## Bias and Evidence: the case of the Evidential Future in Italian and Spanish

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Much research in the evidentials literature focuses on the interpretation of evidentials in questions ([7], [8], [2], [9], a.o.). 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., [8], [9]). 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 [4], 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 ([10], [11], a.o.).

**1. Background. 1.1. The EF in assertions.** Future morphology in Italian and Spanish can convey both predictions about the future (1a) and hypotheses about the present (evidential future (EF), (1b)) or past. On the evidential interpretation, the speaker expresses a conjecture on the basis of indirect inferential evidence (not felicitous in contexts that provide direct evidence for the scope proposition).

1) Maria será austronauta. Maria be.FUT.3SG astronaut. [Sp.]

a. "Maria will be an astronaut" b. "Maria is an astronaut, I guess."

**1.2. The EF in positive questions.** Qs like (2a) are interpreted as conjectural: they are only felicitous in contexts where the hearer is not expected to know the answer. Thus, (2b) is odd (as we expect the addressee to know whether she is married or not).

b.	# ¿Estarás casada?	[Sp.]			
	be.FUT.2SG married				
Roughly: 'What is your guess, is Juan married?' 'What is your guess, are you married?'					
2. New data: the EF in NPQs [i] When the EF is used in a NPQ, the conjectural					
	,	be.FUT.2SG married ' 'What is your guess, are you marrie			

reading may disappear: (3b), unlike (2b), is felicitous. (In Italian, NPQs with the EF can optionally contain the particle *mica*, (3c)). 3) a. ¿No eres casado? b. ¿No estarás casado? [Sp.]

not be.PRES.2SG married	с.	Non sarai (mica) sposato?	[Īt.]
"Aren't you married?"		Not be.FUT.2SG (MICA) marrie	d
	R	oughly: "You are not married, are y	ou?"

**[ii]** The (non-)availability of the conjectural interpretation **correlates with the type of bias** displayed by the question. The EF in NPQs (3b) gives rise to what Frana & Rawlins label a *bias reversal* reading, since it reverses the standard *speaker's bias* found in NPQs, i.e. a pre-existing bias for the positive answer [6],[10]: (3a) is felicitous if the speaker assumed that her addressee was married (positive bias), but has just learned some evidence to the contrary; whereas (3b) is felicitous in a blinddate situation where the speaker assumed the addressee is not married (negative bias), but suddenly notices a ring on his finger. **3. Analysis. [i] The EF.** We treat the EF as an evidential marker, and adopt the analysis put forward by Murray in [9] for the conjectural evidential in Cheyenne. FUT(p) contributes the components in (4) (*Origo* is the discourse participant who acts as the bearer of evidence).

- 4) a. An at-issue component (*p*).
  - b. A non-at issue evidential component that reduces the CG to worlds where *Origo* has conjectural evidence for *p*;

c. An illocutionary component: the proposal to add  $\Diamond(p)$  to the CG.

Support for the non-at-issue status of the evidential component comes from the fact that this component cannot be challenged, as shown in (5).

- 5) 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 evidence that...)

In root declaratives, *Origo* is always the speaker, witness (6) (See [5] for discussion of subjectivity as a cross-linguistically stable property of evidentials.)

6) #Secondo Gianna, il cameriere **sarà** l'assassino, ma io non sono d'accordo. [It.] According-to G. the butler be.FUT.3SG the murderer, but I not am in-agreement Lit: 'A according to Gianna, the butler will be the murderer but I don't agree,'

Lit: 'According to Gianna, the butler will be the murderer, but I don't agree.'

**[ii] Positive PQs (PPQs) with the EF.** Across-languages, evidentials in questions are known to exhibit *interrogative flip: Origo* shifts from the speaker to the hearer. In (7a), it is the speaker that has reportative evidence that Bob is the murderer; in (7b), the speaker assumes that the hearer has reportative evidence for her answer [9]:

7) a. Bob is *reportedly* the murderer. b. Is Bob *reportedly* the murderer?

The conjectural interpretation of PPQs with the EF (2) may be linked to interrogative flip: FUT(p)? requires a context where the *hearer* has conjectural evidence for either *p* or *not p* (thus, she does not have direct evidence for either answer). Hence, the question is infelicitous in contexts where the hearer is expected to know the answer. **[iii] NPQs with the EF. Background:** In Italian, the particle *mica* (optional in non-conjectural questions with the EF (3c)) performs *bias reversal* ([3], [4]). The NPQ in (8a) is felicitous in contexts like (9) (positive bias), whereas (8b), in contexts like (10) (negative bias).

8)	a. Non fumi?	b. Non fumi	mica?
	Not smoke.PRES.2SG	Not smoke.PRES.2SC	3 mica

9) S believed that H smoked, but H has rejected her offer of a cigarette.

10) S believed that H didn't smoke, but H has just asked to stop at the tobacconist.

Frana & Rawlins analyze *mica* as the common ground (CG) managing operator FALSUM ([10], [11]) that contributes (i) negation at the truth-conditional level, and (ii) a CG-oriented presupposition anchored to the speaker (satisfied in negative bias scenarios like (10)). Thus, *mica* in Qs does not flip its Origo (somewhat informally):

11)  $[[\mathbf{Q}_{\mathbf{H}} \operatorname{MICAS} [p]]]]^{c,w} = \{p, \sim p\} \qquad S \text{ asks } H \text{ whether } p \text{ or not } p$ Defined for p, c, w only if **speaker**<sub>c</sub> is sure that in all the worlds satisfying her conversational goals in w, p is not CG

**Our proposal:** (i) non-conjectural NPQs with the EF involve the operator in (11), which can be either covert or overt in Italian and is always covert in Spanish; (ii) the anchor (Origo) of the CG-managing operator and the evidential **have to match**. Thus, in bias reversal questions (3b-c) the EF will remain anchored to the speaker. As a result, (3b-c) is restricted to 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 (e.g., the blind date scenario). 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. On this view, we expect bias reversal and the unavailability to the conjectural interpretation to go hand in hand across languages. Further research is needed to determine whether the prediction is borne out.

## References

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