

By any chance as a biased reading

Main session; syntax-pragmatics interface; bias, question, point of view, Basque, Spanish, Romanian

1. Concept of bias: In biased polar questions, the speaker deems a *yes* or *no* answer to be more likely, or the only possible answer. Sadock (1971, 1974) contributed tests to distinguish between neutral and biased readings. The *after all* tests isolates a rhetorical reading (1a, 1971, p. 225, ex. 9a), which for Sadock is an assertion of opposite polarity. By contrast, *by any chance* is incompatible with a rhetorical reading (1b; p. 227, p. 14; R.P. de Rijk, p.c.). Sadock regards (1b) as *neutral* in that the speaker asks, rather than assert.

(1) a. After all, do phonemes have a damn thing to do with language? [=No, they don't.]

b. Are the gazanias blooming, by any chance? [The speaker doesn't know.]

Han (2002) and Asher & Reese (2007) build on Sadock's work. For Asher & Reese (2007: 15) "*By any chance* [...]" as an expression of epistemic uncertainty, only selects neutral questions. As such, it does not appear with biased questions, which we believe convey a commitment by the speaker."

2. Problematic new data in Basque, Spanish and Romanian: The following data sets cast doubt on an understanding of bias as commitment only. The same question markers express biased readings and the *by any chance* reading. This suggests that *epistemic uncertainty* must be included under the umbrella of bias.

Basque *ba* expresses *by any chance* (2a) and *commitment* readings (2bc) with different word orders.

- (2) a. *Linguista ba al zara?* In this syntactic position, *ba* requires a context where the
linguist BiasedQ Q are? speaker believes the more likely answer is *no*, yet he
'Are you a linguist by any chance?' wants to believe *yes* might be possible, however unlikely.
- b. *Linguista al zara ba?* At the end of a question, *ba* denotes a relative or absolute
linguist Q are BiasedQ commitment bias. (2b) requires a context where the speaker
'Are you a linguist?' [bias = no] believes *no* is a more likely answer or the only possible one.
- c. *Linguista ez al zara ba?* Note negation reverses the polarity of the expected answer.
linguist NEG Q are BiasedQ (2c) requires a context where the speaker believes *yes*
'Aren't you a linguist?' [bias = yes] is either a more likely answer or the only possible answer.

None of the questions in (2) can have a neutral reading where the speaker ignores if one answer is more likely than the other. Data sets like (2) are deemed suspect at first by colleagues specialized in semantics, before other semanticists confirm the judgments. It is an understandable reaction. The existence of (2) unexpectedly relates bias to morphology and syntax. This is a controversial issue. We have long viewed bias in questions as pragmatic, semantic or their interface (Ladd 1981, Büring & Gunlogson 2000, van Rooy 2003, Guerzoni 2003, Rohde 2006, Caponigro & Sprouse 2007, Sudo 2010).

The same problems arise in more widely spoken and more easily accessible languages, such as Spanish (3). *Acaso* 'chance' is a reduction of *por un acaso* 'by any chance'. The commitment readings arose from a grammaticalization of *by any chance*. *Acaso* has the flexible syntax of a particle. No position associates with a particular reading (unlike Basque 2a vs. 2bc). Like *ba*, *acaso* rejects neutral readings. Unlike English (1b), in Spanish *by any chance* is not clearly different in form from commitment readings.

- (3) a. *¿Acaso es usted el Prof. Stevens?* The speaker is at a conference where he knows that Prof.
BiasedQ is you.POL the prof. Stevens Stevens is giving a paper. He does not know him, or how
'Are you Prof. Stevens by any chance?' he looks. He approaches a participant and asks (3a).
- b. *¿Acaso eres lingüista?* The speaker believes either the more likely answer is *no*,
BiasedQ you.are linguist or *no* is the only possible answer because the addressee
'Are you a linguist?' [bias = no] has a PhD in education, not linguistics.
- c. *¿Acaso no eres lingüista?* The speaker believes either *yes* is a more likely answer
BiasedQ NEG you.are linguist or the only possible answer. He thinks the addressee
'Are you not a linguist?' [bias = yes] is the person who just spoke about quantifier raising.

The judgments in (3) are verified by other native linguists. **Romanian** reproduces this same pattern (3) with *cumva* 'by (any) chance' (Donka Farkas, p.c.). The source of bias marking is the word *chance* again.

3. Discussion: In *positive polar questions*, both in *by any chance* (2a/3a) and commitment bias (2b/3b), the speaker expects the more likely answer to be *no*. The *by any chance* reading separates the speaker's preferred expectation (*yes*) from the expectation the speaker deems more likely (*no*). In commitment bias (2b/3b), these are the same. Hence, it is not surprising for the same marker to express commitment bias

and epistemic uncertainty. But epistemic uncertainty is a misnomer, if we consider that the speaker believes *no* is more likely, or perhaps even the only possible answer in (2a/3a).

3.1 Common Ground: *By any chance* (2a/3a) issues a weak proposal to add the lower probability proposition to the Common Ground (Stalnaker 1978), while acknowledging the higher probability one. Relative commitment bias (2bc, 3bc) presents a strong proposal to add the higher probability proposition. In absolute commitment bias (rhetorical readings), the proposal is presented as an absolute truth. This absolute truth may be shared with the addressee (4a; Rhodes 2006), as in conversation starters that ask the obvious, or different, as in a couple's argument (4b; Sadock 1974), where two viewpoints collide.

(4) a. Oh, are you back? [bias = yes] (Hudson 1975) b. Did I ever lie to you? No! [...] Yes you did! Rhetorical readings are presumed pragmatic (4), but only disagreement (4b) can be marked by *ba/acaso*. Similarly, in answers, polarity-reversing affirmative particles—French *si*, German *doch*, Swedish *Jo*, Hungarian *der*—are reserved to express disagreement to the question bias (Krifka 2013, Holmberg 2016).

4. Analysis: *By any chance*, commitment bias readings are syntactic structures that encode point of view. I build on four assumptions presented in Tenny & Speas (2003), who develop an account of point of view phenomena in syntax, such as conjunct-disjunct person morphology and logophoricity. The assumptions are (a) speaker & addressee variables are represented in syntax; (b) there is a third deictic person variable, Seat of Knowledge; (c) the reference of the Seat of Knowledge is the speaker or addressee, via a c-command relation; (d) clause types differ in c-command configurations, which results in the closest c-commanding antecedent for the Seat of Knowledge being either the speaker or the addressee.

For Tenny & Speas (2003) the **Seat of Knowledge** reflects *point of view*. In languages with conjunct-disjunct person morphemes, person morphemes refer to a variable that shifts reference between speaker or addressee. The conjunct is 1st p. in declaratives; 2nd p. in questions (Hale 1980). This is often analyzed as the speaker being responsible for the truth of the declarative; the addressee for the answer (*epistemic authority* of the clause, Hargreaves 1999). The disjunct is 2nd/3rd in declaratives, 1st/3rd in questions.

Tenny & Speas (2003) don't consider bias. Some questions are distinguished in conjunct-disjunct languages. In rhetorical questions, the conjunct is reported as 1st p. (not 2nd, Hale 1980:100, Curnow 2002:614; via Knuchel 2015:8). Unfortunately, to my knowledge, we lack data on *by any chance*, commitment bias (agree/disagree), and, importantly, the role of reversed polarity in these languages.

In Basque and Spanish (2-3), Seat of Knowledge and reversed polarity work together. The polarity of the question is cast as a lower probability or zero (2-3), while its expected answer is a higher or absolute value. In commitment bias (2bc, 3bc), the speaker identifies with the answer. Thus, in the question, the Seat of Knowledge is the addressee or a third party. By contrast, in *by any chance*, the speaker is the Seat of Knowledge. He assumes the lower/zero probability of the question polarity (=epistemic uncertainty).

4.1 Negation: There is more evidence that *by any chance* is a syntactic configuration, not a pragmatic reading. The data concerns negation. Negation is not possible in English (5). Why would this be?

(5) *Aren't the gazanias blooming, by any chance? Noted by R.P de Rijk (see Sadock 1971: 228, ex. 15)

In Spanish and Romanian, negation is possible, yet vacuous, and it refers to an earlier denial (6).

(6) ¿Acaso no es usted el Prof. Stevens? The speaker still expects the more likely answer to BiasedQ NEG is 2SG.POL the Prof. Stevens be *no*. The proposition was denied (perhaps weakly 'Are you *not* Prof. Stevens *then*?' or equivocally), and the speaker wants confirmation.

As Donka Farkas puts it, the difference seen in commitment bias between the positive and negative question (3b vs. 3c) is cancelled in *by any chance*, because its negation does not reverse polarity. The expected answer remains *no* in both (3a) and (6). By contrast, in (2c/3c) the expected answer is *yes*.

In Basque, the *by any chance* reading can be negated (7), but only as in Spanish or Romanian. Negation refers again to an earlier denial, and it is not able to reverse the polarity of the answer either.

(7) *Linguista ez al zara ba?* The expected answer is still *no*, as in (2a). But the syntax changes linguist NEG Q you.are BiasedQ again. The "negated" *by any chance* reading has the word order 'Are you *not* a linguist *then*?' of the commitment bias readings. *Ba* occurs finally, as in (2bc).

By any chance can't be negated because of structural reasons. Basque shows the bias marker is in Polarity Phrase (2a), where inflectional *yes* and *no* sit. In Spanish and Romanian, the bias marker moves covertly to Polarity Phrase. In English a null marker moves covertly, but negation prevents its movement.