

Biased Evidential Questions: the Evidential Future in Spanish and Italian

Much research in the evidentials literature focuses on the interpretation of evidentials in questions (Lim 2011, Littell *et al.* 2010, Eckardt & Beltrama to appear, Eckardt 2018, Murray 2017). To date, this work has focused on positive questions. Using the evidential future (EF) in Spanish and Italian as a case study, we argue that the behavior of **evidentials in negative polar questions (NPQs)** should inform our theories of evidentiality. Positive questions with the EF are interpreted as conjectural questions, which do not request an answer from the addressee (a cross-linguistically common interpretation for evidentials in interrogatives, see e.g., Littell *et al.* 2010, Murray 2017). We show that (i) the conjectural interpretation can disappear in NPQs, and (ii) this disappearance correlates with a reversal of the type of bias normally associated with NPQs. Building on Frana & Rawlins 2016, 2018 we derive this pattern by positing an interaction between the semantics of the EF and the common ground management operators responsible for inducing bias in questions (Romero & Han 2004, a.o.).

1. Background. 1.1. The EF in assertions. Future morphology in Italian and Spanish can convey both predictions about the future ((1)a-(2)a) and hypotheses about the present or the past (EF, (1)b-(2)b) (for space reasons we provide each example in only one language). On the latter reading, the speaker expresses a conjecture on the basis of indirect inferential evidence: the EF is infelicitous in contexts that provide direct evidence for the prejacent (3).

- (1) Juan será astronauta. [Sp.]
Juan be. FUT.3.SG astronaut
a. ‘Juan will be an astronaut.’ b. ‘Juan is an astronaut, I guess.’
- (2) Juan habrá sido astronauta. [Sp.]
Juan have. FUT.3.SG been astronaut
a. ‘Juan will have been an astronaut.’ b. ‘Juan was an astronaut, I guess.’
- (3) a. Context: Speaker sees that it is raining outside.
b. #Starà piovendo. [It.]
be. FUT.3.SG raining
‘It is raining, I guess.’

1.2. The EF in positive questions. Questions with the EF (4) are interpreted as conjectural: they do not request an answer from the addressee and are only felicitous when the addressee is not expected to know the answer (Littell *et al.* 2010, Eckardt 2018). Thus, (4)b is odd (as we expect the addressee to know whether she is married or not).

- (4) a. ¿Estará Juana casada? [Sp.]
be.FUT.3.SG Juana married
Roughly: ‘What is your guess, is Juana married?’
b. # ¿Estarás casada? [Sp.]
be. FUT.2.SG married
Roughly: ‘What is your guess, are you married?’

2. New data: the EF in NPQs. 2.1. Non-conjectural interpretation. The conjectural reading can disappear in NPQs with the EF: the questions in (5), unlike (4)b, are felicitous. (The Italian version, (5)b, can, but need not to, contain the particle *mica*, see 2.2. below).

- (5) a. ¿No estarás casada? [Sp.]
not be. FUT.2.SG married
b. Non sarai (mica) sposata? [It.]
not be. FUT.2.SG (MICA) married

2.2. Bias reversal. [i] Background: In Italian and Spanish, present tense NPQs convey a pre-existing bias for the positive answer (see Ladd 1981, Romero & Han 2004, a.o.): (6) is

felicitous if the speaker assumed that the addressee was married (positive bias), but has just learned some evidence to the contrary.

- (6) Non sei sposata? [It.]
 not be.PRES.2.SG married
 ‘Aren’t you married?’

In Italian, the particle *mica* induces bias reversal (Frana & Rawlins 2016). (7) cannot be uttered in positive bias contexts but is appropriate, e.g., in the negative bias context in (8).

- (7) Non sei mica sposata? [It.]
 not be.PRES.2.SG MICA married?
 Roughly: ‘You are not married, are you?’

- (8) **Negative bias context:** the speaker assumed that the addressee was not married but has just seen what looks like a wedding ring on her finger.

[ii] Bias reversal with the EF: the questions in (5) are felicitous in negative bias contexts (8) but not in positive bias ones (*mica* becomes optional in Italian in this case.)

3. Analysis. 3.1. The EF. We treat the EF as an evidential marker, and adopt the analysis put forward by Murray (2017) for the conjectural evidential in Cheyenne. *FUT(p)* contributes the components in (9). (*Origo* is the discourse participant who acts as the source of evidence.)

- (9) a. An at-issue component: the scope proposition *p*.
 b. A non-at issue evidential component, with two sub-components:
 b.1. reduces the common ground to worlds where *Origo* has conjectural evidence for *p*;
 b.2. presupposes that *Origo* does not have direct evidence for $\sim p$.
 c. An illocutionary component: the proposal to add $\diamond p$ to the common ground.

Support for the non-at-issue status of the evidential component b.1. comes from the fact that this component cannot be challenged, as shown in (10).

- (10) S: Il cameriere sarà l’assassino. [It.]
 The butler be.FUT.3SG. the-murderer
 A: That’s not true / You are wrong.
 = \neg (The butler is the murderer); $\neq \neg$ (you don’t have (conjectural) evidence that...)

In root declaratives *Origo* is always the speaker, witness (11). (See Korotkova 2016 for discussion of subjectivity as a cross-linguistically stable property of evidentials.)

- (11) #Secondo Gianni, il cameriere sarà l’assassino, ma non sono d’accordo. [It.]
 According-to G., the butler be.FUT.3.SG. the murderer, but not be.PRES.1SG of-agreement
 Lit: ‘According to Gianni, the butler will be the murderer, but I don’t agree.’

3.2. Positive Questions with the EF. Across languages, evidentials in questions are known to exhibit *interrogative flip*: the *Origo* parameter shifts from the speaker to the hearer. In (12)a it is the *speaker* who has reportative evidence that Bob is the murderer; in the (12)b the speaker assumes that the *hearer* has reportative evidence for her answer.

- (12) a. Bob is reportedly the murderer.
 b. Is Bob reportedly the murderer? (Murray 2017)

The conjectural interpretation of positive questions with the EF (4) may be linked to interrogative flip. *FUT(p)?* requires a context where the *hearer* has conjectural evidence for either *p* or *not p*, and —assuming that the presupposition of a question is the conjunction of the presuppositions of all the Hamblin alternatives in the denotation of the question (Littell *et al.* 2010)— does not have direct evidence for either answer. Hence, *FUT(p)?* is infelicitous in contexts where the hearer is expected to know the answer.

3.3. NPQs with the EF. [i] Starting point: Frana & Rawlins (2016, 2018) analyze *mica* as a common ground (CG) management operator akin to English negation in denials and to high (preposed) negation in biased polar questions, which has been treated as the CG-management operator FALSUM by Romero 2014 (see also Repp 2013 and Romero & Han 2004). *Mica* contributes negation at the truth-conditional level (as in (13)a), and a CG-oriented presupposition that is always speaker-oriented (see (13)b). This presupposition sets *mica* apart from regular FALSUM which—like evidentials—flips its perspectival anchor to the hearer in questions. Instead, *mica* remains anchored to the speaker in questions: (7), e.g., is only defined for a context *c*, and world *w* if *the speaker of c* is sure that in all the worlds satisfying her conversational goals in *w* it is not common ground that the addressee is married (a requirement met in the negative bias context (8)).

- (13) a. $[[\text{mica}]]^c = \lambda p. \sim p.$
 b. Defined for *p*, *c*, *w* only if **the speaker of c** is sure that in all the worlds satisfying her conversational goals in *w*, *p* is not CG. (Frana & Rawlins 2018)

[ii] Our proposal: 1. Non-conjectural NPQs with the EF involve the operator in (13), which can be either covert or overt in Italian and is always covert in Spanish. **2.** The *Origo* of (13) and the *Origo* of the evidential component of the EF **have to match**. Thus, in bias reversal questions (5), the EF remains anchored to the speaker. As a result, (5) requires contexts where the *speaker* has conjectural evidence for either *p* or *not p*, and is sure that *p* is not CG in the input context prior to her question. (All of these conditions are satisfied in the negative bias context in (8)). As the evidential component does not target the hearer, this type of question is compatible with contexts where the hearer is expected to know the answer.

We have posited a matching requirement between two perspectival elements that impose requirements on the common ground: (covert or overt) *mica* and the evidential component of the EF. Further data suggests that this requirement extends to cases where the EF combines with FALSUM. In the context in (14) the question in (15)a is conjectural (felicitous even though the addressee cannot possibly know the answer), and conveys positive bias. A non-conjectural reading is not possible, as shown by the oddity of (15)b. This pattern follows if (i) positive bias is triggered by FALSUM (Romero 2014), which is anchored to the hearer in questions (Frana & Rawlins 2018); (ii) conjectural readings are tied to interrogative flip (section 3.2); and (iii) the *Origo* of the EF has to match the *Origo* of FALSUM.

(14) Context: I have invited Pedro and Lola (who don't know each other) for a paella dinner. I assumed both liked paella, but I see that Lola barely touches her food.

- (15) a. ¿No le gustará (a Lola) la paella? [Speaker to Pedro] [Sp.]
 Not to-her like.FUT.3SG (to Lola) the paella
 'What is your guess, doesn't Lola like paella?'
 b. #¿No te gustará la paella? [Speaker to Lola] [Sp.]
 Not to-you like.FUT.2SG the paella
 'What is your guess, don't you like paella?'

These data open up the question of whether this kind of matching requirement applies to clause-mate perspectival operators across-the-board (and if not, what the constraints are), which in turn has the potential of shedding light on the general problem of what triggers 'Origo-shift' effects across constructions and across languages (see, e.g., Bhadra 2017).

References

- Bhadra, D. 2017. Evidentiality and questions: Bangla at the interfaces. Rutgers PhD dissertation.
- Eckardt, R. 2018. Evidentials in different kinds of questions. Ms.
- Eckardt, R. and A. Beltrama (to appear). Evidentials in questions. To appear in *Empirical Issues in Syntax and Semantics 12*.
- Frana, I. and Rawlins, K. 2016. Italian *mica* in assertions and questions. In *Proceedings of Sinn und Bedeutung 20*.
- Frana, I. and Rawlins, K. 2018. Attitudes in discourse: Italian polar questions and the particle *mica*. Ms.
- Korotkova, N. 2016. Heterogeneity and uniformity in the evidential domain. UCLA Ph.D. dissertation.
- Ladd, R. 1981. A first look at the semantics and pragmatics of negative questions and tag questions. In *Proceedings of CLS 17*.
- Lim, D. 2011. Evidentials in interrogatives. In *Proceedings of Sinn und Bedeutung 15*.
- Littell, P., Matthewson, L., & Peterson, T. 2010. On the semantics of conjectural questions. In T. Peterson, & U. Sauerland (Eds.) *Evidence from evidentials*, vol. 28: 89–104.
- Murray, S. 2009. Evidentials and questions in Cheyenne. In *Proceedings of SULA*, vol. 5.
- Murray, S. 2017. *The semantics of evidentials*. Oxford University Press.
- Romero, M. & Chung-hye Han. 2004. On negative Yes/No questions. *Linguistics and Philosophy* 27(5). 609–658.
- Romero, M. 2014. High negation in subjunctive conditionals and polar questions. In *Proceedings of Sinn und Bedeutung 19*.
- Repp, Sophie. 2013. Common ground management: modal particles, illocutionary negation and *verum*. In *Beyond expressives – explorations in use-conditional meaning*.