also in the current 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 I have tried, explaining it (in the current 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 Šafářová (2006), albeit in response to Gunlogson (2003) (see below); Šafářová 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 (17) given earlier showed something similar):

- (18) 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 Šafářová (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 & Crnič (2011) note, an unlikely proposition may well be non-redundant in the sense intended by Šafářová (I refer to Trinh & Crnič 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 (and no interlocutor to its negation). An empirical challenge is, again, (18) above, where as noted by Šafářová (2006) the type of asymmetry assumed by Gunlogson is missing – and see Trinh & Crnič (2011) for similar arguments against Gunlogson’s assumption that the utterer of a rising declarative must take the addressee to be already committed. Trinh & Crnič 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 & Crnič’s approach is centrally based.

Gunlogson (2008) herself also drops the “addressee commitment” component of her earlier account. She treats rising declaratives of the relevant sort as expressing a “contingent commitment”, defined (Gunlogson 2008: 28) as a commitment for which it is clear that it will be withdrawn unless the next interlocutor commits to the same, and does so, in particular, as an authoritative source (this account is essentially adopted in Malamud & Stephenson 2015). Nothing in the definition of contingent commitment entails a bias. Hence, to account for the fact that rising declaratives express a bias, Gunlogson adopts the additional assumption that commitments, whether contingent (as for rising declaratives) or more definitive (as for falling declaratives), require a source, and that for there to be a source there must be some evidence (Gunlogson 2008: 17–18). Now, it seems to me that the resulting account doesn’t explain but basically just stipulates, albeit in two or three steps, that rising declaratives express a bias. This is because, to my understanding, no explanation is offered for why contingent commitments would require a source (and hence evidence). After all, at least intuitively it seems possible for one to say “I will commit to *X* (only) if you will.” also in the absence of knowledge about what the addressee will do, and even in the absence of mere expectations. Of course this lack of intuitive support does not mean that no genuine explanation could turn out to exist; but for now none seems to be given.

The foregoing approaches all belong in the “true-to-form” category. As for the non-true-to-form approaches, to my 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 I mentioned in section 2, Farkas & Roelofsen take examples somewhat like (11) to show that rising declaratives of the relevant sort do not generally express a speaker bias. I explained how the present account may commit one, rather, to an analysis of such examples in terms of metalinguisticness and/or hyperbole. 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, Farkas & Roelofsen 2017: 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 (7), repeated here, should be fine:

(7) *(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%)

But the rising declarative is strange, recall, unless, as noted by a reviewer, this is construed as a guessing/quiz context (see footnote 12). Farkas and Roelofsen’s account instead predicts it 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.<sup>16</sup> Since (7) is a case where the predictions of our accounts differ, a more proper empirical assessment of this and similar examples is called for.

**Previous accounts of the badness out of the blue** I 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 I followed Poschmann (2008) and Gunlogson (2008) in assuming that they are distinct. Still, to my awareness only one line of explanation exists in the literature. No previous work tries to explain the badness out of the blue, as I 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 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 (Gunlogson 2008: 120). Trinh & Crnić (2011), to my 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).

<sup>16</sup> Although I 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), I believe that this can only be the case if there happens to be equally strong evidence against the proposition, which is how I have set up (7). 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”.

To my 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., (8) from section 2:

- (8) (*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 (8): 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 (9) does not rule out that Harry was indeed publicly committed from an earlier conversation, it should be possible to accommodate this information when evaluating (8b) – leaving its infelicity unexplained.

In fact, Gunlogson (2003) relies on exactly this kind of accommodation in order to explain why the rising declarative is fine in (9), “The flight takes about three hours?”. She then tries to explain why accommodation would be possible in (9) but not in (8), by noting the asymmetry of authority in (9): she proposes that without such an asymmetry, as in (8), an audience would not be able to understand that the rising declarative is of the (in current terms) Quality-suspending kind, and resulting ambiguity would be what renders it infelicitous. But my impression is that ambiguity isn’t the problem with (8b): it seems sufficiently clear that Gina’s rising declarative is intended to be of the Quality-suspending kind, at least if one imagines appropriate paralinguistic cues (see section 4.1) – and clearer paralinguistic cues do not seem to improve it. Besides this impression, which I 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, the current 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 the current 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, I claim, involve a suspension of the maxim of Quality. My starting point was the Intonational Compliance Marking (ICM) theory proposed in Westera (2013; 2014), in particular the view that final rises indicate maxim suspensions, which was combined with a set of quite minimal assumptions about pragmatics (e.g., that Quality is more important than Relation; that interrogatives shouldn’t be redundant). The resulting ICM-based 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 me 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 I highlighted concerned, foremost, my assumption that the relevant sort of contextual setup for rising declaratives is the opportunity to present the QUD as given, the purported metalinguistic 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.

I conjecture that intonation has the same meta-pragmatic function on interrogatives as on declaratives, i.e., compliance marking. Nevertheless, the proposed explanations concerning rising declaratives will not (and should not, empirically) generalize to rising interrogatives. The reason is that, as I 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 (see the “Attention” maxims in Westera 2017a) – in which case a final rise on an interrogative could convey that other relevant, possible propositions may exist. This would align, for instance, with the account of question intonation in Biezma & Rawlins (2012), and an ICM-based approach is explored in Westera (2017a) as well as Meertens et al. (2018).

Finally, I hope that the proposed account and the ICM theory more generally 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, I conjecture that, if indeed discrepancies between trying to maximize compliance with the maxims 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, by means of discourse particles or syntactic form. 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, I hope that certain elements of the current approach can be applied to the analysis of meta-pragmatic markers cross-linguistically.

## Abbreviations

QUD = Question Under Discussion, ICM = Intonational Compliance Marking, H% = high right boundary tone, L% = low right boundary tone, H\* = high pitch accent

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The author has no competing interests to declare.

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