Disagreement with evidentials: A call for subjectivity

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Abstract

Across languages, grammatical evidentials (linguistic expressions of information source) exhibit the property of non-challengeability: they resist direct denial in dialogues. The literature attributes this property to the not-at-issue status of the information contributed by evidentials. I argue against this view and show that with respect to disagreement, evidentials pattern with subjective expressions such as first-person belief and pain reports. Like other subjective expressions and unlike e.g. appositives, evidentials ban *all* kinds of disagreement about content and not just explicit denial. This novel observation has no account in the literature. It falls out naturally once a theory of evidentiality incorporates subjectivity. It is thus unnecessary to appeal to a special discourse status of evidentials to explain their behavior in conversations.

1 Introduction

Evidentiality is a linguistic category that marks the information source for the proposition expressed by a sentence (a.o. Chafe and Nichols, 1986; Willett, 1988; Aikhenvald, 2004; de Haan, 2013b,a). English can express information source lexically, e.g. by adverbials as in (1) below:

(1) Threatened by climate change, Florida **reportedly** bans term 'climate change'.[1]

The sentence in (1) conveys, via *reportedly*, an evidential adverbial, the idea that the speaker does not have firsthand knowledge about the terminology ban but rather learned about it via hearsay.

This paper focuses on grammaticalized evidentials. Many of the world's languages—237 out of 414 surveyed by de Haan (2013b)—have designated morphological means to talk about information source, e.g. visual vs. non-visual perception,

inference from reasoning, or hearsay; see (Willett, 1988) for an overview of source types. Three types of information source commonly signalled by evidential markers are exemplified below by the Cuzco Quechua evidential paradigm:

(2) Cuzco Quechua (Quechuan)
   a. Para-sha-n=**mi**.   [PERCEPTION]
      rain-PROG-3=**DIR**
      'It is raining, *I see*.'

   b. Para-sha-n=**si**.   [HEARSAY]
      rain-PROG-3=**REP**
      'It is raining, *I hear*.'

   c. Para-sha-n=**chá**.   [CONJECTURE]
      rain-PROG-3=**CONJ**
      'It must be raining, *I gather*.'
                    (based on Faller, 2002: 3, ex.2a-c)

Each sentence in (2) talks about the proposition 'It is raining', which will be referred to as the *scope proposition* throughout (after Murray, 2014). Evidentials =*mi*, =*si* and =*chá* specify the way the speaker learned the scope proposition: firsthand as in (2a), via hearsay as in (2b), or via conjecture as in (2c). The contribution of evidentials will be referred to as the *Evidential Requirement* (ER).

A hallmark of morphological evidentials is their *non-challengeability*: a direct denial can only target the scope proposition, but not the ER ((Izvorski, 1997) and later work).[2] This property is illustrated with a Cuzco Quechua dialogue:[3]

(3) Cuzco Quechua
   A. Ines-qa   qaynunchay ñaña-n-ta=**n**
      Inés-TOP   yesterday   sister-3-ACC=**DIR**
      watuku-rqa-n
      visit-PST-3
      'Inés visited her sister yesterday, *I saw*'.

   B. Mana=n chiqaq-chu.
      not=DIR true-NEG
      'That's not true.'

   (i) = ¬ [Inés visited her sister]
   (ii) ≠ ¬ [You saw that Inés visited her sister]
                    (based on Faller, 2002: 156, ex. 116-117b)

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[2] Premises for making a conclusion may be challenged, e.g. faulty logic or an untrustworthy source (Faller, 2007).

[3] In (3), =*n* is a morphophonemic variant of =*mi*.

[1] From *Washington Post*; `https://goo.gl/XVx6JN`.

The reaction in (3) can only indicate disagreement with the scope proposition. For instance, it can be followed up with 'Inés only visited her mother' (Faller, 2002: 158: ex.119). However, (3) cannot be understood as a disagreement with the ER, and the follow-up 'You didn't see it' results in infelicity (Faller, 2002: 158: ex.118). The same holds for other Cuzco Quechua evidentials. To sum up, it is impossible to challenge the fact that the speaker acquired the scope proposition in a way lexically specified by the evidential.[4]

The pattern illustrated in (3) is observed in many other geographically unrelated languages, e.g. in Bulgarian (South Slavic; Izvorski, 1997), Cheyenne (Algonquian; Murray, 2014), Georgian (South Caucasian; Korotkova, 2012), German (Germanic; Faller, 2007) and St'át'imcets (Salish; Matthewson et al., 2007). Based on the data from available studies of evidentiality within formal semantics, the non-challengeability of the ER is a *universal* property of morphological evidentials.

The central puzzle addressed in this paper is as follows: what bans disagreement with the ER?

The near-consensus in the literature (a.o. Izvorski, 1997; Matthewson et al., 2007; Murray, 2014) is that statements with evidentials make two contributions. The scope proposition constitutes the main point of an utterance and thus enjoys the *At-Issue* (AI) status. The ER, one the other hand, is analyzed as a kind of peripheral, *Not-At-Issue* (NAI), information (in the sense of Tonhauser et al., 2013). Relying on the view on discourse wherein conversational disagreement is derived solely from the AI vs. NAI divide (e.g. Potts 2005, Roberts 1998/2012), the non-challengeability of the ER is explained via its discourse status: by definition, NAI cannot be targeted by direct responses.

I argue that the view above is not justified empirically. The argument proceeds in two steps.

First, I show that non-challengeability does not carve out just NAI (pace Tonhauser et al., 2013). It is also an inherent trait of a host of expressions that I will call *subjective*, such as first-person belief reports or statements about pain. The source of non-challengeability is different in each

case. For NAI, non-challengeability results from the special discourse status of the information conveyed by a given construction. For subjective expressions, it is their lexical semantics that bans disagreement. Such expressions describe experiences to which individuals have exclusive access (e.g. mental states) and which others have no grounds to contest. This non-linguistic fact has linguistic consequences: denial is an infelicitous reaction to statements with subjective expressions. Summing up, non-challengeable content comes in at least two varieties: (i) NAI content and (ii) *Subjective Content* (SC). This means that direct denials alone are not indicative of the NAI nature of the ER, contrary to the accepted wisdom.

Second, I show that NAI on the one hand, and SC on the other, part company when examined against a variety of disagreement strategies. While there are ways to disagree with presuppositions or appositives (typical representatives of the NAI class), subjective expressions resist *all* kinds of disagreement about content. Based on novel data from Bulgarian and Turkish,[5] I argue that evidentials exhibit the same kind of strong non-challengeability as subjective expressions do. I further demonstrate that the only kind of disagreement allowed for evidentials and e.g. first-person belief reports is what I refer to as "performance disagreement" (the term from (Anand, 2009) on similar facts about taste ascriptions): a situation when the speaker is considered incompetent (e.g. drunk) or insincere (e.g. lying) by their addressee. The overall pattern of disagreement with evidentials is not easily amenable to an NAI analysis. Such an analysis incorrectly predicts that disagreement with evidentials should be possible modulo the constraints on propositional anaphora. I thus conclude that the data from various kinds of denials (A) do not support the NAI view of evidentiality and (B) call for a new, subjective, approach.

The paper is structured as follows. Section 2 presents two analytical options that explain non-challengeability away, the NAI status and subjectivity, and explores their applications to evidentiality. Section 3 demonstrates that non-challengeable expressions do not form a uniform class with respect to various kinds of disagreement and that evidentials do not pattern with NAI. Section 4 is on performance disagreement. Section 5 concludes.

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[4]The current paper only discusses root declarative clauses, so it is correct to say that evidentials are always anchored to the speaker. Elsewhere, they may flip: to the addressee in questions (Lim, 2010; Murray, 2010), and to the attitude holder in attitude reports (Korotkova, 2015).

[5]The data come from my work with consultants.

2 Direct denial

This section discusses two routes to banning direct denials: (1) via NAI status, and (2) via subjectivity. The former route reflects the now-standard view that disagreement is reducible to the AI vs. NAI distinction, and it is widely taken in the literature on evidentiality. The latter route is never addressed head-on with respect to evidentials. I will show that this neglected route is a viable alternative to the ER-as-NAI mantra.

2.1 Route 1: NAI content

Issues in discourse Recent research on conversational dynamics identifies different types of content (Potts, 2005; Simons et al., 2010; Tonhauser, 2012; Tonhauser et al., 2013; Gutzmann, 2015):

○ AT-ISSUE (AI): information central to the issues discussed
○ NOT-AT-ISSUE (NAI): peripheral information

NAI does include presuppositions (what is taken for granted), but also new information that constitutes a comment rather than the main point of an utterance, e.g. conventional implicatures (Potts, 2005) (though see (Schlenker, 2013) for a presuppositional analysis of Potts' cases).

Is there a relation between the structure of discourse and grammar? Natural language is sensitive to the AI vs. NAI divide and has designated means to mark it, e.g. focus:

(4)   Where did Kit spend his vacation?
    a.   ✓Kit flew to CALIFORNIA.
    b.   #KIT flew to California.

As examples like (4) show, English prosodic focus highlights what the issue under discussion is. Only (4a) is a felicitous reply while (4b) is out, as it suggests that the question asked is about people who flew to California.

Non-challengeability of NAI The divide is obviously important in determining the range of replies to questions and reactions to assertions. Often it is argued that the divide is *solely* responsible for patterns of conversational disagreement (cf. (Amaral et al., 2007; Anderbois et al., 2015) and diagnostics 1a,b,c in (Tonhauser, 2012)):

○ A direct response has to target AI.
○ NAI cannot be targeted by a direct response.

These patterns are familiar from presuppositions, which one cannot explicitly deny (5ii):

(5)   PRESUPPOSITIONS
    A. The queen of the US visited Jupiter.
    B. That's not true.
(i)   = She visited Mars.
(ii)   ≠ ¬ [The US has a queen].

More recently, a number of constructions have been analyzed as a vehicle for the not-at-issue content based in particular on their non-challengeability: appositives and non-restrictive relative clauses (Potts, 2005), expressives such as *darn* (McCready, 2008, 2010), and various parentheticals (Potts, 2002; Simons, 2007):

(6)   EXPRESSIVES
    A. That **damn** Ortcutt lost his passport.
    B. That's not true.
(i)   = ¬ [Ortcutt lost his passport]
(ii)   ≠ ¬ [There is something wrong with Ortcutt]

(7)   APPOSITIVES
    A. Ortcutt, **a spy**, lost his passport.
    B. That's not true.
(i)   = ¬ [Ortcutt lost his passport]
(ii)   ≠ ¬ [Ortcutt is a spy]

Direct responses such as *That's not true* cannot target the semantic contribution of *damn* (6ii), or the content of an appositive (7ii). Similar results hold for other types of response, such as *That's right*: one can only agree with what is at-issue.

ER as NAI Recall from (3) that a direct denial can only target the scope proposition and never the ER. This is the same pattern as the one exhibited by expressions under the NAI umbrella. Not surprisingly, formally different approaches to evidentiality meet at one point: the ER is treated as a kind of NAI content (first proposed by Izvorski (1997)).

The ER-as-NAI view is widely accepted. The approaches range from presuppositional (Izvorski, 1997; McCready and Asher, 2006; Matthewson et al., 2007; Lee, 2013) to ones where the ER is a part of sincerity conditions associated with a speech act (Faller, 2002) to ones where the ER is paralleled to Pottsian supplements (Murray, 2010, 2014; Koev, 2016). Modulo the technical and conceptual differences, the key intuition of these theories is that the ER is an *automatic* restriction on the common ground and as such is never up for negotiation by the interlocutors. The ban on explicit denial is thus correctly predicted.

A common trait of the above proposals is that, out of several empirical means to diagnose discourse status (see e.g. Tonhauser, 2012), the only one used is the non-challengeability test. As I will argue throughout the paper, the denial pattern

lends itself to an alternative explanation and thus is not indicative of the NAI status of the ER.

Additional arguments for the ER-as-NAI view come from projection (=escaping the scope of entailment-cancelling operators). However, recent research challenges Simons et al. (2010)'s idea that discourse status and projection go hand in hand (see (Jasinskaja, 2016) for discussion)—it is possible to project and exhibit properties of AI (sentence-final appositives, see section 3). Furthermore, the overall cross-linguistic profile of evidentials with respect to projection is largely understudied. For instance, across languages the ER is not affected by the clause-mate negation (de Haan, 1997: 146-170), which is almost always taken as an instance of projection:

(8) Georgian
    sup'-i   ar   *gauk'etebia*
    soup-NOM NEG make.**IND**.PST
    p = 'S/he made a soup'
  (i) $\neq$ [I hear/infer p] $\wedge$ [$\neg p$] **projects**
  (ii) $\neq \neg$ [I hear/infer p] **narrow scope**, EV$< \neg$
  (iii) = [I hear/infer $\neg p$] **wide scope**, EV$> \neg$

As Murray (2010) (but not Murray, 2014) and Tonhauser (forth.) correctly point out, the only available interpretation is an instance of the evidential outscoping clause-mate negation, which in turn creates an illusion of projection.[6] Moreover, non-challengeability does not correlate with projection: while all evidentials are non-challengeable, some of them may have narrow scope in conditionals, e.g. Tagalog (Kierstead, 2015), or in attitudes, e.g. Turkish and Korean (Korotkova, 2015). In light of this, the data on disagreement are essential for modeling evidentiality.

In all incarnations of the view above, the speaker's having acquired p in a particular way is treated as an objective fact. That this information has to be channeled as NAI seems to be an arbitrary property of grammar, and things could have been otherwise. I present an alternative view wherein the non-challengeability of some elements is a direct effect of what they mean.

2.2 Route 2: Subjectivity

Subjectivity Individuals have privileged and exclusive access to certain information about themselves, through senses and introspection: (A) mental states, e.g. having a desire, (B) feelings, e.g. being angry or sad, (C) some bodily sensations, e.g.

pain or hunger. Self-knowledge obtained via these channels is *incorrigible*: the experiencer has a special epistemic status and others have no grounds to deny such knowledge.[7] If I am, say, tired, I am the only authority over this state of mine.[8]

I will call linguistic expressions that describe such experiences as above *subjective*. The category of Subjective Content (SC) includes, e.g., first-person (A) attitude reports (*I hope*), (B) taste ascriptions (*It tastes good to me*), (C) psych verbs (*I am excited*), and (D) statements about pain (*It hurts*).[9] I demonstrate, using conversational disagreement as an example, that some features of the linguistic behavior of SC stem from intrinsic properties of the experiences it talks about.

Non-challengeability of SC Incorrigibility of knowledge obtained via subjective experiences restricts the range of reactions to SC in the following way. Only the experiencer has access to said experiences, so genuine disagreement is impossible:

(9)   FIRST-PERSON PAIN REPORT
    A. **I** have a splitting headache.
    B. #No, that's not true.

By virtue of self-knowledge about pain being incorrigible (a non-linguistic fact), B cannot felicitously disagree (a linguistic fact) with A about A's pain (9).[10] In third-person pain reports (10), the speaker and the addressee both have low epistemic status, and non-challengeability evaporates:

(10)   THIRD-PERSON PAIN REPORT
    A. **Mo** has a splitting headache.
    B. ✓No, that's not true.

Other subjective expressions exhibit the same pattern with respect to non-challengeability of first-person statements (11, 13) and lack thereof for their third-person counterparts (12, 14).

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[6]Sharvit (2015) makes a similar observation about the pseudo-projective behavior of *only*.

[7]I am not taking sides in the debate on the infallibility—complete immunity to error—of such self-knowledge (see e.g. (Aydede, 2013) on pain). Of importance here is that only the experiencer has access to certain experiences, regardless of whether it is logically possible for them to be mistaken.

[8]Bodily awareness isn't always incorrigible (de Vignemont, 2015). Even though proprioception offers a unique experience of one's body, mistakes about e.g. spatial orientation are possible and may be corrected by others.

[9]The notion is broader than the usually recognized first-person content such as attitudes 'de se' (Moltmann, 2012).

[10]B may disagree with (9) if B thinks that A (a) is being insincere or (b) is not correctly assessing their own experience. I ignore such pragmatically odd situations until section 4.

(11) FIRST-PERSON PSYCH PREDICATE
    A.   Sauerkraut disgusts **me**.
    B.   #That's not true.

(12) THIRD-PERSON PSYCH PREDICATE
    A.   Sauerkraut disgusts **all vegans**.
    B.   ✓That's not true.

(13) FIRST-PERSON BELIEF REPORT
    A.   **I** think that there is life on Mars.
    B.   That's not true.
  (i) $= \neg$ [There is life on Mars]
  (ii) $\neq \neg$ [You think that there is life on Mars]

(14) THIRD-PERSON BELIEF REPORT
    A.   **Mo** thinks that there is life on Mars.
    B.   That's not true.
  (i) $= \neg$ [There is life on Mars]
  (ii) $\neq$ [She thinks that there is life on Mars]

SC resists third-party assessment in general, which is responsible for its non-challengeability in dialogues. Therefore, non-challengeability does not uniquely diagnose NAI (Anand (2007: 203) makes a similar point).[11] Still, subjectivity is not brought up in the literature on conversational dynamics (Simons et al., 2010; Tonhauser, 2012).

On the other hand, that subjectivity bans some kinds of disagreement is explicitly acknowledged for epistemics such as *likely* and Predicates of Personal Taste (PPT) such as *delicious*. While it is possible to disagree with e.g. a PPT-statement, the disagreement is of a different nature:

(15)   A.   Sauerkraut is disgusting.
       B.   ✓No, it is delicious.

Dialogues as in (15) are referred to as *faultless disagreement* (Kölbel, 2003), a situation when the two parties disagree without one of them being strictly wrong. B's statement is only felicitous so long as B is making a claim about oneself or a generic statement ($\approx$ 'People in general like sauerkraut'). Such a *No* never contests the speaker's epistemic state or perception, a move deemed infelicitous precisely on the grounds I discuss—these are private experiences (Stephenson, 2007; Anand, 2009; von Fintel and Gillies, 2011). Subjectivity also predicts the infelicity of a *No* in reply to a PPT-statement with an overt experiencer, such as *It is disgusting to me*.

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[11](13) is susceptible to an explanation along the lines of (Simons, 2007): the preferred content, but not the matrix verb, constitutes the main point. Such an analysis fails to predict (A) the contrast between first- and third-person attitudes with respect to disagreement, and (B) the pattern exhibited by SC across the board. In e.g. (9) and (12) one's headache and preferences are clearly at-issue as the sentences can answer questions about, respectively, one's well-being and likes.

The possibility of faultless disagreement, as well as the the possibility of retractions—disagreement with one's previous statements, is at the core of the contextualism-relativism-expressivism debate on the proper analysis of PPTs and epistemics; see (Weatherson and Egan, 2011) and (MacFarlane, 2014: 1-25) for an overview. Using Weatherson and Egan's helpful analogy, epistemics and PPTs resemble *we* in that they have a 'communal' component, formalized e.g. as assessment-sensitivity (Stephenson, 2007; MacFarlane, 2014), genericity (Anand, 2009; Pearson, 2013) or group-relativity (von Fintel and Gillies, 2008). This component is part of their conventional meaning and is not inherent to subjective expressions, as evidenced e.g. by the contrast between taste ascriptions via PPTs (15) and via psych verbs (11); cf. also discussion in (Anand, 2009).

ER as SC   Recall that it is illicit to deny the ER:

(16)   German (Germanic)
    A. Es **soll** regnen am   Wochenende.
       It   **REP** to.rain at.DAT.DEF weeekend
       'It will rain on the weekend, *I hear*'.
       $\approx$'It is supposed to rain on the weekend.'
    B. Nein, das stimmt   nicht.
       No   that be.true.PRES NEG
       'No, that's not true'
  (i) $= \neg$ [It will rain]
  (ii) $\neq \neg$ [You heard it it will rain]
  (iii) $\neq \neg$ [I/we all heard it will rain]

The hearsay use of German *sollen* ($\approx$'must') also exhibits non-challengeability (Faller, 2007). I propose that this universal pattern is amenable to a subjective analysis.

Acquisition of some proposition is always associated with a mental state formed thereafter. Some *conjectural* and *inferential* evidentials, e.g. Cuzco Quechua =*chá* (2c), refer to mental states directly by indicating that the scope proposition was acquired via reasoning from general knowledge. Other evidentials describe mental states mediated by perception. (A) *Direct* evidentials such as Cuzco Quechua =*mi* (2a, 3) involve immediate perception. (B) *Hearsay* evidentials such as Cuzco Quechua =*si* (2b) and German *sollen* (16) denote having heard (or read) a report. (C) *Indirect* evidentials—ones denoting either hearsay or inference from results, such as Bulgarian *-l* and Turkish *mIş* (discussed in section 3 below)—refer to, respectively, perceiving results or reports. Whichever the channel, denying that the speaker acquired the scope proposition in a given

way amounts to questioning their introspection and perception—and this, in turn, is infelicitous. The formal analysis is proposed in (Korotkova in prep.), where I also argue that faultless disagreement (16iii) is banned due to indexicality.

Similar effects in fact hold for English. Even though the language lacks grammatical evidentials, information source can be signalled by other means, as in *I saw that it hailed*. A reply *No, you didn't* is infelicitous: regardless of what the addressee thinks the speaker has observed, only the actual speaker has access to their perception.[12]

If explicit performatives (*I promise*) are true by say-so, linguistic subjectivity can be described as true by *feel-so*: *It hurts* is true if the speaker is sincere. The ER, under the view sketched above, behaves the same way and thus is non-challengeable. Faller (2002), who likens the ER to mental acts of evaluation, observes this parallel between performatives and evidentials. However, Faller does not discuss linguistic and non-linguistic subjectivity, and derives the non-challengeability of the ER from the level of meaning evidentials operate at.

Garrett (2001: Chapter 4, 102-206), too, discusses the truth by say-so effects of evidentials and appeals to the privileged status of some information to describe constraints on what he calls *ego evidentiality* in Tibetan, a category that describes internal knowledge about a situation. The proposal I put forth is different. I argue that *all* evidentials denote experiences to which individuals have exclusive access, regardless of the source. Besides, the status of ego evidentiality as evidentiality proper is debated, and it may better fit under the egophoricity umbrella (Floyd et al. forth).

2.3 Interim summary

The landscape of disagreement patterns requires rethinking. I show that (not-)at-issue status is not the only source of impossibility of direct denials and that subjectivity is another plausible solution. To this end, I delineate an approach to evidentiality such that the speaker is the one and only authority over the way they acquired the scope proposition. This view derives direct denials equally well compared to the ER-as-NAI approaches. The next section discusses where the two options diverge.

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[12]A reviewer notes that it is possible to disagree with such English statements. I argue that such cases can be subsumed under performance disagreement, discussed in section 4.

3 Other types of denial

Direct denials of the form *No, that's not true* do not distinguish between NAI content and SC: both are non-challengeable. Thus, as far as evidentials are concerned, each line of analysis will get the direct denial data right. I show that the two different sources of non-challengeability yield different patterns with respect to other denial strategies and argue that evidentials pattern with SC.

NAI content is backgrounded, which limits the range of discourse operations applicable to it. In this case, form matters. Direct denials become possible if the same content is conveyed via regular clausal coordination. Direct denials are more likely (Syrett and Koev, 2015: Experiment 2) for sentence-final non-restrictive relatives (17a) as opposed to non sentence-final ones (17b):

(17)   a.   The photographer took a picture of Catherine, **who is an experienced climber**.
       b.   Catherine, **who is an experienced climber**, made it to the summit.
              (Syrett and Koev, 2015: App.A, ex.5)

Jasinskaja (2016) argues that positional effects follow from a more general constraint on salience associated with propositional anaphora such as *that*.

Additionally, special discourse moves are allowed to target NAI. *Hey, wait a minute* (proposed by von Fintel (2004) for identifying presuppositions) may target appositives, and in fact prefers to (Syrett and Koev, 2015: Experiment 1).

SC, on the other hand, cannot be challenged across the board: the addressee has no epistemic authority for disagreement, and e.g. *Hey, wait, you are not* in reply to *I'm in pain* is bizarre at best.

The asymmetry in licensing disagreement can be used as a benchmark for evidentials. If some kinds of disagreement are allowed, it is an argument for the dominant ER-as-NAI view (section 2.1). If denials are banned altogether, it is an argument for a subjective approach (section 2.2):

	NAI	SC	ER
That's not true	☺	☺	☺
Other types of denial	✓	☺	**??**

Table 1: Licensing disagreement

Below I discuss novel data from Bulgarian (South Slavic) and Turkish (Turkic) on the availability of two kinds of denials, *No, that's not true* and *You are mistaken*, for (A) NAI: presuppositions and appositives, (B) SC: pain and attitude reports, and (C) evidentials. None of these

expression types allow *No, that's not true*. *You are mistaken*, being more flexible than propositional anaphora, may target NAI but, given the lack of epistemic authority on part of the addressee, cannot target SC. Evidentials ban both reactions.[13]

NAI   In both Bulgarian and Turkish, presuppositions introduced by *too* (Appendix A) and the content of appositives (18, 19) can be disagreed with using *You are mistaken* (with a follow-up specifying what the mistake is about) but cannot be targeted by direct denial (even with a follow-up).[14]

APPOSITIVES

(18)   Bulgarian
   A. Kalifornija, **naj-golemijat štat**, legalizira
      California **the.largest state** legalize.PST
      marixuana-ta
      marijuana-DEF
      'C., the largest state, legalized marijuana.'.

   B. Ne, ne e vjarno.
      No NEG be.PRES true
      'No, that's not true'.

  (i) = ¬ [California legalized]
  (ii) ≠ ¬ [California is the largest state] (even with a continuation such as *Alaska is the largest state*)

   B'.Bărkaš.
      be.mistaken.2SG
      'No, you're mistaken'.

  (i) = ¬ [California legalized]
  (ii) = ¬ [California is the largest state] (if there is a continuation such as *Alaska is the largest state*)

(19)   Turkish
   A. Kaliforniya, **Amerika'nin en büyük**
      California **America's most big**
      eyaleti, otu yasallaştır-dı
      state weed legalize-PST
      'C., A.'s largest state, legalized marijuana.'

   B. Hayır. Bu doğru değil.
      no   this true NEG
      'No, that's not true'.

  (i) = ¬ [California legalized]
  (ii) ≠ ¬ [California is the largest state] (even with a continuation such as *Alaska is the largest state*)

   B'.Yanıl-ıyor-sun.
      be.mistaken.PROG-2SG
      'You're mistaken'.

  (i) = ¬ [California legalized]
  (ii) = ¬ [California is the largest state] (if there is a continuation such as *Alaska is the largest state*)

In (18) and (19), the appositives are sentence-medial to compensate for potential positional effects. Given that this position does not facilitate

denials, unlike the sentence-final position in English (which would be especially interesting to test in languages with other word-order patterns, such as Turkish), the contrast between the two strategies is even more marked.

SC   In both Bulgarian and Turkish, first-person pain (20, 21) and attitude (Appendix A) reports ban all kinds of disagreement, while third-person statements can be disagreed with using both strategies in question (see section 2.2 on English).

PAIN REPORTS

First person

(20)   Bulgarian
   A. Glava-ta **me** boli   strašno
      head-DEF **I.**DAT ache.PRES awfully
      'I have an awful headache'.
   B. #No, that's not true.
   B'.#You are mistaken.

(21)   Turkish
   A. Can-**ım**   yan-ıyor
      life-**1SG**.POSS burn-PROG
      'I am in pain; lit. My life is burning'.
   B. #No, that's not true.
   B'.#You are mistaken.

Third person

(22)   Bulgarian
   A. **Lora ja** boli glava-ta   strašno
      Laura she.DAT ache head-DEF awfully
      'Laura has an awful headache'.
   B. ✓No, that's not true.
   B'.✓You are mistaken.

(23)   Turkish
   A. **Canın** can-**ı**   yan-ıyor
      John's life-**3SG**.POSS burn-PROG
      'John is in pain; lit. John's life is burning'.
   B. ✓No, that's not true.
   B'.✓You are mistaken.

ER   In Bulgarian and Turkish, evidentiality is morphologically part of the tense system. Indirect evidential morphemes *-l* (Bulgarian; Izvorski 1997) and *-mIş* (Turkish; Şener 2011) denote, depending on the context, either inference from results or hearsay. The ER contributed by each morpheme cannot be challenged using either of the strategies in question (24, 25):

Context 1, hearsay: I read a note in LA Times.
Context 2, inference: I come to Venice Beach. Lots of people are smoking weed.

(24)   Bulgarian
   A. Kalifornija legalizira-**l**-a
      California   legalize-**IND**.PST-F
      marixuana-ta
      marijuana-DEF
      'C. legalized marijuana, *I hear/infer*'.
   B. That's not true.
  (i) = ¬ [California legalized]

---

[13]I avoid using 'Hey, wait a minute' for methodological reasons: the cross-linguistic validity of this test as a NAI diagnostic is yet to be established. In particular, the test may not have a direct equivalent in other languages and the results are controversial even for e.g. presuppositions.

[14]As translations show, English behaves the same way.

(ii) $\neq \neg$ [You hear/infer it]

 B'. You are mistaken.

(i) $= \neg$ [California legalized]

(ii) $\neq \neg$ [You hear/infer it]

(25)   Turkish

 A. Kaliforniya otu yasallaştır-**mış**
  California weed legalize-**IND**.PST
  'C. legalized marijuana, *I hear/infer*.'

 B. That's not true.

(i) $= \neg$ [California legalized]

(ii) $\neq \neg$ [You hear/infer it]

 B'. You are mistaken.

(i) $= \neg$ [California legalized]

(ii) $\neq \neg$ [You hear/infer it]

Below is a detailed summary of applicability of the two disagreement strategies, *No, that's not true* and *You are mistaken* across different kinds of expressions in Bulgarian and Turkish:

	Not true	Mistaken
too (30, 31)	☹	✓(w/ follow-up)
appositive (18, 19)	☹	✓(w/ follow-up)
1-person pain (20, 21)	☹	☹
3-person pain (22, 23)	✓	✓
1-person hope (32, 33)	☹	☹
3-person hope (34, 35)	✓	✓
ER (24, 25)	☹	☹

Table 2: Licensing disagreement, itemized

That *No, that's not true* and *You are mistaken* can target the scope proposition in (24) and (25) is predicted both by the NAI and the subjective view. What is surprising under the ER-as-NAI view is that *You are mistaken* can be directed at appositives and presuppositions but not at the ER, even with an explicit follow-up such as 'You didn't hear it', 'Nobody told you so', 'You don't infer it', 'You don't have evidence for it' and so on. The NAI view on evidentiality—especially approaches that model appositives and the ER in the same fashion (Murray, 2014)—fails to predict and explain the pattern. If all types of NAI content were created equal, the difference would be a mystery. Using Jasinskaja (2016)'s insight, one may argue that (a) *You are mistaken* requires a particular level of salience, and that (b) only the content of appositives, but not the ER, satisfies it. While analytically an option, this argument currently has no empirical basis. Furthermore, the NAI approaches predict that all kinds of propositional anaphora would be banned with evidentials, but the prediction is not borne out:

(26)   Bulgarian

 A. Ana se ozheni-**l**-a.
  Ana REFL marry-**IND**.PST-F
  'Ana got married, *I hear/infer*.'

 B. (Tova e) stranno. Tja mi kaza
  (that be.3SG) weird she me say.PST
  da go pazja v tajna.
  to it keep in secret
  'That's surprising. She told me to keep it as a secret.'

The bottom line   The lesson learned from the data presented in this section is as follows. Denials make it possible to draw a line between NAI on the one hand and evidentials on the other. If the ER were a type of NAI content, at least *some* kinds of disagreement about content would be possible. This expectation is not borne out. The ER behaves in the same way as subjective expressions such as *I hope* in that disagreement is generally infelicitous, which makes a subjective analysis not just possible but empirically advantageous:

	NAI	SC	ER
That's not true	☹	☹	☹
You're mistaken	✓	☹	☹

Table 3: Licensing disagreement, revisited

4   Performance disagreement

The paper argues that disagreement with SC is infelicitous because self-knowledge described by subjective expressions is not available to the addressee (a non-linguistic fact), so they have no reasonable basis to contest it (a linguistic fact). Such disagreement would signal that the addressee assumes being in a better position to evaluate the speaker's mental state than the actual speaker is. Under normal circumstances, such behavior is outright weird and possibly violates social norms. However, even though the weirdness is rooted in the lexical semantics of the items in question, which in turn is rooted in the qualities of experiences described, the ban is of a pragmatic nature. If so, under less-normal circumstances *some* kind of disagreement should be possible. The prediction is borne out.

It is possible to disagree with SC if the addressee thinks that the speaker is insincere or is impaired in judgment. Consider (27) below:

(27) A. It hurts so much!

 B. No, it doesn't.

(27) is common in caretaker-child interactions. B may think that A is faking. Or B may deem A's reaction inappropriate as nothing really serious has

happened. Either way, B is in disagreement with A. But the disagreement is not about the content of A's utterance: after all, B has no access as to what A truly experiences.[15] B is challenging the premises for said utterance.

I will call cases such as (27) *performance disagreement*: the situation when the addressee challenges not the content, but the speaker's performance and thus the grounds for an assertion (the term from (Anand, 2009) on taste ascriptions).

As section 3 shows, genuine disagreement is impossible with first-person statements about pain, first-person attitude ascriptions and evidentials. But performance disagreement is allowed.

In the case of pain, both Bulgarian and Turkish allow dialogues like (27) in scenarios with children and caretakers. This use is highly restricted though, likely due to societal norms. It is infelicitous to challenge an adult's statement about their pain even if you think they are under anesthesia and should not feel anything.

Performance disagreement with attitudes (28) and evidentials (29) is exemplified below.

FIRST-PERSON HOPE

(28) Bulgarian
      Context: A is a devout Democrat.

   A. Nadjava-**m** se   [če Tramp šte spečeli].
      hope-**1SG** REFL [that Trump will win]
      'I hope that Trump will win.'

   B. Ne, kazvaš go samo za provokacija
      no say.2SG it only for provocation
      'No, you say this only for provocation.'

In (28), B is challenging A's sincerity (or sanity).

EVIDENTIALS

(29) Bulgarian

   A. Teksas legalizira-**l**   marixuana-ta.
      Texas legalize-**IND**.PST marijuana-DEF
      'T. legalized marijuana, *I hear/infer*'.

   B. Njamaš   nikakvo osnovanie za tova.
      have.NEG.2SG no   ground   for that

      Prosto si   pijan.
      just   be.2SG drunk
      'You have no grounds for saying that. You're just drunk.'

In (29), B is challenging A's competence, suspecting they are drunk. Dialogues similar to (29) and (28) are also possible in cases of assumed hallucinations and other types of impaired performance,

or if the addressee thinks that the speaker is lying.

Summing up, evidentials pattern with subjective expressions even with respect to substandard disagreement. This new data point is not immediately handled in current approaches to evidentiality.

5   General discussion

The non-challengeability of the ER has been one of the keystones of NAI approaches to evidentials. Based on the behavior of different types of content with respect to different types of denial, I argue that the ER patterns with subjective expressions and not with NAI.

The main empirical contributions are twofold. (A) Subjective content resists denial. Direct denial thus cannot be used as a two-way diagnostics that separates AI (=denial possible) from NAI content (=denial impossible). (B) In the case of SC, all kinds of denial render the infelicity of response, except for performance disagreement. Evidentials exhibit this very pattern—at least the morphological ones, in contrast with lexical means such as English *allegedly* and *reportedly*. In the case of NAI, denial is contingent on the strategy used: *You are mistaken* is allowed and *That's not true* is banned. I leave investigating the source of flexibility of *You are mistaken*, as well as the behavior of other disagreement techniques, for future research.

The main theoretical claim is that the strong non-challengeability of the ER necessitates a subjective analysis of evidentiality. Certain experiences, such as mental states, are inherently first-person and thus incorrigible, i.e. immune to third-party assessment. In dialogues, these properties give rise to non-challengeability. Evidentials make reference to mental processes such as perception and reasoning, therefore it is only natural to treat them as subjective. And once subjectivity is in place, the NAI analysis is no longer needed.

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[15]I am not concerned here with brain-in-a-vat kind of scenarios where a third party might gain access to one's experiences. I focus not on the logical (im)possibility to assess someone's exclusive states, which is a question for philosophy of mind, but on particularities of dialogues that feature subjective expressions in worlds similar to ours.

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Appendix A: Presuppositions and attitudes

PRESUPPOSITIONS: TOO

(30) Bulgarian
A. Kalifornija **săshto** legalizira
California **too** legalize.PST
marixuana-ta
marijuana-DEF
'California, too, legalized marijuana'.

B. No, that's not true.
(i) = ¬ [California legalized]
(ii) ≠ ¬ [Some other state legalized]
B'. You are mistaken.
(i) = ¬ [California legalized]
(ii) = ¬ [Some other state legalized]

(31) Turkish
A. Kaliforniya **da** otu yasallaştır-dı
California **too** weed legalize-PST
'California, too, legalized marijuana.'
B. No, that's not true.
(i) = ¬ [California legalized]
(ii) ≠ ¬ [Some other state legalized]
B'. You are mistaken.
(i) = ¬ [California legalized]
(ii) = ¬ [Some other state legalized]

ATTITUDE ASCRIPTIONS: HOPE

Since it is pragmatically odd to evaluate the truth of one's aspirations, only reactions that target the entire sentence are included.

First person

(32) Bulgarian
A. Nadjava-**m** se [če Tramp šte spečeli].
hope-**1SG** REFL [that Trump will win]
'I hope that Trump will win.'
B. #No, that's not true.
B'. #You are mistaken.

(33) Turkish
A. [Trump'ın kazancağını] um-uyor-**um**
[Trump's winning] hope-PROG-**1SG**
'I hope that Trump will win'.
B. #No, that's not true.
B'. #You are mistaken.

Third person

(34) Bulgarian
A. **Republikanci-te** se nadjava-**t** [če
Republican.PL-DEF REFL hope-**3PL** [that
Tramp šte spečeli].
Trump will win]
'The Republicans hope that Trump will win.'
B. ✓No, that's not true.
B'. ✓You are mistaken.

(35) Turkish
A. **Can** [Trump'ın kazancağını] um-uyor
John [Trump's winning] hope-PROG
'John hopes that Trump will win'.
B. ✓No, that's not true.
B'. ✓You are mistaken.

Appendix B: Abbreviations

1,2,3 person; ACC accusative; CONJ conjectural; DAT dative; DEF definite; DIR direct; F feminine; IND indirect; NEG negation; PL plural; PROG progressive; POSS possessive; PST past; PRES present; REFL reflexive; REP reportative; SG singular; TOP topic