

Appendix of “Diagnosing (not-)at-issue content”

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1. Introduction

This document is the appendix of Tonhauser (2012) that discusses the application of the (not-)at-issue diagnostics presented there to a wider variety of projective implications (contents). In particular, the trigger/implication pairs mentioned in Table 0.1 will be discussed, except for appositives, which were discussed in Tonhauser (2012). A checkmark ‘✓’ in a cell in the table indicates that the diagnostic identifies the projective content as not-at-issue. A checkmark in parentheses ‘(✓)’ indicates that the diagnostic suggests that the projective content is not-at-issue (e.g. consultants indicated preferences in the expected direction). ‘x’ indicates that the diagnostic did not distinguish the hypothesized at-issue content from the hypothesized not-at-issue content. A cell is left empty if no data pertaining to the diagnostic were collected. (If an entry in a cell is marked with a dagger (†), its content differs from that presented in the summary table in Tonhauser 2012.)

Trigger/implication	(Not-)at-issuiness diagnostics					
	#1a	#1b	#1c	#2	#3a	#3b
Appositives	✓	✓	✓	(✓)	✓	✓
<i>(oi)kuaa</i> ‘know’/complement implication	✓	(✓)	x	x	✓	x
Demonstrative NP/descriptive content implication	✓	✓	✓ [†]	✓	✓	✓
<i>aimete</i> ‘almost’/polar implication	x	(✓)	(✓) [†]	(✓)	(✓) [†]	✓ [†]
Possessive NP/possession implication	✓	x	x	✓	✓	(✓)
<i>-nte</i> ‘only’/prejacent implication	x	✓	x	✓		
<i>n(d)(a)–...–vé-i-ma</i> ‘not anymore’/pre-state impl.	x [†]	(✓)	x	✓ [†]	✓	(✓) [†]

Table 0.1: Not-at-issuiness of projective contents in Paraguayan Guaraní (adapted from Tonhauser 2012)

2. Application of the diagnostics

2.1 *(oi)kuaa* ‘know’

The implication explored in this section is the one conveyed by the complement of *(oi)kuaa* ‘know’, e.g. the implication of (1K) that the speaker went to the soccer field on the day before yesterday.¹ The implication of (1K) that the mother knows that the speaker went to the soccer field is referred to as the knowledge implication.

Diagnostic #1a: Intuitions about assent/dissent

- (1) Context: Karlos (K) has been grounded by his parents for the past month because he misbehaved. His friend Samuel (S) is visiting him:

K: Che-sy oi-kuaa kokuehe a-ha-ha-gue
 B1sg-mother A3-know day.before.yesterday A1sg-go-NOM.NOM.TERM
 partido-há-pe.
 soccer.game-LOC-to

‘My mother knows that I went to the soccer field the day before yesterday.’

S1: Heẽ, añete.

yes true

‘Yes, that’s true.’

S2: Na-’añeté-i.

NEG-true-NEG

‘That’s not true.’

The consultants’ intuitions were that Samuel’s utterance in S1 affirms that the mother knows that Karlos went to the soccer field, and that S2 denies that the mother knows this. These intuitions are compatible with the hypothesis that the complement implication is not at-issue.

¹I thank Marité Maldonado, Evert Ojeda Morán and Julio Rolon for working with me. The Guaraní examples in this paper were collected during yearly fieldwork trips to Paraguay in 2009–2012 and are given in the standardized orthography of the language used in Paraguay (Ministerio de Educación y Cultura 2004, Velázquez-Castillo 2004, 1421f.), except that all postpositions are attached to their host. Following this orthography, accents are not written for normally accented words (stress on the final syllable); stressed nasal syllables are marked with a tilde. The set A cross-reference prefixes (which mark transitive subjects and some intransitive ones) are *a(i)*– ‘A1sg’, *ja(i)*– ‘A1pl.incl’, *ro(i)*– ‘A1pl.excl’, *re(i)*– ‘A2sg’, *pe(i)*– ‘A2pl’, and *o(i)*– ‘A3’; the set B prefixes (which mark transitive objects, possessors and some intransitive subjects) are *che(r)*– ‘B1sg’, *ñande(r)*– ‘B1pl.incl’, *ore(r)*– ‘B1pl.excl’, *nde(r)*– ‘B2sg’, *pende(r)*– ‘B2pl’, and *i(ñ)*–/h– ‘B3’. There are two portmanteaux prefixes *ro(i)*– ‘12sg’ and *po(i)*– ‘12pl’. The following glosses are used: ABL = ablative, CONTRAST = contrastive topic marker, INTS = intensifier, JE = reflexive/middle, LOC = locative, NEG = negation, NOM = nominalization, PAST = past marker, PERFECT = perfect aspect, PL = plural, pron.S/O = subject/object pronoun, QU = question, RC = relative clause, RECIP = reciprocal, TERM = terminative aspect.

Diagnostic #1b: Assent/dissent with positive continuation

(2) In continuation of (1K)

S1: Heẽ, añete, ha'e oi-kuaa.
 yes true pron.S.3 A3-know
 'Yes, that's true, she knows.'

S2: Na-'añeté-i, ha'e nd-oi-kuáa-i.
 NEG-true-NEG pron.S.3 NEG-A3-know-NEG
 'That's not true, she doesn't know.'

S3: Heẽ, añete, re-ho partido-há-pe.
 yes true A2sg-go soccer.game-LOC-to
 'Yes, that's true, you went to the soccer field.'

S4: Na-'añeté-i, nde-re-hó-i partido-há-pe.
 NEG-true-NEG NEG-A2sg-go-NEG soccer.game-LOC-to
 'That's not true, you didn't go to the soccer field.'

The consultants judged Samuel's responses in S1 and S2 to be acceptable. They also commented that the second clause of S1 was redundant. These judgments and comments are compatible with the hypothesis that the implication of (1K) that the mother knows that p (where p is the implication of the complement) is at-issue. The responses in S3 and S4 were also judged to be acceptable by the consultants, but all consultants found them to be degraded compared to the responses in S1 and S2 (though not unacceptable). This diagnostic thus provides only weak support for the hypothesis that the complement implication is not at-issue.

Diagnostic #1c: Assent/dissent with adversative continuation

(3) In continuation of (1K)

S1: #Heẽ, añete, há=katu ha'e nd-oi-kuáa-i.
 yes true and=CONTRAST pron.S.3 NEG-A3-know-NEG
 (Yes, that's true but she doesn't know.)

S2: #Na-'añeté-i, há=katu ha'e oi-kuaa
 NEG-true-NEG and=CONTRAST pron.S.3 A3-know
 re-ho-ha-gue.
 A2sg-go-NOM-NOM.TERM
 (That's not true, but she knows that you went.)

S3: #Heẽ, añete, há=katu nde-re-hó-i partido-há-pe.
 yes true and=CONTRAST NEG-A2sg-go-NEG soccer.game-LOC-to
 (Yes, that's true, but you didn't go to the soccer field.)

S4: #Na-'añeté-i, há=katu re-ho.
 NEG-true-NEG and=CONTRAST A2sg-go
 (That's not true but you went.)

All four responses were judged to be unacceptable by the consultants. The unacceptability of S1 and S2 supports the hypothesis that the implication that the mother knows that p is at-issue: under this hypothesis, S1 and S2 are contradictory. The unacceptability of S3 is compatible with the hypothesis that the complement implication is not at-issue: S3 affirms that the mother knows that p , rendering the adversative continuation ($\neg p$) a contradiction (and one consultant commented on this utterance being contradictory). But it is also compatible with the hypothesis that the complement implication is at-issue. The unacceptability judgment of S4 does not support the hypothesis that the complement implication is not at-issue.

Diagnostic #2: Addressing the question under discussion

- (4) Q1: Máva-pa oi-kuaa a-monda-ha-gue nde-pirapire?
 who-QU A3-know A1sg-steal-NOM-NOM.TERM B2sg-money
 ‘Who knows that I stole your money?’
- Q2: Mba’é-pa oi-kuaa Júlio?
 what-QU A3-know Julio
 ‘What does Julio know?’
- A1: Júlio oi-kuaa (re-monda-ha-gue che-pirapire).
 Julio A3-know A2sg-steal-NOM-NOM.TERM B1sg-money
 ‘Julio knows (that you stole my money).’
- A2: Júlio oi-kuaa re-monda-ha-gue che-pirapire.
 Julio A3-know A2sg-steal-NOM-NOM.TERM B1sg-money
 ‘Julio knows that you stole my money.’

The consultants judged that answer A1 is acceptable in response to question Q1 and that answer A2 is acceptable in response to question Q2. These judgments suggest that both the implication that Julio knows p and the complement implication may be at-issue.

Diagnostic #3a: Positive/negative answer with positive continuation

- (5) Q: Nde-sý-pa oi-kuaa a-ke-ha-gue nde-róga-pe?
 B2sg-mother-QU A3-know A1sg-sleep-NOM-NOM.TERM B2sg-house-in
 ‘Does your mother know that I slept in your house?’
- A1: Heẽ, oi-kuaa.
 yes A3-know
 ‘Yes, she knows.’
- A2: Nahániri, nd-oi-kuáa-i.
 no NEG-A3-know-NEG
 ‘No, she doesn’t know.’
- A3: #Heẽ, re-ke che-róga-pe.
 yes A2sg-sleep B1sg-house-in
 (Yes, you slept at my house.)

A4: #Nahániri, nde-re-ké-i che-róga-pe.
 no NEG-A2sg-sleep-NEG B1sg-house-in
 (No, you didn't sleep in my house.)

The consultants judged answers A1 and A2 to be acceptable, and answers A3 and A4 to be unacceptable in response to the question Q. These judgments support the hypothesis that the knowledge implication is at-issue and that the complement implication is not at-issue.

Diagnostic #3b: Positive/negative answer with adversative continuation

(6) In response to (5Q)

A1: #Heẽ, há=katu che-sy nd-oi-kuáa-i.
 yes and=CONTRAST B1sg-mother NEG-A3-know-NEG
 (Yes, but my mother doesn't know that.)

A2: #Nahániri, há=katu che-sy oi-kuaa
 no and=CONTRAST B1sg-mother A3-know
 re-ke-ha-gue che-róga-pe.
 A2sg-sleep-NOM-NOM.TERM B1sg-house-in
 (No, but my mother knows that you slept at my house.)

A3: #Heẽ, há=katu nde-re-ké-i che-róga-pe.
 yes and=CONTRAST NEG-A2sg-sleep-NEG B1sg-house-in
 (Yes, but you didn't sleep at my house.)

A4: #Nahániri, há=katu re-ke che-róga-pe.
 no and=CONTRAST B2sg-sleep B1sg-house-in
 (No, but you did sleep at my house.)

The consultants judged all four responses to be unacceptable. The unacceptability of A1 and A2 is compatible with the knowledge implication being at-issue, and the unacceptability of A3 and A4 is likewise compatible with the hypothesis that the complement implication is at-issue.

Evaluation: Three of the six diagnostics provide evidence that the complement implication can be not-at-issue content. But diagnostic 2 also suggests that it can be at-issue content. These results are in line with Simons (2007), who argues that the embedded clauses of English embedding verbs such as *see*, *hear*, *think* and *know* can be the main point of the utterance, i.e. at-issue content.

2.2 Demonstrative noun phrases

The implication explored in this section is the descriptive content implication of demonstrative noun phrases, e.g. the implication of *pe mbo'ehára* 'that teacher' in (7B) that the entity that is indicated by the speaker is a teacher.

(7) A: Juan mbo'ehára.
 Juan teacher
 'Juan is a teacher.'

B: Pe mbo'ehára Raul angiru-ete.
that teacher Raul friend-INTS
'That teacher is Raul's good friend.'

Diagnostic #1a: Intuitions about assent/dissent

(8) In continuation of the conversation in (7):

C1: Heẽ, añete.
yes true
'Yes, that's true.'

C2: Na-'añeté-i.
NEG-true-NEG
'That's not true.'

The consultants' intuitions were that C1's utterance in (8) affirms that Juan is Raul's friend and that C2's utterance denies that Juan is Raul's friend. These judgments are compatible with the hypothesis that the descriptive content implication is not at-issue.

Diagnostic #1b: Assent/dissent with positive continuation

(9) In continuation of the conversation in (7):

C1: Heẽ, añete, ha'e Raul angiru-ete.
yes true pron.S.3 Raul friend-INTS
'Yes, that's true, he is Raul's good friend.'

C2: Na-'añeté-i, nda-ha'é-i Raul angiru-ete.
NEG-true-NEG NEG-pron.S.3-NEG Raul friend-INTS
'That's not true, he isn't Raul's good friend.'

C3: Heẽ, añete, ha'e mbo'ehára.
yes true pron.S.3 teacher
'Yes, true, he is a teacher.'

C4: Na-'añeté-i, nda-ha'é-i mbo'ehára.
NEG-true-NEG NEG-pron.S.3-NEG teacher
'That's not true, he isn't a teacher.'

The consultants' judged C1 and C2's utterances in (9) to be acceptable. These judgments are compatible with the hypothesis that the at-issue implication of (7B) is that Juan is Raul's good friend. The utterances by C3 and C4 were not judged unacceptable but the consultants invariably commented that the two clauses seem to affirm (C3) or deny (C4) different things (e.g. "Yes, true (he is Raul's good friend) and he is a teacher"). We can consider these comments to provide evidence that what is affirmed/denied by C3/C4 is not the implication that Juan is a teacher, which is therefore not at-issue.

Diagnostic #1c: Assent/dissent with adversative continuation

(10) In continuation of the conversation in (7):

C1: #Heẽ, añete, há=katu nda-ha'é-i Raul angiru-ete.
yes true and=CONTRAST NEG-pron.S.3-NEG Raul friend-INTS

(Yes, that's true, but he's not Raul's good friend.)

C2: #Na-'añeté-i, há=katu ha'e Raul angiru-ete.
NEG-true-NEG and=CONTRAST pron.S.3 Raul friend-INTS

(That's not true, but he's Raul's good friend.)

C3: Heẽ, añete, há=katu nda-ha'é-i mbo'ehára.
yes true and=CONTRAST NEG-pron.S.3-NEG teacher

'Yes, true, but he's not a teacher.'

C4: Na-'añeté-i, há=katu ha'e mbo'ehára.
NEG-true-NEG and=CONTRAST pron.S.3 teacher

'That's not true, but he is a teacher.'

The utterances in C1 and C2 were judged to be unacceptable, which supports the hypothesis that what's at-issue in (7B) is that Juan is Raul's good friend. The acceptability of C3 and C4, on the other hand, support the hypothesis that the descriptive content implication is not at-issue.

Diagnostic #2: Addressing the question under discussion

(11) Q1: Mba'e-pé-pa o-mba'apo Juan?

what-at-QU A3-work Juan

'What is Juan's job?'

Q2: Mba'é-icha-pa Juan Raúl-ndi o-jo-gueraha?

what-like-QU Juan Raul-with A3-RECIP-carry

'How do Juan and Raul stand to each other?'

A1: Pe mbo'ehára Juan ha'e Raul angiru-ete.

that teacher Juan pron.S.3 Raul friend-INTS

'That teacher Juan is Raul's good friend.'

A2: Juan, Raul angiru-ete, ha'e mbo'ehára.

Juan Raul friend-INTS pron.S.3 teacher

'Juan, Raul's good friend, is a teacher.'

The consultants judged that response A1 can answer the question Q2 but not the question Q1. These judgments are compatible with the hypothesis that the descriptive content implication of A1 is not at-issue and the implication that Juan is Raul's good friend is at-issue. The consultants also judged that response A2 can answer the question Q1 but not the question Q2. These judgments provide further evidence that the appositive conveys not-at-issue content, whereas content of the predicate of the main clause (*mbo'ehára* 'to be a teacher') is at-issue.

Diagnostic #3a: Positive/negative answer with positive continuation

(12) Q: Pe mbo'ehára-pa ha'e Raul angiru-ete?
that teacher-QU pron.S.3 Raul friend-INTS
'Is that teacher Raul's good friend?'

A1: Heẽ, ha'e Raul angiru-ete.
yes pron.S.3 Raul friend-INTS
'Yes, he is Raul's good friend.'

A2: #Heẽ, ha'e mbo'ehára.
yes pron.S.3 teacher
(Yes, he is a teacher.)

The finding that the answer A1 is acceptable suggests that the implication that Juan is Raul's good friend is at-issue content. The fact that consultants judged the answer A2 to be unacceptable in response to the question Q is in support of the hypothesis that the descriptive content implication is not at-issue. The negative counterparts of these utterances ("No, he isn't Raul's good friend" and "No, he isn't a teacher") were not elicited.

Diagnostic #3b: Positive/negative answer with adversative continuation

(13) In response to (12Q):

A1: #Nahániri, há=katu ha'e Raul angiru-ete.
no and=CONTRAST pron.S.3 Raul friend-INTS
(No, but he's Raul's good friend.)

A2: Nahániri, há=katu ha'e mbo'ehára.
no and=CONTRAST pron.S.3 teacher
'No, but he's a teacher.'

The fact that answer A1 was judged to be unacceptable supports the hypothesis that the implication that Juan is Raul's good friend is at-issue whereas the fact that answer A2 was judged to be acceptable is compatible with the hypothesis that the descriptive content implication is not at-issue. The positive counterparts of these utterances ("Yes, but he's not Raul's good friend" and "Yes, but he's not a teacher") were not elicited.

Evaluation: All six diagnostics provide evidence that the descriptive content implication of demonstrative noun phrases is not-at-issue content.

2.3 *aimete* 'almost'

The implication explored with sentences containing *aimete* 'almost' is the polar implication, e.g. the implication of (14A) that Malena did not break her leg. The implication of (14A) that Malena came close to breaking her leg is called the proximal implication.

Diagnostic #1a: Intuitions about assent/dissent

- (14) Context: Malena fell at home.
- A: Maléna aimete o-pe hetymá-me.
 Malena almost A3-break B3.leg-at
 ‘Malena broke her leg.’
- B1: Heẽ, añete.
 yes true
 ‘Yes, that’s true.’
- B2: Na-’añeté-i.
 NEG-true-NEG
 ‘That’s not true.’

When asked what B1 affirms and what B2 denies, consultants invariably stated (in Spanish) that B1’s utterance affirms that Malena almost broke her leg, and that B2 denies that she almost broke her leg. Because the consultants’ responses use the (Spanish translation of the) trigger *aimete* ‘almost’, their responses do not allow one to establish whether it is the polar or the proximal implication that is at-issue. Therefore, as already mentioned in Tonhauser (2012), this diagnostic is inconclusive for the not-at-issue status of the polar implication of *aimete* ‘almost’.

Diagnostic #1b: Assent/dissent with positive continuation

- (15) In response to (14A):
- B1: Heẽ, añete, aimete o-pe hetymá-me.
 yes true almost A3-break B3.leg-at
 ‘Yes, that’s true, she almost broke her leg.’
- B2: Na-’añeté-i, n-aimeté-i. (O-pe hetymá-me.)
 NEG-true-NEG NEG-almost-NEG A3-break B3.leg-at
 ‘That’s not true, not almost. (She broke her leg.)’
- B3: #Heẽ, añete, nd-o-pé-i hetymá-me.
 yes true NEG-A3-break-NEG B3.leg-at
 (Yes, that’s true, she didn’t break her leg.)

The consultants judged B1 and B2’s responses to be acceptable, which supports the hypothesis that the proximal implication can be assented (B1) and dissented (B2) with, and is therefore at-issue. They also judged B3’s utterance to be unacceptable, which supports the hypothesis that the polar implication is not at-issue. The last member of this set (“That’s not true, she broke her leg.”) was not elicited.

Diagnostic #1c: Assent/dissent with adversative continuation

(16) In response to (14A):

B1: #Na-’añeté-i, há=katu aimete o-pe hetymá-me.
NEG-true-NEG and=CONTRAST almost A3-break B3.leg-at
(That’s not true but she almost broke her leg.)

B2: Na-’añeté-i, há=katu nd-o-pé-i hetymá-me.
NEG-true-NEG and=CONTRAST NEG-A3-break-NEG B3.leg-at
‘That’s not true, but she didn’t break her leg.’

The unacceptability of B1 is evidence that the proximal implication is at-issue: B1 is contradictory since it both denies the proximal implication and affirms it (in the second clause). The second member of this pair (“That’s true, but she didn’t almost break her leg.”) was not elicited. The acceptability of B2’s utterance supports the hypothesis that the polar implication is not at-issue: B2 denies the proximal implication and affirms the polar implication. The other member of this pair (“That’s true, but she broke her leg”) was not elicited.

Diagnostic #2: Addressing the question under discussion

(17) Q1: Máva-pa nd-o-pé-i hetymá-me?
who-QU NEG-A3-break-NEG B3.leg-at
‘Who didn’t break their leg?’

Q2: Máva-pa aimete o-ñe-mbyai?
who-QU almost A3-JE-hurt
‘Who almost got hurt?’

A1: Maléna aimete o-pe hetymá-me.
Malena almost A3-break B3.leg-at
‘Malena almost broke her leg.’

A2: Maléna nd-o-pé-i hetymá-me há=katu o-pe-mbota
Malena NEG-break-NEG B3.leg-at and=CONTRAST A3-break-about.to
kuri.
PAST
‘Malena didn’t break her leg but she was about to.’

The consultants judged that answer A2 was better in response to question Q1 than answer A1, and that answer A1 was better in response to question Q2 than answer A2. These judgments are compatible with the hypothesis that the polar implication of answer A1 is not at-issue, but that the proximal implication is.

Diagnostic #3a: Positive/negative answer with positive continuation

(18) Q: Maléna-pa aimete o-pe hetymá-me?
Malena-QU almost A3-break B3.leg-at
‘Did Malena almost break her leg?’

- A1: Heẽ, aimete.
 yes almost
 ‘Yes, she almost broke it.’
- A2: #Heẽ, nd-o-pé-i.
 yes NEG-A3-break-NEG
 (Yes, she didn’t break it.)
- A3: Nahániri, o-pe.
 no A3-break
 ‘No, she broke it.’

The consultants judged A1’s answer to be acceptable, which is in support of the hypothesis that the proximal implication is at-issue. A2’s answer was judged to be unacceptable, which is in support of the hypothesis that the polar implication is not at-issue. The negative answer with the positive continuation of the proximal implication (“No, she didn’t almost break it.”) was not elicited. The negative answer with the negation of the polar implication, given in A3, was judged to be acceptable: this may be due to the polar implication being at-issue content (but this is not compatible with the results of other diagnostics) or because the continuation can also be read as a reason for the denial of the proximal implication.

Diagnostic #3b: Positive/negative answer with adversative continuation

(19) In response to (18Q)

- A1: #Heẽ, há=katu aimete.
 yes and=CONTRAST almost
 (Yes, but she almost broke it.)
- A2: Heẽ, há=katu nd-o-pé-i.
 yes and=CONTRAST NEG-A3-break-NEG
 ‘Yes, but she didn’t break it.’

The fact that answer A1 was judged to be unacceptable supports the hypothesis that the proximal implication is at-issue whereas the fact that answer A2 was judged to be acceptable is compatible with the hypothesis that the polar implication is not at-issue. The negative counterparts of these utterances (“No, but she didn’t almost break it” and “No, but she didn’t break it”) were not elicited.

Evaluation: Of the six diagnostics, only one provides clear evidence that the pre-state implication is not-at-issue content, but four other diagnostics provide suggestive evidence.

2.4 Possessive noun phrases

The implication explored for possessive noun phrases is the possession implication, e.g. the implication contributed by *imbarakaja* ‘his/her cat’ in (20B) that Daniel has a cat.

Diagnostic #1a: Intuitions about assent/dissent

- (20) Context: A, B and C are talking about their friend Daniel.
- A: A-hendu Daniel o-ho Paraguay-pe ko pyharevé-pe.
A1sg-hear Daniel A3-go Asunción-to this morning-at
'I heard that Daniel went to Asunción this morning.'
- B: Heẽ, hasy i-mbarakaja.
yes B3.sick B3-cat
'Yes, his cat is sick.'
- C1: Heẽ, añete.
yes true
'Yes, that's true.'
- C2: Na-'añeté-i.
NEG-true-NEG
'That's not true.'

The consultants agreed that C1's utterance affirms that the cat is sick and that C2's utterance denies that Daniel's cat is sick. These intuitions are in agreement with the hypothesis that the possessive implication of *imbarakaja* 'his cat' is not at-issue.

Diagnostic #1b: Assent/dissent with positive continuation

- (21) In continuation of (20)
- C1: Heẽ, añete, hasy. I-kichiha he'i.
yes true B3.sick B3-girl/boyfriend A3.say
'Yes, that's true, it is sick. His girl/boyfriend said so.'
- C2: Na-'añeté-i, nda-hasý-i. I-kichiha he'i i-mbarakaja
NEG-true-NEG NEG-B3.sick-NEG B3-boy/girlfriend A3.say B3-cat
hy'e guasu-ha.
stomach big-NOM
'That's not true, it is not sick. His boy/girlfriend said that his cat is pregnant.'
- C3: Heẽ, añete, ha'e o-guereko mbarakaja.
yes true pron.S.3 A3-have cat
'Yes, that's true, he has a cat.'
- C4: Na-'añeté-i, ha'e nd-o-guerekó-i mbarakaja.
NEG-true-NEG pron.S.3 NEG-A3-have-NEG cat
'That's not true, he doesn't have a cat.'

The consultants judged all of these utterances to be acceptable. The fact that C1 and C2's utterances are acceptable supports the hypothesis that what is at issue in B's utterance in (20) is that the cat is sick. There are at least two possible hypotheses regarding the acceptability of C3 and C4's utterances. The first one is that the possession implication is at-issue and can be assented/dissented with. Another hypothesis is that what C3 and

C4 assent/dissent with is the implication that the cat is sick, the at-issue content, and the continuations are just understood as elaborations on the assent/dissent. This hypothesis is compelling for C4's utterance: the speaker may be dissenting with the proposition that Daniel's cat is sick on the basis of Daniel not having a cat.

Diagnostic #1c: Assent/dissent with adversative continuation

(22) In continuation of (20)

C1: #Heẽ, añete, há=katu nda-hasý-i.
 yes true and=CONTRAST NEG-B3.sick-NEG
 (Yes, that's true but it's not sick.)

C2: #Na-'añeté-i, há=katu hasy.
 NEG-true-NEG and=CONTRAST B3.sick
 (That's not true but it is sick.)

C3: #Heẽ, añete, há=katu nd-o-guerekó-i mbarakaja. Iñ-ermána
 yes true and=CONTRAST NEG-A3-have-NEG cat B3-sister
 mbarakaja.
 cat

(Yes, that's true, but he doesn't have a cat. It's his sister's cat.)

C4: Na-'añeté-i, há=katu o-guereko mbarakaja.
 NEG-true-NEG and=CONTRAST A3-have cat
 'That's not true, but he has a cat.'

The unacceptability of C1 and C2's utterances support the hypothesis that what is assented and dissented with is the implication that the cat is sick, which therefore is at-issue content. The acceptability of C4's utterance supports the hypothesis that the possession implication is not at-issue. The unacceptability of C3's utterance could be attributed to the possession implication being at issue. Another hypothesis for the unacceptability is that the possession implication is not at-issue, and that C3's utterance is unacceptable because the possession implication cannot be canceled or suspended in this context.

Diagnostic #2: Addressing the question under discussion

(23) Q: Mba'e mymba o-guereko Daniel?
 what domesticated.animal A3-have Daniel
 'What kind of pet does Daniel have?'

A1: Hasy Daniel mbarakaja.
 B3.sick Daniel cat
 'Daniel's cat is sick.'

A2: Daniel o-guereko peteĩ mbarakaja hasý-va.
 Daniel A3-have one cat B3.sick-RC
 'Daniel has a cat that is sick.'

The consultants judged A2 to be an appropriate answer to question Q, but not answer A1. These judgments provide evidence for the hypothesis that the possession implication of A1 is not at-issue.

Diagnostic #3a: Positive/negative answer with positive continuation

- (24) Q: Hasý-pa Daniel mbarakaja?
B3.sick-QU Daniel cat
'Is Daniel's cat sick?'
- A1: Heẽ, hasy.
yes B3.sick
'Yes, it is sick.'
- A2: Nahániri, nda-hasý-i.
no NEG-B3.sick-NEG
'No, it is not sick.'
- A3: #Heẽ, o-guereko mbarakaja.
yes A3-have cat
(Yes, he has cat.)
- A4: #Nahániri, nd-o-guerekó-i mbarakaja.
no NEG-A3-have-NEG cat
(No, he doesn't have a cat.)

The consultants judged the answers in A1 and A2 to be acceptable, which is support for the hypothesis that the main clause content is at-issue. The fact that the answers in A3 and A4 were judged to be unacceptable supports the hypothesis that the possession relation is not at-issue.

Diagnostic #3b: Positive/negative answer with adversative continuation

- (25) In response to (24Q)
- A1: #Heẽ, há=katu nda-hasý-i.
yes and=CONTRAST NEG-B3.sick-NEG
(Yes, but it's not sick.)
- A2: #Nahániri, há=katu hasy.
no and=CONTRAST B3.sick
(No, but it's sick.)
- A3: #Heẽ, há=katu nd-o-guerekó-i mbarakaja.
yes and=CONTRAST NEG-A3-have-NEG cat
(Yes, but he doesn't have a cat.)
- A4: Nahániri, há=katu o-guereko mbarakaja.
no and=CONTRAST A3-have cat
'No, but he has a cat.'

The unacceptability of answers A1 and A2 is compatible with the hypothesis that the implication that Daniel's cat is sick is at-issue content. The unacceptability of A3's answer may be due to the possession implication being at-issue content. An alternative hypothesis is that A3's utterance is unacceptable because the possession implication cannot be canceled or suspended in this context. The acceptability of A4 is compatible with the possession implication being not-at-issue content.

Evaluation: Four of the six diagnostics provide evidence that the possession implication of possessive noun phrases is not-at-issue content.

2.5 *-nte* 'only'

This subsection explores the prejacent implication of sentences with *-nte* 'only'. The prejacent implication of (26A) is the implication that Malena works. The implication of (26A) that nobody other than Malena works is called the exclusive implication.

Diagnostic #1a: Intuitions about assent/dissent

(26) A: Iñ-angiru-kuéra-gui, Maléna-nte o-mba'apo.
 B3-friend-PL-ABL Malena-only A3-work
 'Of her friends, only Malena works.'

B1: Heẽ, añete.
 yes true
 'Yes, that's true.'

B2: Na-'añeté-i.
 NEG-true-NEG
 'That's not true.'

The consultants' intuitions were that B1's utterance affirms that only Malena works and that B2's utterance denies that only Malena works, that others work, too. Since the consultants' responses use the (Spanish translation of the) trigger *-nte* 'only', these responses do not allow one to establish whether it is the prejacent or the exclusive implication that is at-issue. Therefore, this diagnostic is inconclusive for the not-at-issue status of the polar implication of *aimete* 'almost'.

Diagnostic #1b: Assent/dissent with positive continuation

(27) In continuation of (26A)
 B1: Heẽ, añete, Maléna-nte / mavavéa ambue.
 yes true Malena-only nobody other
 'Yes, true, only Malena / nobody else.'
 B2: Na-'añeté-i, Sabína avei.
 NEG-true-NEG Sabina too
 'That's not true, Sabina (works) too.'

B3: #Heẽ, añete, Maléna o-mba'apo.

yes true Malena A3-work

(Yes, that's true, Malena works.)

B4: #Na-'añeté-i, Maléna nd-o-mba'apó-i.

NEG-true-NEG Malena NEG-A3-work-NEG

(That's not true, Malena doesn't work.)

B1 and B2's utterances were judged to be acceptable, which provides support for the hypothesis that the exclusive implication is at-issue. By the same argument, the unacceptability of B3 and B4's utterances provides support for the hypothesis that the prejacent implication is not at-issue.

Diagnostic #1c: Assent/dissent with adversative continuation

(28) In continuation of (26A):

B1: #Heẽ, añete, há=katu Sabína avei.

yes true and=CONTRAST Sabina too

(Yes, that's true, but Sabina works too.)

B2: #Na-'añeté-i, há=katu mavavéa ambue nd-o-mba'apó-i.

NEG-true-NEG and=CONTRAST nobody other NEG-A3-work-NEG

(That's not true, but nobody else works.)

B3: #Heẽ, añete, há=katu Maléna nd-o-mba'apó-i.

yes true and=CONTRAST Malena NEG-A3-work-NEG

(Yes, that's true, but Malena doesn't work.)

B4: #Na-'añeté-i, há=katu Maléna o-mba'apo.

NEG-true-NEG and=CONTRAST Malena A3-work

(That's not true, but Malena does work.)

All four utterances in B1 to B4 were judged to be unacceptable. The unacceptability of B1 and B2 is compatible with the hypothesis that the exclusive implication is at issue: by this hypothesis, B1 is unacceptable because it affirms the exclusive implication and then denies it, and B2 is unacceptable because it denies the exclusive implication (i.e. other people besides Malena work) and then affirms it. The unacceptability of B3 could be attributed to the prejacent implication being at-issue. An alternative hypothesis is that B3 is unacceptable because it affirms the (at-issue) exclusive implication; as a consequence, denying the prejacent implication is contradictory. The unacceptability of B4 is puzzling regardless of whether the prejacent implication is at-issue or not.

Diagnostic #2: Addressing the question under discussion

(29) Q: Maléna-pa o-mba'apo?

Malena-QU A3-work

'Does Malena work?'

- Q2: Maléna ha iñ-angiru-kuéra-gui, máva-pa o-mba'apo?
 Malena and B3-friend-PL-ABL who-QU A3-work
 'Who among Malena and her friends works?'
- A1: Maléna-nte o-mba'apo.
 Malena-only A3-work
 'Only Malena works.'
- A2: Maléna o-mba'apo ha mavavéa iñ-angiru-kuéra nd-o-mba'apó-i.
 Malena A3-work and nobody B3-friend-PL NEG-A3-work-NEG
 'Malena works and none of her friends work.'

The consultants judged that answer A1 was unacceptable in response to question Q1, whereas answer A2 was acceptable. These judgments support the hypothesis that the prejacent implication of A1, that Malena works, is not at-issue. The hypothesis that the exclusive implication of answer A1 is at-issue content is supported by the finding that the consultants' judged that both A1 and A2 are acceptable answers to the question Q2.

Diagnostic #3a: Positive/negative answer with positive continuation No data were collected.

Diagnostic #3b: Positive/negative answer with adversative continuation No data were collected.

Evaluation: Only four of the six diagnostics were applied to the prejacent implication of sentences with *-nte* 'only', and of these only two provide evidence that the pre-state implication is not-at-issue content. Application of diagnostics 3a and 3b is needed to establish a clearer result.

2.6 *n(d)(a)–...–vé-i-ma* 'not anymore'

The implication that is explored in this section is the pre-state implication of sentences with *n(d)(a)–...–vé-i-ma* 'not anymore', which convey a change of state, similar to those with the English verb *stop*. The pre-state implication of (30A) is that Pedro smoked in the past.

Diagnostic #1a: Intuitions about assent/dissent

(30) Context: Pedro is a friend of A and B.

- A: Pédro nd-o-pita-vé-i-ma.
 Pedro NEG-A3-smoke-more-NEG-PERFECT
 'Pedro doesn't smoke anymore / Pedro stopped smoking.'
- B1: Heẽ, añete.
 yes true
 'Yes, that's true.'

B2: Na-'añeté-i.
NEG-true-NEG
'That's not true.'

The consultants judged that B1's utterance affirms that Pedro stopped smoking and that B2 denies that he stopped smoking. Since the consultants' responses use the (Spanish translation of the) triggering expression, these responses do not allow one to establish whether it is the pre-state or the change-of-state implication that is at-issue.

Diagnostic #1b: Assent/dissent with positive continuation

(31) In continuation of (30A)

B1: Heẽ, añete, nd-o-pita-vé-i-ma.
yes true NEG-A3-smoke-more-NEG-PERFECT
'Yes, that's true, he stopped smoking.'

B2: Na-'añeté-i, o-pita guéteri.
NEG-true-NEG A3-smoke still
'That's not true, he still smokes.'

B3: Heẽ, añete, o-pita kuri.
yes true A3-smoke PAST
'Yes, that's true, he smoked in the past.'

B4: Na-'añeté-i, nd-o-pitá-i araka'eve.
NEG-true-NEG NEG-A3-smoke-NEG never
'That's not true, he's never smoked.'

The consultants judged all of these utterances to be acceptable in the context of (30A). The acceptability of B1 and B2's utterances is compatible with the hypothesis that the change-of-state implication is at-issue. With regard to B3, one consultant commented that the two utterances don't affirm the same thing. This comment may suggest that what is affirmed in B3's utterance is the change-of-state implication rather than the pre-state implication. The acceptability of B4's utterance is compatible with the hypothesis that the pre-state implication is at-issue. But it is also compatible with the hypothesis that what *na'añetéi* 'that's not true' denies is that Pedro stopped smoking, with the continuation delivering an explanation, namely that Pedro never smoked in the first place. (The same pattern occurred with this diagnostic for the possession implication of possessive noun phrases, cf. section 2.4.)

Diagnostic #1c: Assent/dissent with adversative continuation

(32) In continuation of (30A)

B1: #Heẽ, añete, há=katu nd-o-pita-vé-i-ma.
yes true and=CONTRAST NEG-A3-smoke-more-NEG-PERFECT
(Yes, that's true, but he doesn't smoke anymore.)

B2: #Heẽ, añete, há=katu nd-o-pitá-i kuri.
 yes true and=CONTRAST NEG-A3-smoke-NEG PAST
 (Yes, that's true, but he didn't smoke in the past.)

B3: #Na-'añeté-i, há=katu o-pita kuri.
 NEG-true-NEG and=CONTRAST A3-smoke PAST
 (That's not true, but he smoked in the past.)

B1, B2 and B3 were all judged to be unacceptable. The unacceptability of B1 is in support of the hypothesis that the change-of-state implication is at-issue. The other member of this pair ("That's not true, but he has stopped smoking") was not elicited. The unacceptability of B2 is not surprising, regardless of whether the pre-state implication is at-issue or not: B2 affirms that Pedro stopped smoking (the change-of-state implication), which makes it odd to then deny that he smoked in the past. The unacceptability of B3 is puzzling, regardless of whether the pre-state implication is at-issue or not.

Diagnostic #2: Addressing the question under discussion

(33) Q1: Mba'é-pa o-japo ra'e Pédro o-mbyaí-va chupe?
 what-QU A3-do PAST Pedro A3-damage-RC pron.O.3
 'What did Pedro do that was bad for him?'

Q2: Mba'é-icha-pa o-kambia heko Pédro pe ambue mé-guive?
 what-like-QU A3-change life Pedro that other month-since
 'How has Pedro's life changed since last month?'

A1: Pédro nd-o-pita-vé-i-ma.
 Pedro NEG-A3-smoke-more-NEG-PERFECT
 'Pedro doesn't smoke anymore.'

A2: Pédro o-pita kuri há=katu ko'ãga nd-o-pitá-i.
 Pedro A3-smoke PAST and=CONTRAST now NEG-A3-smoke-NEG
 'Pedro smoked in the past and now he doesn't smoke.'

The consultants judged that the answer in A1 is not acceptable in response to question Q1, but that in A2 is. These judgments support the hypothesis that the pre-state implication of answer A1, that Pedro smoked in the past, is not at-issue. The consultants also judged that, in response to question Q2, the answer in A1 is better than the answer in A2.

Diagnostic #3a: Positive/negative answer with positive continuation

(34) Q: Pédro-pa nd-o-pita-vé-i-ma?
 Pedro-QU NEG-A3-smoke-more-NEG-PERFECT
 'Has Pedro stopped smoking?'

B1: Heẽ, nd-o-pita-vé-i-ma.
 yes NEG-A3-smoke-more-NEG-PERFECT
 'Yes, he stopped smoking.'

- B2: Nahániri, o-pita guéteri.
no A3-smoke still
'No, he still smokes.'
- B3: #Heẽ, o-pita kuri.
yes A3-smoke PAST
(Yes, he smoked in the past.)
- B4: Nahániri, nd-o-pitá-i kuri.
no NEG-A3-smoke-NEG PAST
'No, he didn't smoke in the past.'

The consultants judged the answers in B1 and B2 as acceptable in response to the question Q, which is compatible with the hypothesis that the change-of-state implication is at-issue. The fact that the answer B3 was judged to be unacceptable is in support of the hypothesis that the pre-state implication is not at-issue. Answer B4 was not judged to be unacceptable. Again, this may be due to the pre-state implication being at-issue. An alternative hypothesis is that B4 is acceptable because *nahániri* 'no' denies that Pedro stopped smoking, with the (not-at-issue) continuation providing a reason for the negative answer.

Diagnostic #3b: Positive/negative answer with adversative continuation

(35) In response to (34Q)

- B1: #Heẽ, há=katu o-pita guéteri.
yes and=CONTRAST A3-smoke still
(Yes, but he still smokes.)
- B2: Nahániri, há=katu o-pita kuri.
no and=CONTRAST A3-smoke PAST
'No, but he smoked in the past.'

The unacceptability of B1's utterance can be accounted for by assuming that *heẽ* 'yes' affirms that Pedro stopped smoking, i.e. it affirms the change-of-state implication which is at-issue content, which is incompatible with the adversative affirmation that he still smokes. The acceptability of B2's utterance is compatible with *nahániri* 'no' denying that Pedro stopped smoking, which is compatible with an adversative affirmation of the pre-state implication. The other members of this set (i.e. "Yes, but he didn't stop smoking" and "No, but he has stopped smoking") were not elicited.

Evaluation: Of the six diagnostics, two provide evidence that the pre-state implication is not-at-issue content, with two other diagnostics trending in this direction.

3. Comments on the results and the diagnostics

The six diagnostics that were applied to the seven trigger/implication pairs in Tonhauser (2012) and this appendix were culled from the literature, where they were used to argue for the not-at-issue status of a variety of trigger/implication pairs (see Tonhauser 2012 for references). Table 0.1 shows that different diagnostics lead to different results for the Guaraní

trigger/implication pairs. Whereas all six diagnostics provide evidence that the content of an appositive and the descriptive content implication of a demonstrative noun phrase are not-at-issue implications, only a subset of the diagnostics provided such evidence for the other trigger/implication pairs. For example, only four of the six diagnostics provide evidence that the pre-state implication of the Guaraní change-of-state expression is not at-issue. For *(oi)kuaa* ‘know’, only three of the six diagnostics suggest that the complement implication may be not-at-issue (although that may also be due to the complement implication being able to be at-issue; cf. Simons 2007).

The take-away message is clear: Applying only one diagnostic to a particular trigger/implication pair may not provide a clear picture of whether the implication may be not-at-issue content, or not. And different diagnostics may lead to different conclusions for a particular trigger/implication pair: when applied to the complement implication of *(oi)kuaa* ‘know’, diagnostic #2 suggests that it may be at-issue content whereas diagnostic #3a does not reveal this possibility. More research is needed to determine whether the varying results may in part be due to some of the six diagnostics probing for slightly different but related properties. Finally, cross-trigger and cross-linguistic comparability increases once more than one diagnostic is applied to a particular trigger/implication pair.

In this document, all six diagnostics were applied to all trigger/implication pairs. The results of applying the diagnostics provide some insight into which diagnostics may be particularly useful or suitable with a particular trigger/implication pair. Diagnostic #3a delivered results for all six implications it was applied to, whereas diagnostic #1c only delivered results for three of the seven triggers it was applied to.

A final comment: Diagnostic #1a relies on native speakers articulating their intuitions about what a simple assent/dissent statement assents or dissents with. Although this is not a semantic fieldwork methodology endorsed in Matthewson (2004), this diagnostic was included here since it has been applied by semanticists in arguing for the not-at-issue status of particular implications of expressions in their native languages. The results of diagnostic #1b, which only relies on native speakers’ intuitions about acceptability, can be regarded as a follow-up or confirmation of the results of diagnostic #1a.

References

- Matthewson, Lisa. 2004. On the methodology of semantic fieldwork. *International Journal of American Linguistics* 70:369–415.
- Ministerio de Educación y Cultura. 2004. La educación bilingüe en la reforma educativa Paraguaya. Available online at www.escuelavivamec.edu.py/investigaciones/60.pdf, last checked 08/30/08.
- Simons, Mandy. 2007. Observations on embedding verbs, evidentiality, and presupposition. *Lingua* 117:1034–1056.
- Tonhauser, Judith. 2012. Diagnosing (not-)at-issue content. In *Proceedings of Semantics of Under-represented Languages in the Americas (SULA) 6*, 239–254. UMass, Amherst: GLSA.
- Velázquez-Castillo, Maura. 2004. Guaraní (Tupí-Guaraní). In *Morphology: An Interna-*

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tional Handbook on Inflection and Word-Formation, ed. G.E. Booij, C. Lehmann, J. Mugdan, and S. Skopeteas, volume 2, 1421–1432. Berlin: Walter de Gruyter.