

The Guaraní mirative evidential and the decomposition of mirativity*

Andrés Pablo Salanova¹ & Javier Carol²

¹University of Ottawa, ²Consejo Nacional de Investigaciones Científicas y Técnicas,
²Universidad Autónoma de Entre Ríos, ²Universidad de Buenos Aires

1. Introduction

This paper describes the Guaraní evidential *ra'e* and claims that it encodes acquisition of evidence at evaluation time. The interaction of evidence acquisition with the temporal interpretation of predicates is responsible for the inferential interpretation that *ra'e* often conveys, in a way reminiscent of Korean *-te* (cf. Lee 2013). The fact that evaluation time can be (and often is by default) utterance time sets it apart from *-te*, and is, we claim, responsible for *ra'e*'s association with mirativity.

Recent work on evidentiality (Fleck 2007, Speas 2010, Koev 2011, Lee 2013, Smirnova 2013, Kalsang et al. (2013), a.o.) has highlighted the relevance of an evidence acquisition situation for the proper description of evidential meaning. As has been shown by Arregui et al. (2017), the temporal component of evidentials does not constitute a system distinct from tense and aspect, and the facts presented here allow us to maintain that only one temporal system is in play in Guaraní.

In addition to its descriptive goal, this paper makes the general claim that mirativity has to be decomposed into at least two distinct notions: discovery and counter-expectation, and hypothesize that many of the mirative morphemes described in the literature only instantiate the first of these notions (a conviction reached independently by Mexas 2016), with the other being an associated notion that generally has separate exponency, often focus or exclamative intonation (cf. Simeonova 2016).

The paper is structured as follows: section 2 presents an overview of Guaraní TAM morphology, in particular the expression of various evidential categories; section 3 describes

*Thanks to our Guaraní teachers Nieves Montiel, Néstor Amarilla, Nina Ortega and Juana Arce, and to audiences at WSCLA, SULA and NELS, in particular to Peggy Speas and Seth Cable, and to Ana Arregui, María Luisa Rivero, Vesela Simeonova, Gita Zareikar, Martine Bruil, Haris Mexas, Pranav Anand, Sarah Murray and Rajesh Bhatt for helpful comments. We also thank Domingo Aguilera for discussion of some of our data. All errors are our own. The research leading to this paper was partly supported by the Social Sciences and Humanities Research Council of Canada through the grant “The syntax and semantics of perspectival meaning” (435-2016-1375) awarded to Ana Arregui (PI), María Luisa Rivero and Andrés Pablo Salanova.

the evidential meaning of *ra'e*; section 4 introduces mirative evidentials and shows where mirative readings of *ra'e* arise; section 5 claims that mirativity has to be decomposed into two distinct notions, and shows how *ra'e* instantiates one of them and is simply associated to the other; section 6 summarizes the paper. For reasons of space, our descriptive exposition is of necessity very brief and the formalization is only partial. For a more complete description of the behavior of *ra'e*, we refer the reader to Carol & Avellana (2017), which furthermore presents several generalizations not discussed here and develops alternative analyses that we cannot consider here in detail.

2. The Guaraní evidential paradigm

Guaraní (Tupian), spoken by approximately 7 million people, is the primary language of Paraguay, and is used by a significant population in neighboring countries. The dialect on which we report is spoken in urban areas of eastern Paraguay by individuals who are for the most part bilingual in Spanish.

Guaraní is head-marking and predominantly SVO but with essentially free word order. No direct cases are expressed in noun phrases. Prefixal person markers come in two forms, active and inactive, that are used to index subjects and objects of transitive verbs, respectively, and that determine a split in intransitive predicates. Transitive verbs agree with only one of the core participants, following a person hierarchy: first person wins over second, which wins over third, with a portmanteau form used when a first person subject acts over a second person object. TAME notions in Guaraní are expressed either as verbal enclitics, both stress-attracting and stress-neutral, or as independent particles that tend to cluster after the verb or clause-finally. There seems to be no semantic principle underlying the makeup of these two morphological classes.

Evidentials in Guaraní include reportative *ndaje* ~ *je* (cf. Tonhauser 2014, Velázquez-Castillo 2017) and *ñandeko*, conjectural *chéne* ~ *ne*, the indirect *ra'e* examined here, the related *raka'e*, which could be called narrative, and direct *kuri* and *va'ekue*. There are other particles that could have evidential meaning, such as *po/nipo* and a number of assertive particles. Evidential elements don't all form a homogeneous paradigm: not only do they occur in different positions in the clause, but two or more can cooccur in the same sentence. Furthermore, as we will see in examining *ra'e*, the meaning of some evidentials combines various notions beyond evidence source. It is however possible to place *ra'e* within a reduced paradigm that includes *raka'e*, *kuri* and *va'ekue*: all of these are past, and differ in temporal distance to the event (*raka'e* and *va'ekue* are considered remote), and in whether the evidence is direct or indirect (*kuri* and *va'ekue* are considered direct). The paradigmatic relation between *ra'e* and *kuri* can further be seen in the fact that the latter often substitutes the former in question-answer pairs (exs. from Carol & Avellana 2017):¹

¹We use the following abbreviations here: 1, 12, 2, 3 for person categories (12 is first person inclusive), A for the active series of prefixes, I for the inactive series, also used for possession. The remaining glosses aim to be self-evident: NEGation, PROSPective, RELativizer; PRT glosses various emphatic particles, EX is the nominal past tense.

- (7) Upon seeing Juan's jacket hanging near the door:

O-u Juan ra'e.

3A-arrive Juan RA'E

“Juan has arrived (it seems).” [Infelicitous if the arrival itself was witnessed.]

- (8) We stop near a puddle on the roadside to fish. As we approach, my companion points to some fish remains and says:

Oi-kutu mbusu ra'e hikuái. Péa ha'e ñ-akã-ngue.

3A-spear eel RA'E they that is 3I-head-EX

“They (apparently) fished eel here. That's its head.”

- (9) Juan typically arrives home at 7pm. We see that it's 7:15:

a. Juan o-ĩ-ne h-óga-pe.

Juan 3A-be-NE 3I-house-in

“Juan must already be at his house.”

b. # Juan o-ĩ ra'e h-óga-pe.

Juan 3A-be RA'E 3I-house-in

“Juan is apparently at his house.” [Infelicitous if we do not have any evidence of his being there that can be directly apprehended at evaluation time. Consultant comment: I thought he wasn't there, but I suddenly get a text message saying that he's home. Also OK as past with indirect evidence.]

One important aspect of the evidential meaning of *ra'e* is not captured by simply calling it an inferential. With, e.g., the hearsay evidential in (10), the time of acquisition of evidence is irrelevant. With the *ra'e* (11), on the other hand, the acquisition of evidence is highlighted. Though it normally coincides temporally with the utterance situation, it can be shifted to a moment other than utterance time by a temporal adjunct, (12), by a matrix clause (13), or by a preceding clause (14). Hearsay *ndaje* is not shifted in this way.²

- (10) Juan o-ho ndaje Paraguaý-pe.

Juan 3A-go NDAJE Asunción-to

“Juan went to Asunción [it is said].”

- (11) Juan o-ho ra'e Paraguaý-pe.

Juan 3A-go RA'E Asunción-to

“Juan went to Asunción [one can now infer].”

²Velázquez-Castillo (2017) shows that *ra'e* scopes over *ndaje* when they cooccur in a sentence (cf. her example (18)), leading us to expect similar shifts in *ndaje*. We cannot discuss this here for reasons of space.

The Guaraní mirative evidential

- (12) A-guahẽ-rõguare, o-pá-ma ra'e la fiesta.
1A-arrive-when 3A-finish-already RA'E the party
“When I arrived, the party had finished.”
- (13) O-topa peteĩ aratiri o-trosá ra'e pe tajy o-ĩ-va óga renondé-pe.
3A-find one lightning 3A-crack RA'E the tree sp. 3A-be-REL house front_of-in
“S/he found that lightning had cracked the tajy tree.” (cf. Melià et al. 1997, 212)
- (14) Che-renda o-jere o-jere. Ha i-po oi-su'u ra'e mbói.
1I-mount 3A-turn 3A-turn and 3I-hand 3A-bite RA'E snake
“My horse turned and turned. It turned out that he had been bitten on the front leg by a snake.” (Kaiwá dialect, from Taylor 1984, 20)
- Furthermore, though in exs. (12)–(14) the evidence is acquired immediately after the event or when its consequences are still visible, this is not always the case, as evidenced by (15), where the realization is about a relatively distant reference time. Finally, inference can be completely absent from the meaning of *ra'e*, as (16) shows.
- (15) Context: the phone rings for John, and I, believing him not to be around, do not call him to take the call. I'm later told by a co-worker that John just left. I exclaim:
¡Oi-mé-ngo ko'á-pe upé-rõguare ra'e!
3A-be-PRT here-in that-when RA'E
“Ah, so [now it turns out that] he was here then [when they called him]!”
- (16) Ñorairõ Guasu o-pa 1935-pe ra'e.
war great 3A-end 1935-in RA'E
“The great war [war of the Chaco] ended in 1935.” [Works if the speaker just learned this fact from a book that is sitting in front of him/her.]

In light of this, we propose that the primary meaning of *ra'e* is **discovery in the perspective of the speaker at the time of evaluation**.³ *Ra'e* does not require that the evidence be direct or indirect. Rather, it requires that sufficient evidence to believe the truth of the proposition *P* expressed by the clause containing it (the prejacent proposition) be perceived by the speaker at evaluation time. Though typically this evidence will consist of the concrete consequences of the event expressed in the proposition, yielding a traditional inferential meaning, in some cases it can also be a second-hand report. That the speaker

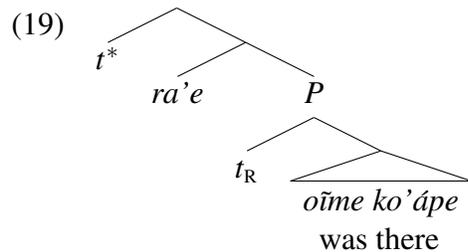
³A question arises as to what exactly *at the time of evaluation* means with respect to acquisition of evidence. We provisionally answer this with the claim that the evidence has to have come to the attention of the speaker shortly before in absolute terms, with a further constraint that we tentatively articulate as a requirement that the evidence still be available for the hearer to see. The latter constraint is crucial to distinguish direct from indirect evidence of a past event (cf. fn. 4). The question awaits further investigation, in particular for cases where evidence comes from a speech act, such as in (15).

is committed to the truth of P and to the adequacy of the evidence for P can be seen in examples such as the following:

- (17) Juan o-hó-ma ra'e ko'águi, # pero ikatuete nd-o-hó-iti.
 Juan 3A-go-already RA'E from.here but just.possibly NEG-3A-go-yet
 “It seems that Juan left, but just possibly he didn’t.” [Consultant comment: it only works if you say the first part as a complete sentence; then if you see that Juan left some of his belongings behind and you change your mind, you can say the second part as a separate sentence.]

On the other hand, it is clear that the evidential meaning is not part of the at-issue content conveyed by the clause, in the sense of Potts (2011) and Rett & Murray (2013). That is, it is not part of a claim that can be questioned or negated, among other properties. In light of this, we propose the following preliminary definition of $ra'e$, and offer a derivation of (15). We use the symbol \bullet following Potts’s (2011) convention to separate the at-issue and not-at-issue components of meaning:

- (18) $\llbracket ra'e \rrbracket = \lambda t. \lambda P. \underbrace{P}_{\text{at-issue}} \bullet \underbrace{\text{the speaker acquires adequate evidence at } t \text{ that } P}_{\text{not-at-issue}}$



- (20) a. $\llbracket \text{Oi-mé-ngo ko'á-pe upé-rõ-guare} \rrbracket = 1 \leftrightarrow \text{He}_1 \text{ was there at } t_R$
 (t_R is set by *upe rõguare*)
 b. $\llbracket \text{Oi-mé-ngo ko'á-pe upé-rõ-guare ra'e} \rrbracket = 1 \leftrightarrow \text{He}_1 \text{ was there at } t_R$
 \bullet the speaker acquires evidence at t^* that he_1 was there at t_R
 (t^* is utterance time in this case)

As a final descriptive point, note that $ra'e$ always scopes over any overt temporal, aspectual or modal operators within its clause, as shown by (21)–(22), giving plausibility to the recursive structure in (19).

- (21) Context: A student was about to leave a classroom because the teacher wasn’t there, but suddenly sees the teacher arriving.

Ja-pytá-ta ra'e.
 12A-stay-PROSP RA'E

“We’ll be staying, after all.” (from Carol & Avellana 2017)

- (22) Context: You ask me to go get meat in the fridge, and I come back saying that I don't see any.

O-pá-ma-ne ra'e la so'o.
3A-finish-already-NE RA'E the meat

“It turns out that the meat might be finished already.”

The reader might ask why, if *ra'e* encodes evidence acquisition at evaluation time without regard to the type of evidence that is acquired, it cannot function as a direct evidential, e.g., in sentences that describe an event or state ongoing at evidence acquisition time, as Lee (2013) claims about Korean *-te* in the past. We address this question next.

4. Mirative evidentials

There exist cases where *ra'e* is employed with exclamative intonation to convey surprise upon learning something that is unexpected. In such cases *ra'e* can be used even when the evidence for the statement is direct, as (23) attests.

- (23) ¡Rei-kove niko ra'e!
2A-live PRT RA'E

“You're still alive!”

Such meanings fall within the category that is now commonly called *mirativity*, following DeLancey's (1997) original definition. The typical mirative reading is one where alternative states-of-affairs are deemed more likely than what one actually observes, and the speaker is thus surprised at the actual state-of-affairs. This is certainly a property of Guaraní *ra'e*, and it yields striking discourse effects, as example (24) shows:

- (24) Context: I'm seeing the newborn baby of friends that I don't consider beautiful:

¡I-porã ra'e nde-ra'y!
3I-beautiful RA'E 2I-child

“Your child is beautiful!” [Consultant comment: you are offending them somewhat, because you suppose that the baby shouldn't be beautiful.]

A complementarity between indirect evidentiality and mirativity is a well known pattern, present in the earliest discussions of mirativity (Slobin & Aksu 1982, DeLancey 1997, 2001). We follow Rett & Murray (2013) in calling the evidentials that have mirative uses *mirative evidentials*, of which we consider *ra'e* an instance (Tonnhauser 2006 calls it “non-expected evidential marker”). Given the coexistence of these two meanings in a single morpheme, we begin by making a couple of generalizations about their distribution:

1. The surprise component of meaning can be present regardless of the type of evidence that is available, as long as the evaluation time is utterance time.
2. The indirect evidential component of meaning only arises when the clause describes an event terminated by evaluation time.

Let us temporarily put aside the first point about the appearance of mirative meaning, and try to address how *ra'e* becomes an indirect evidential. The following minimal pair illustrates succinctly what we wish to explain:

(25) ¡Juan o-ĩ ra'e h-óga-pe!
 Juan 3A-be RA'E 3I-home-to.
 “Juan is at home!” [OK if I'm seeing Juan at home.]

(26) ¡Juan o-guahẽ ra'e h-óga-pe!
 Juan 3A-arrive RA'E 3I-home-to
 “Juan has arrived home!” [Not OK if I saw the arrival.]

Why can't the evidence in (26) be direct? We claimed that *ra'e* means acquisition of evidence precisely at evaluation time. Since in order to use *ra'e* I have to have had insufficient evidence to make the assertion previous to evaluation time, if I'm uttering (26) some time after Juan's arrival I couldn't have witnessed his arrival directly. Therefore the evidence in that case has to be indirect. But what if I'm standing at the door of my house and see Juan arrive, or I see Juan eat the last piece of chipa. Why can't I say either of the following exactly at the moment that I see it happening?

(27) # Juan o-guahẽ ra'e.
 Juan 3A-arrive RA'E

(28) # Juan ho'u-pa la chipa ra'e.
 Juan 3A.eat-finish the chipa RA'E

We claim that the infelicity of these two sentences is only indirectly related to the meaning of *ra'e*, and does not need to be encoded as a requirement for indirect evidence. Cross-linguistically, it is very commonly the case that telic eventualities resist aligning their culmination point with utterance time.⁴ This generalization also holds in Guaraní, though discussing what is behind it is beyond the scope of the present paper. If the culmination or termination is forced to be past (or anterior) by a general principle, and the evidence

⁴The exact semantic trait that triggers this effect is elusive, both cross-linguistically and in Guaraní. In languages that display the “factative effect”, the verbal trait that determines past versus present interpretation is stativity rather than telicity (Welmers 1973, 346). This seems to be the case also in Guaraní, where atelic activities also often resist interpretation in the present. Note that to get the facts about *ra'e* right, *ra'e* itself has to be treated as a stative predicate: it is interpreted as present by default, and is felicitously used only if evidence is somehow still available at evaluation time, as proposed in fn. 3.

acquisition encoded in *ra'e* is forced to be simultaneous with evaluation time, it is clear that the evidence cannot be direct evidence, which has to be concurrent to the event.^{5,6}

This account predicts that aspectual operators that render a predicate stative (in the specific sense of having the subinterval property), such as progressives and habituals, make *ra'e* compatible with direct evidence. This is certainly true. For sentence (30), note that *-ti* is an active verb that would be interpreted in the past if used episodically.

- (29) ¡Re-karu-iti ngo hína ra'e!
2A-eat-still PRT PROGR RA'E
“You are still eating!” (from Carol & Avellana 2017)

- (30) ¡Lo rico ra'y nimbo o-ti avei ra'e!
DET.PL rich child PRT 3A-have_shame also RA'E
“[It turns out that] the children of the rich also feel shame!” (from Melià et al. 1997)

At least two questions could be raised here: (1) does the requirement that evidence be indirect with completed or terminated eventualities still hold when the evidence acquisition time encoded by *ra'e* is shifted to the past, and in that case how does one explain it there? and (2) do the facts of temporal interpretation sketched for clauses with *ra'e* hold more generally in the language? At this point we lack sufficient data to answer the first question, and for reasons of space can only answer the second question with a brief “yes with caveats”. A more thorough treatment of these questions, as well as of the issue raised in fn. 3, is forthcoming in Carol & Salanova (2017).

We now return to the question of where the mirative meaning comes from. When looking at (18), a terminologically-inclined linguist could well ask whether it really corresponds to the denotation of an evidential. We claim that it's the proper denotation of a mirative. In other words, we maintain that miratives encode discovery rather than surprise or counter-expectation. Mexas (2016) independently reaches the same conclusion after examining the cross-linguistic data on miratives gathered by Aikhenvald (2012).

It is clear that some sense of unexpectedness has to be present to yield the connotations of (24). Mexas (op. cit.) offers the attractive suggestion that such meanings arise as implicatures from the basic meaning of discovery. We, on the other hand, take the approach that

⁵An alternative account would be to say that *ra'e* requires that the proposition be true some time before evidence acquisition time. If I see Juan arrive or see Juan eat the last chipa, the proposition is true only at evidence acquisition time but not before, given the punctual nature of these events, and these sentences are deemed infelicitous. This alternative analysis is considered further in Carol & Avellana (2017). A similar idea is developed by Kalsang et al. (2013) for Tibetan evidentials, but using situations instead of times, and substituting the anteriority/posteriority relations by the notions of inclusion and accessibility.

⁶The point that indirect evidentiality is a by-product of a temporal relation is not new. It is clearly stated by Lee (2013), p. 13: “[...] I argue that the (in)directness meaning in Korean evidential sentences is expressed by means of temporal relations between the evidence acquisition eventuality and the described eventuality. When the two eventualities are sequentially ordered, direct evidence is not available, but instead (inferential) indirect evidence is available. In contrast, a temporal overlap between the two eventualities does allow for direct evidence.” The difference between Guaraní and Korean is that in the latter the completedness of the event is explicitly encoded in the morphology, while in Guaraní it follows from principles of temporal interpretation.

counterexpectation and surprise are distinct meaning components that simply cooccur with the encoding of discovery. We explain how this works in the following section.

5. Decomposing mirativity

Miratives cross-linguistically are often associated with exclamative intonation, and examples with mirative are invariably translated as exclamatives in English. So far as we know, however, a post hoc obvious fact has remained under the radar in studies of mirativity until recently. Simeonova (2016) has shown persuasively that in Turkish and Bulgarian, two languages that have mirative morphology, the mirative evidential morpheme is neither necessary nor sufficient to encode surprise, while exclamative intonation is. Example (31) is one of her Turkish sentences with non-mirative tense, where surprise (i.e., “mirativity” in the traditional sense) still arises when there is exclamative intonation. If exclamative intonation is absent, as in (32), the mirative meaning disappears.

(31) Pul-um var!
 money-1SG exist
 “I have money!”

(32) # Pul-um var.
 money-1SG exist
 (no mirative meaning possible)

We have no reason to doubt that Simeonova’s discovery applies to Guaraní as well. Examples (23)–(26) show that exclamative intonation is a frequent concomitant of the “mirative”, and many sentences expressing surprise (cf. (23), (29), a.o.) contain emphatic particles, glossed PRT. Further to support the idea that discovery and surprise are distinct, there is the fact that to some (though admittedly not all) speakers it is acceptable to follow a sentence with *ra’e* with a clause such as “as I expected”, as in (33). Example (34) shows that *ra’e* can appear even in cases where the preajcent proposition is naturally expected.

(33) Ho’a ra’e, che ai-mo’ã hagué-icha.
 3A.fall RA’E I 1A-suspect PAST-as
 “S/he fell, as I suspected [s/he would].”

(34) Pe río o-jupí-ma voi hína kuri, ha ko’ãga
 that river 3A-go_up-already ASSERT PROG PAST and now
 o-soro-ité-ma voi ra’e.
 3A-burst-really-already ASSERT RA’E
 “That river was swelling, and now it really overflowed.” [OK if I didn’t see the moment it overflowed, but later]

In light of the sufficiency of exclamative intonation to convey surprise, Simeonova considers the actual mirative morpheme to be an intensifier. In her account, sentences with

mirative morphology (in addition to the proper intonation) express a stronger surprise than sentences where mirativity is expressed only through intonation.

We would like to maintain that mirative morphology is meaningful beyond intensification, i.e., it has the distinctive meaning of discovery at the evaluation time, and hence differ from Simeonova in this regard. What to make then of the cooccurrence of *ra'e* with emphatic particles or exclamative intonation in clauses that express mirativity in the traditional sense? At this point we could simply say that discovery at the present time is a meaning that “goes well” with the surprise or counter-expectation that is encoded through intonation or emphatic particles, but neither implicates or requires the other.

This is perhaps where we should stop, as it is as much as we are certain of. For completeness, however, we close this section with a speculation that *ra'e* can serve to disambiguate between *mirative focus* and other focus meanings. This requires us to partly formalize mirative meaning beyond the meaning of discovery that we claim *ra'e* conveys.

Miratives have been formalized as counter-expectation in various places, including Torres Bustamante (2012), Simeonova (op. cit.) and Bianchi et al. (2016). As we saw regarding (24), counter-expectation is clearly present in some Guaraní examples. We capture it through a semi-formal description loosely based on Bianchi et al.:

(35) Given a set of alternatives C to the at-issue proposition P ,

$$\llbracket \text{MIR} \rrbracket = \lambda P.P \bullet \exists P' \in C \text{ s.t. } P' \text{ is better than } P \text{ w.r.t. the speaker's expectations}$$

In other words, MIR simply states the at-issue proposition P , adding a not-at-issue claim that alternative propositions are likelier from the speaker's point of view. The technical details involve choosing a doxastic modal base and ordering source anchored on the speaker's expectations. The fact that the ordering source is anchored on the speaker is relevant to our final speculations below. Other details are irrelevant for our purposes here.

Where does the set of (likelier) alternatives come from? A good candidate for this is focus, which has been analyzed since Rooth (1985) as requiring a set of alternatives to the prejacent proposition. The alternatives are built with substitutions of the focalized element. We adapt an example from Simeonova (op. cit.) to illustrate this:⁷

⁷Still there are cases where no obvious alternatives exist, and where it might be better to speak of unexpectedness rather than counter-expectation. With the following, the speaker is simply avowing that s/he asked himself what was up with the hearer that s/he didn't answer the phone. Though in this case one could say that the speaker is considering alternatives over predicates, the actual alternatives are irrelevant:

- (i) ¡Re-jahu ngo hína ra'e!
2A-bathe PRT PROG RA'E

“So, you were taking a bath! [That explains why you didn't answer!]” (from Carol & Avellana 2017)

These require a weaker view of alternatives, which is already implicit in (35). To quote Bianchi et al. (2016), p. 14:

“The existential force of (18) [our (35)] requires C to provide at least a minimal likelihood scale consisting of the expressed proposition and one distinct focus alternative. [...] The reason why we opt for this weaker formulation is that in the case of [mirative focus], there need not be any immediately salient set of alternatives: a hearer may perfectly interpret [*John gave Mary a diamond ring*, with mirative focus on *a diamond ring*] even though this is uttered out of the

(36) “Paul is drinking *coffee!*”

$$C = \left\{ \begin{array}{l} P_1 = \lambda w. \text{Paul is drinking tea in } w, \\ P_2 = \lambda w. \text{Paul is drinking beer in } w, \\ P_3 = \lambda w. \text{Paul is drinking coffee in } w, \\ \dots \end{array} \right\}$$

Focus does not in and of itself convey counter-expectation or surprise, of course. To our knowledge, the “mirative” function of focus, contrasting with focus’ better-known functions such as contrastive and corrective, was recognized by Cruschina (2012) (apud Bianchi et al. op. cit.). In Bianchi et al.’s account, the various meanings result from focus-based implicatures, and at least in some of the languages discussed in their paper they are each associated with a specific intonation. In this account, MIR would be a modifier of focus, which in some languages would be unambiguously expressed by a particular intonation; in others, MIR could be one of various readings of a single focus intonation.

All focus interpretations but the mirative are generally associated with conveying information that is new *to the hearer*, not to the speaker. One possible explanation for the quasi-systematic occurrence of *ra’e* in mirative clauses is that, given its assertion that the prejacent proposition is new *to the speaker*, it serves to disambiguate between mirative focus and other focus readings that are mostly associated with novelty to the hearer.

The full account of *ra’e* used in mirative sentences in Guaraní would speculatively be the following, then: *ra’e* indicates novelty to the speaker, while focus creates a series of alternatives to the prejacent proposition that can be used in many ways: as contrast to the prejacent proposition for the sake of the hearer, or, what interests us, as likelier scenarios from the point of view of the speaker. By using *ra’e* to indicate novelty to the speaker rather than the hearer, a speaker can pick out a “mirative” use for the alternatives.

6. Conclusions and remaining issues

In this paper, we examined a particle in Guaraní that has both mirative and evidential meanings, and concluded that the best characterization for its meaning is acquisition of evidence at evaluation time. The indirect evidential meaning associated with such particles arises from how evidence acquisition time and the event culmination time are related, in a way reminiscent of Lee’s (2013) and Kalsang et al.’s (2013) treatment of Korean and Tibetan evidentials, respectively. One could summarize this by saying that mirative evidentials are essentially mirative, in the specific sense of indicating discovery irrespective of evidence source. This approach avoids a series of stipulations that have been previously proposed to explain the complementary distribution between indirect evidential and mirative meanings.

Mirativity in the sense of unexpectedness or surprise is naturally associated with the “mirative evidential” particle, but is not actually conveyed by it. In fact, mirativity is better

blue – for example, as a comment on how madly in love with Mary John is – and there has been no previous mention of expensive or inexpensive gifts. The participants need only agree on the fact that there is at least one more likely alternative proposition, but they need not agree on any specific alternative (i.e., they may have different gifts in mind).”

thought of as consisting of at least two, and perhaps three components, that are semantically distinct and have separate exponency in the cases that we've examined in this paper. On the one hand there is discovery, while on the other there is the countering of previous expectations, which is linked to focus. A further component might be the actual surprise, expressed gradiently through exclamative intonation, which conveys how strongly the speaker believes some alternative to be likelier than the actual situation.

A number of issues surrounding *ra'e* haven't been touched upon here for reasons of space, including its use in questions, and the "past tense" meanings that various descriptions ascribe to it. For some discussion, we refer the reader to Carol & Avellana (2017).

References

- Aikhenvald, Alexandra. 2012. The essence of mirativity. *Linguistic Typology* 16:435–485.
- Arregui, Ana, María Luisa Rivero, & Andrés Pablo Salanova. 2017. Aspect and tense in evidentials. In *Modality across syntactic categories*, ed. Ana Arregui, María Luisa Rivero, & Andrés Pablo Salanova, 211–234. Oxford University Press.
- Bianchi, Valentina, Giuliano Bocci, & Silvio Cruschina. 2016. Focus fronting, unexpectedness, and evaluative implicatures. *Semantics and Pragmatics* 9:1–54.
- Carol, Javier, & Alicia Avellana. 2017. Tiempo, evidencialidad y miratividad en guaraní paraguayo y español de contacto: *ra'elhabía sido*. Unpublished manuscript.
- Carol, Javier, & Andrés Pablo Salanova. 2017. On mirative evidentials. Presentation at the 50th annual meeting of the Societas Linguistica Europaea, Zürich.
- Cruschina, Silvio. 2012. *Discourse-related features and functional projections*. Oxford University Press.
- DeLancey, Scott. 1997. Mirativity: The grammatical marking of unexpected information. *Linguistic Typology* 1:33–52.
- DeLancey, Scott. 2001. The mirative and evidentiality. *Journal of Pragmatics* 33:369–382.
- Dietrich, Wolf. 2010. Tiempo, aspecto y evidencialidad en guaraní. *LIAMES* 10:67–83.
- Fleck, David. 2007. Evidentiality and double tense in Matsés. *Language* 83:589–614.
- Gregores, Emma, & Jorge Suárez. 1967. *A grammar of colloquial Guaraní*. Berlin: Mouton de Gruyter.
- Guasch, Antonio. 1996. *El idioma guaraní: gramática y antología de prosa y verso*. Asunción: CEPAG, 7th edition.
- Kalsang, Jay Garfield, Margaret Speas, & Jill de Villiers. 2013. Direct evidentials, case, tense and aspect in Tibetan: evidence for a general theory of the semantics of evidential. *Natural Language and Linguistic Theory* 31:517–561.
- Koev, Todor. 2011. Evidentiality and temporal distance learning. In *Proceedings of SALT 21*, ed. Neil Ashton, Anca Chereches, & David Lutz, 115–134. Linguistic Society of America.
- Lee, Jungmee. 2013. Temporal constraints on the meaning of evidentiality. *Natural Language Semantics* 21:1–41.
- Melià, Bartomeu, Luis Farré, & Alfonso Pérez. 1997. *El guaraní a su alcance*. Asunción: CEPAG.

- Mexas, Haris. 2016. Mirativity as realization marking: a cross-linguistic study. Master's thesis, Universiteit Leiden.
- Potts, Chris. 2011. Conventional implicature and expressive content. In *Semantics: An international handbook of natural language meaning, vol 3*, 2516–2536. Berlin: Mouton De Gruyter.
- Rett, Jessica, & Sarah Murray. 2013. A semantic account of mirative evidentials. In *Proceedings of SALT 23*, 453–472. Linguistic Society of America.
- Rooth, Mats. 1985. Association with focus. Doctoral dissertation, University of Massachusetts at Amherst.
- Simeonova, Vesela. 2015. On the semantics of mirativity. In *Proceedings of the 2015 annual conference of the Canadian Linguistic Association*, ed. Santa Vinerter.
- Simeonova, Vesela. 2016. A semantics of mirativity in Bulgarian and Turkish. Ms., published in part as Simeonova (2015).
- Slobin, Dan, & Ayhan Aksu. 1982. Tense, aspect and modality in the use of the Turkish evidential. In *Tense-aspect: Between semantics and pragmatics*, ed. Paul Hopper. Amsterdam and Philadelphia: John Benjamins.
- Smirnova, Anastasia. 2013. Evidentiality in Bulgarian: temporality, epistemic modality, and information source. *Journal of Semantics* 30:479–532.
- Speas, Margaret. 2010. Evidentials as generalized functional heads. In *Interface legibility at the edge*, ed. Anne-Marie DiSciullo, 127–150. Oxford University Press.
- Taylor, John Michael. 1984. Marcação temporal na língua Kaiwá. *Série Linguística* 11:37–121.
- Tonhauser, Judith. 2014. Reportative evidence in Paraguayan Guaraní. In *Proceedings of SULA 7*.
- Tonhauser, Judith. 2006. The temporal semantics of noun phrases: Evidence from Guaraní. Doctoral dissertation, Stanford.
- Torres Bustamante, Teresa. 2012. Real tense and real aspect in mirativity. In *Proceedings of SALT 22*, 347–364.
- Velázquez-Castillo, Maura. 2017. Deixis and perspective in Paraguayan Guaraní reportative evidentiality. In *Guaraní linguistics in the 21st century*, ed. Bruno Estigarribia & Justin Pinta, 259–284. Leiden: Brill.
- Welmers, William E. 1973. *African language structures*. University of California Press.

Andrés Pablo Salanova, Javier Carol
kaitire@uottawa.ca, javier_carol2000@yahoo.com.ar