

# Objecting to discourse moves with gestures<sup>1</sup>

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**Abstract.** This paper explores the role of the visual modality in marking objections in spoken languages. It describes a facial expression that signals particularly strong objections. In the context of discourse, this gesture can serve as a marker of conversational breakdown.

**Keywords:** gesture, facial expression, objection.

## 1. Introduction

It has long been observed that movements of the face and body can carry information about what is happening in a discourse (see Kendon, 2017 for a recent summary of relevant research). This paper is about a gesture that frequently appears in objections like the one in (1).

- (1) A: Did Kenji's wife go to the picnic?                      Presupposes: Kenji has a wife, i.e., is married  
B: Kenji isn't married!

Here, Speaker B objects to the unsatisfied existence presupposition triggered by Speaker A's use of the possessive. This objection is very naturally produced with the combination of facial movements illustrated in Figure 1; the first four frames are realized before the onset of speech.

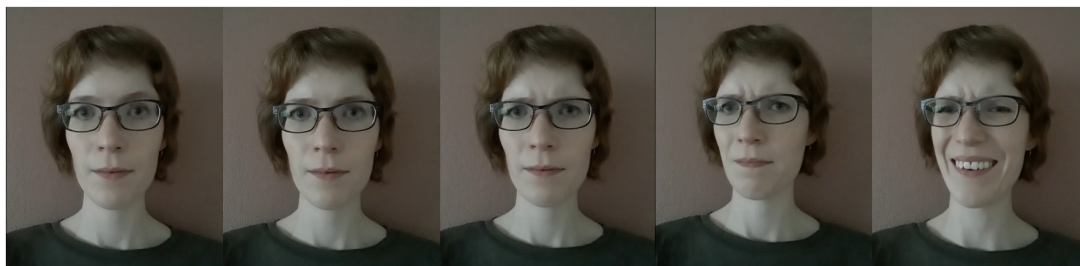


Figure 1: Gesture accompanying (1B)

I will refer to this gesture as *WAYTA* (mnemonic for *What Are You Talking About?!).* The goal of this paper is to conduct a preliminary investigation of this gesture's distribution and role in discourse. I will argue that *WAYTA* marks strong objections. This gesture is sensitive to properties of the surrounding discourse that are also relevant for the licensing of elements of spoken language (e.g., *actually*), and it can replace otherwise obligatory spoken material.

## 2. WAYTA

*WAYTA* involves (at least) four key ingredients, visible in Figure 2: lowering of the eyebrows, compression of the lips, tightening of the corners of the mouth, and raising of the chin. Some speakers combine this facial configuration with a movement of the head either forward or backward.

This gesture bears a striking similarity to another facial expression that has been identified in the literature by Benitez-Quiroz et al. (2016). They call the gesture the “*not face*” and show

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Figure 2: WAYTA up close

that it is composed of the same four ingredients just identified in WAYTA: brow-lowering, lip compression, tightening of the corners of the mouth, and chin-raising (AUs 4, 24, 14, and 17, respectively, in Ekman and Friesen's (1978) Facial Action Coding System). I will tentatively assume, then, that WAYTA is the same as the *not* face.<sup>2</sup> Benitez-Quiroz et al. (2016) propose that these four components are drawn from universal expressions of negative moral judgement,<sup>3</sup> with the brow-furrowing and lip compression coming from the prototypical anger face, the tightening of the corners of the mouth coming from the contempt face, and the chin-raising coming from the disgust face. They show that the *not* face is employed by users of English, Spanish, Mandarin, and ASL, from different cultural backgrounds.

### 2.1. Objection vs. negation

Benitez-Quiroz et al. (2016) claim that the *not* face is a universal expression of negation. While this is clearly true for ASL, where it is a fully grammaticalized non-manual marker of negation, its behaviour in spoken languages is quite different.

Most obviously, in a language like English this gesture does not negate the truth-conditional material that it overlays. For example, producing an assertion like *Esther left* with this facial expression, as in (2a), does not result in a meaning equivalent to *Esther didn't leave*, as in (2b). The underlining in this and future examples indicates the approximate temporal alignment of the gesture.

- (2)    a.    Esther left<sub>WAYTA</sub>  
          b.    Esther didn't leave.

<sup>2</sup>In the final frame of Figure 1, the lower eyelids are raised (AU7) in a way that has not been described for the *not* face. I am grateful to audience members at SuB 25 for pointing this out to me. This difference could indicate that WAYTA is the *not* face plus an additional ingredient; however, it is not clear that this eyelid movement occurs in all instances of WAYTA, whereas the other movements do. More work is needed on this front.

<sup>3</sup>The existence of universal facial expressions of emotion has been challenged; see, e.g., Barrett et al., 2019 for a recent evaluation of the research.

Benitez-Quiroz et al. (2016) also characterize the *not* face as a “co-articulator” of negation; perhaps, then, they do not intend that it encodes negation but rather that it is part of how we produce negation. This cannot be quite right either, as the presence of negation is neither a necessary nor a sufficient condition for the felicity of this gesture. Instead, it appears that the distribution of this gesture tracks objection. This is illustrated in (3) and (4). In the former, where Speaker B’s utterance objects to Speaker A’s presupposition, *WAYTA* is felicitous even though it accompanies a positive sentence; in the latter, where Speaker B’s utterance contains negation but does not object to anything, *WAYTA* is infelicitous.

(3) A: Did Kenji’s wife come to the picnic?

B: Kenji’s a bachelor!<sub>WAYTA</sub>

(4) A: Who here doesn’t smoke?

B: Mary doesn’t smoke!<sub>#WAYTA</sub>

I believe that this shift from negation to objection is consistent with the spirit of the connection that Benitez-Quiroz et al. (2016) draw between the *not* face and the facial expressions of disgust, contempt, and anger with which it shares elements. At the root of objection is a negative judgement of or attitude toward the target of the objection.

This move has the welcome result of making sense of Benitez-Quiroz et al.’s (2016) observation that the *not* face can be used as a pro-speech gesture that comments on events in the world. They observe that it is not uncommon for athletes to make this face after missing a goal or disagreeing with a referee’s decision. Intuitively what is happening here is not a form of negation – the face does not undo the event, or claim that it did not happen – but rather something closer to objection: a negative evaluation.

## 2.2. The strength of objection

We have established that *WAYTA* marks objections. However, this gesture is not felicitous in all objections. As (5) demonstrates, *WAYTA* is compatible with many ways of embellishing a presupposition denial, but it is not compatible with the discourse particle *actually*.

(5) A: Did Kenji’s wife come to the picnic?

B: Kenji isn’t married!<sub>WAYTA</sub>

B’: Kenji isn’t even married!<sub>WAYTA</sub>

B’’: Kenji’s wife didn’t come to the picnic; Kenji isn’t married!<sub>WAYTA</sub>

B’’’: What are you talking about?! Kenji isn’t married!<sub>WAYTA</sub>

B’’’’: Kenji actually isn’t married!<sub>#WAYTA</sub>

Indeed, it appears that *WAYTA* and *actually* are in complementary distribution.<sup>4</sup> This is illustrated in (6) and (7), where the same strings receive different judgments depending on the continuation.

(6) A: Did Kenji’s wife come to the picnic?

B: Kenji actually isn’t married! You’re thinking of his roommate; she did attend.

B’: #Kenji isn’t married!<sub>WAYTA</sub> You’re thinking of his roommate; she did attend.

<sup>4</sup>Although illustrated here with sentence-medial *actually*, the same holds when the particle is placed sentence-initially or sentence-finally, provided that it is unstressed. Stressed *actually* appears to be compatible with *WAYTA*; a full exploration of this fact is left to future research.

- (7) A: Did Kenji's wife come to the picnic?  
 B: ??Kenji actually isn't married! I have no idea who you're talking about.  
 B': Kenji isn't married!<sub>WAYTA</sub> I have no idea who you're talking about.

In (6), the continuation signals that Speaker A's mistake was an understandable one. Perhaps Kenji is often seen in the company of a woman who Speaker A has mistakenly assumed is his wife, and Speaker A is interested in learning whether this person attended the picnic. Speaker B knows who Speaker A intended to refer to; although they must correct the conversational record on Kenji's marital status, Speaker B can then carry on with the conversation and answer Speaker A's question. In this context, *actually* is felicitous while *WAYTA* is not. In (7), precisely the opposite holds; here the continuation signals that Speaker A's mistake is not an understandable one; Speaker B has no idea who Speaker A intended to refer to and so is unable to answer the question.

The use of *actually* seen above, to be distinguished from the truth-emphasizing use of *actually*, has been identified as part of a conciliatory, face-saving correction strategy; while it indicates that the content of its host sentence is incompatible with some other salient proposition in the discourse, it also has an effect that is variously described as downplaying, softening, or apologizing for the correction (Hickey, 1991; Oh, 2000; Taglicht, 2001). With this characterization in mind, we can make some headway on figuring out why *WAYTA* and *actually* are in complementary distribution. Both involve pointing out an incompatibility between Speaker B's discourse move and Speaker A's discourse move. They must differ in the way that this correction is presented; whereas *actually* signals a mild, conciliatory objection, *WAYTA* instead signals a strong, rebuke-filled one.

What is the difference between a mild objection and a strong one? I would like to suggest that the difference lies in how understandable the speaker portrays the target of the objection to be; a mild objection arises when the speaker signals that they understand why their interlocutor made the discourse move that they did, while a strong objection arises when the speaker signals that they do not understand why their interlocutor made the discourse move that they did.<sup>5</sup> One easily accessible reason for a participant's move being hard to understand is that it was in some sense defective or ill-advised, hence the negative judgement.

### 2.3. The target of objection

It appears that *WAYTA* is quite flexible with respect to the target of the objections in which it appears. It is particularly common in presupposition denials, such as (1) and (8), presumably because presupposing something false is a particularly egregious dereliction of one's conversational duties; the common ground is, after all, public information. Beyond presupposition denials, *WAYTA* can also be found in denials of implicatures, as in (9), and of at-issue content, as in (10).

- (8) A: Tamara stopped smoking.  
 B: Tamara never smoked in the first place!<sub>WAYTA</sub>
- (9) A: Agnes passed the test.

<sup>5</sup>We should therefore expect that what counts as grounds for a strong objection will depend on the context. This prediction appears to be borne out; for example, *WAYTA* is only appropriate in (1) if B believes that A could (or should) have known better than to presuppose that Kenji had a wife.

B: She aced it!<sub>WAYTA</sub>

(10) A: Sophia passed the test.

B: No she didn't!<sub>WAYTA</sub>/She failed it!<sub>WAYTA</sub>

WAYTA is also compatible with objections to the form of an utterance, as illustrated in (11).<sup>6</sup>

(11) I didn't catch two MONGEESE – I caught two MONGOOSES!<sub>WAYTA</sub>

(adapted from Horn, 1985: 132)

Here, the target of objection is not the truth of the proposition that the speaker caught two members of the family Herpestidae, but rather the plural morphology that the interlocutor has apparently used.

In (12) and (13), the target of Speaker B's objection is an unfulfilled precondition for the felicity of Speaker A's discourse move.

(12) A: Go to your room!

B: You can't tell me what to do!<sub>WAYTA</sub>

(13) A: Shall we go to Oleana for dinner?

B: Where even is that?<sub>WAYTA</sub> (adapted from Iatridou and Tatevosov, 2016: 298)

In (12), the relevant precondition is the authority condition, while in (13) it is the assumption that the addressee of the question might be equipped to answer it. Both of these conditions could in principle be encoded as presuppositions (cf. Kaufmann, 2011 and Iatridou and Tatevosov, 2016, respectively). However, WAYTA can also appear in objections to discourse moves in ways that cannot be collapsed with presupposition denial. For example, in a context where Speaker A and Speaker B are strangers, the presence of WAYTA in Speaker B's utterance in (14) might signal an objection to Speaker A's attempt to strike up a conversation. Similarly, in (15), WAYTA signals an objection to Speaker A's choice to say something offensive.

(14) A: Hey there!

B: Do I know you?<sub>WAYTA</sub>

(15) A: [offensive remark]

B: Why would you say that?!<sub>WAYTA</sub>

I have glossed the gesture under discussion as WAYTA to capture its intuitive effect in responses to discourse moves. But it is important to note that, as Benitez-Quiroz et al. (2016) observed, this gesture is also found in responses to non-linguistic events. This is illustrated in (16) and (17), where Speaker B objects to Speaker A's eccentric use of shoes and inconsiderate failure to shield others from potential infection, respectively.

(16) A: \*takes off shoes and puts them on hands\*

B: What are you doing?!<sub>WAYTA</sub>

(17) A: \*sneezes without covering mouth and nose\*

B: ...<sub>WAYTA</sub>

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<sup>6</sup>WAYTA need not extend over the positive part of this metalinguistic correction, but it is very naturally produced as marked.

In light of cases like these, a more accurate paraphrase of this gesture's contribution might be *What are you doing?!*, which would cover both linguistic and non-linguistic behaviours; however, this does not have quite the same ring to it as *WAYTA*. I will stick with the existing name here, but it should be remembered that *WAYTA* can target both linguistic and non-linguistic updates to the context.

### 3. Relationship to spoken material

We have seen that *WAYTA* signals strong objection. To precisify what the contribution of this gesture is, let us first consider how it interacts with the linguistic material that it co-occurs with. We have already seen that *WAYTA* can overlay a variety of sentence-types. This is further illustrated in (18B)-(18B''') for a constituent question, a polar question, an imperative, a declarative, and an exclamative, respectively.

- (18) A: [offensive remark]  
 B: Why would you say that?!<sub>WAYTA</sub>  
 B': Are you serious?!<sub>WAYTA</sub>  
 B'': Don't say that!<sub>WAYTA</sub>  
 B''': That's uncalled for.<sub>WAYTA</sub>  
 B''': What a horrible thing to say!<sub>WAYTA</sub>

Native speakers report an intuition that the presence of *WAYTA* has the same effect in each of these objections; it highlights the speaker's disapproval and surprise or frustration at their interlocutor's behaviour. This effect does not change with the sentence type. Importantly, *WAYTA* can disambiguate the intended effect of an utterance in the direction of a negative judgement. In (16), for example, the presence of *WAYTA* makes it clear that Speaker B's question *What are you doing?!* is not merely an expression of curiosity about Speaker A's intentions but rather a rebuke of their odd behaviour. Furthermore, as we have already seen, *WAYTA* can readily be used on its own to signal an objection. This is exemplified in (19), for the same situation as above; here, Speaker B's disgruntled look is enough to signal that they find Speaker A's remark extremely objectionable.

- (19) A: [offensive remark]  
 B: ...<sub>WAYTA</sub>

A further clue about the role of *WAYTA* may come from another interesting feature of this gesture: it can replace otherwise obligatory linguistic material. This can be seen in its interaction with the Hebrew particle *bixlal*. *Bixlal* is a scalar particle that can be translated as *at all* in negative environments and *in general* in positive environments; crucially, it also appears in particularly strong denials or corrections (Greenberg and Khrizman, 2012; Greenberg, 2016). In presupposition denials like the ones discussed in this paper, it plays a role similar to *even* (Francis, 2018, 2019). Unlike English *even*, however, this use of *bixlal* is felt to be odd unless it is preceded by an explicit announcement of conversational breakdown. This is shown in the contrast between (20B) and (20B'). Intriguingly, this requirement can be satisfied by a particularly strong production of *WAYTA*; this is shown in (20B'').

- (20) A: Did Kenji's wife go to the picnic?  
 B: Hu (??*bixlal*) lo nasuy!  
 he BIXLAL NEG married

‘He isn’t (even) married!’

B’: Al ma at medaberet / Ma / Ex ze yaxol lihiyot?!<sub>WAYTA</sub> Hu bixlal lo nasuy!  
on what you.F talk / what / how can it be he BIXLAL NEG married  
‘What are you talking about/What/How can it be?! He isn’t even married!’

B’’: ...Hu bixlal lo nasuy!<sub>WAYTA</sub>  
he BIXLAL NEG married  
‘What are you talking about/What/How can it be?! He isn’t married!’

The precise nature of this discourse requirement and its encoding in the semantics of *bixlal* has to my knowledge not been explored. That *WAYTA* can fulfill this requirement suggests that this gesture does approximately the same thing as the material that it replaces in (20). That is, it has the same effect as an exasperated, disapproving and slightly incredulous utterance of *What are you talking about?!<sub>WAYTA</sub>*. This is not to say, however, that *WAYTA* encodes an interrogative semantics; what these questions do indirectly, via reasoning about why a conversation participant would ask such a thing, the gesture appears to do directly.<sup>7</sup> There are several ways that this idea could be cashed out formally. We could treat *WAYTA* as a performative that registers an objection. We could treat *WAYTA* as an expressive in the sense of Potts (2005), or as a way of giving voice to one’s internal affective state as suggested by emotivist philosophers (e.g., Ayer, 1936). We could treat *WAYTA* as contributing a presupposition that the speaker objects to some update to the context, although it is difficult to run filtering tests of its projection properties because it is difficult to clearly embed this gesture.

Taking *WAYTA* to contribute approximately the same discourse effect as an exasperated utterance of *What?!<sub>WAYTA</sub>* or *What are you talking about?!<sub>WAYTA</sub>* is consistent with the timing of the gesture. As illustrated in Figure 1, the onset of *WAYTA* is very often well before the utterance of any spoken material that it accompanies. Beginning the gesture after the utterance, by contrast, is quite odd; if anything, (21B’) is felt to be objecting to Speaker B’s own utterance.

(21) A: Did Kenji’s wife go to the picnic?

B: ...<sub>WAYTA</sub> He isn’t married!

B’: #He isn’t married! ...<sub>WAYTA</sub>

This ordering effect also holds of an overt utterance of *What (are you talking about)?!<sub>WAYTA</sub>*; while it is perfectly acceptable for this exclamation to precede the assertion that Kenji isn’t married, following it is degraded.

(22) A: Did Kenji’s wife go to the picnic?

B: What (are you talking about)?! He isn’t married!

B’: ??He isn’t married! What (are you talking about)?!<sub>WAYTA</sub>

It appears, then, that if one is going to make a strong objection there is a strong preference to announce that objection as soon as possible, and before the grounds on which the objection is made. If the target of the objection constitutes a problem that is important enough to be worth interrupting the flow of the conversation, one should make this known right away.

<sup>7</sup>I am grateful to Sabine Iatridou for pointing this out to me.

#### 4. Cross-linguistic variation

It appears that there may be cross-linguistic variation in the gestures used in objections. Austrian German speakers report that they can produce presupposition denials of the kind discussed in this paper accompanied by a movement of the hands and body: this involves the torso and head moving forward while the shoulders and hands raise, the latter coming to rest at mid-torso height with palms facing upward, as illustrated in Figure 3.

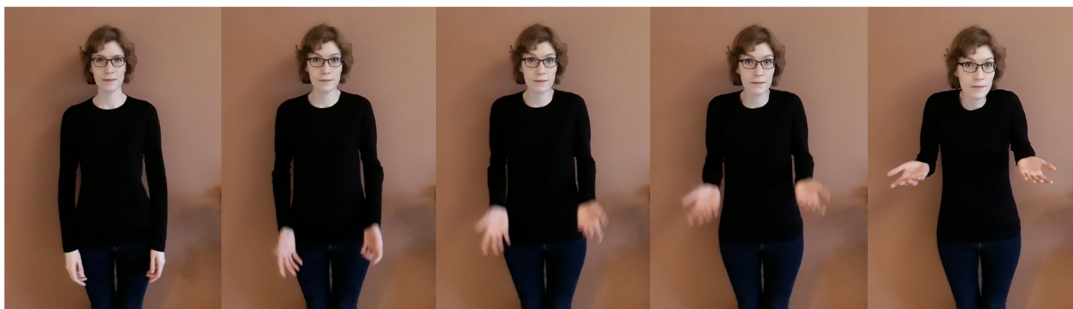


Figure 3: Another objection gesture

It is not clear at present how this gesture combines or competes with *WAYTA*. Preliminary investigation has found variable judgements regarding the facial expression that should accompany this gesture, with speakers variously endorsing raised eyebrows, as in Figure 3, lowered brows, as in *WAYTA*, or different intuitions depending on politeness. Importantly, the hand and body movement illustrated in Figure 3 does not appear to be available to English speakers in the discourse contexts under discussion. That different language communities have different gestural repertoires is not necessarily surprising; after all, there are a wide range of discourse meanings that gestures could express, and there is no reason to believe that all languages would divide up this possibility space in the same way. More cross-linguistic comparative work is needed to explore this issue.

#### 5. Discussion and open questions

This paper has explored the distribution of *WAYTA* and argued that this gesture serves to signal a strong objection toward something that has happened in the context. *WAYTA* can be used to signal objections to both non-linguistic and linguistic material; in the latter case, it can be viewed as a marker of conversational breakdown.

*WAYTA* differs from the gestures that have recently occupied the attention of semanticists (e.g., Schlenker, 2018; Esipova, 2019) in that it is not obviously iconic or deictic and does not obviously compose with spoken material. Nevertheless, this gesture holds plenty of interest for linguists. Firstly, *WAYTA* seems to be sensitive to at least some of the same discourse properties as elements of spoken language, namely *actually* and *bixlal*. Both the spoken particles and the gesture seem to care about the difference between a weak and a strong objection (or, between a surmountable conversational hiccup and a conversational breakdown), and so it would be desirable for our machinery to capture this sensitivity in both modalities. Secondly, *bixlal*'s requirement that objections containing it not only be strong but also be preceded by an overt signal of conversational breakdown is worth further investigation, both in terms of how it should be encoded in the semantics of *bixlal* and whether there are other particles with similar requirements in other languages.



There is much more work to be done on the role of gestures in discourse-management strategies. While this paper has focused on the gestural component of objections, WAYTA is often accompanied by a distinctive prosodic contour; the division of labour between gesture and intonation is very much an open question. Furthermore, given the similarities between WAYTA and facial expressions associated with affective displays, the behaviour of WAYTA raises questions about where the line is between gesture and expressions of emotion. It is hoped that this preliminary investigation has laid some useful foundations for future work on this topic.

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