ON THE SYNTAX AND SEMANTICS OF MIRATIVITY:

EVIDENCE FROM SPANISH AND ALBANIAN

By

TERESA TORRES BUSTAMANTE

A Dissertation submitted to the

Graduate School-New Brunswick

Rutgers, The State University of New Jersey

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Graduate Program in Linguistics

written under the direction of

Dr. Mark Baker

and approved by

_____

_____

_____

_____

New Brunswick, New Jersey

October, 2013

ABSTRACT OF THE DISSERTATION

On the Syntax and Semantics of Mirativity: Evidence from Spanish and

Albanian

By TERESA TORRES BUSTAMANTE

Dissertation Director:

Mark Baker

In this dissertation, I examine mirative constructions in Spanish and
Albanian, in which past tense morphology is used to convey speaker's
surprise and does not seem to contribute its usual temporal meaning to the
asserted proposition. I put forward an analysis that makes the following
claims.

First, mirative sentences are assertions that include a modal
component. This modal component brings up the speaker's beliefs in a way
that entails the opposite of what the assertion expresses. Thus, a clash is
generated between the speaker's beliefs and the assertion, and this triggers a
sense of surprise.

Second, the past tense morphology is analyzed as being a *real* past

tense, following recent proposals for counterfactual conditionals. In the case of miratives, the past tense keeps its normal semantics, but is interpreted in the CP domain as the time argument of the modal base, rather than in TP. The beliefs that are contrasted with the assertion are therefore *past* beliefs up to the discovery time (which usually coincides with the speech time), in which the actual state of affairs is encountered by the speaker.

Third, a syntactic Agree relationship is established between the interpretable past tense feature in C and the uninterpretable past tense feature in T. This Agree relationship must meet locality requirements, such that there must not be intervenors between C and T. I claim that the participle movement observed in Albanian miratives happens in order to overcome intervention, so that Agree can take place.

The dissertation also accounts for the role of aspect in deriving differences in the nature of the surprise, at least in Spanish, and for the aspectual requirement that miratives seem to have cross linguistically. Finally, I show that miratives cannot be analyzed in the same way as apparently similar constructions, in terms of usage, such as exclamations and exclamatives. On the contrary, the analysis presented in this dissertation calls for a closer relationship between miratives and counterfactual conditionals, which I also explore.

Acknowledgements

Recent scientific research[1] has proven that a key factor in happiness is gratitude. So, even though I am writing these acknowledgements at the last minute, I am definitely enjoying it.

First, I want to thank my wonderful dissertation committee. Mark Baker has been an amazing chair and professor throughout my graduate studies. I am fortunate to have been his student and to have had weekly meetings with him, where I learned how to be a linguist. Veneeta Dayal has been more than a professor and an advisor; she has been a true mentor. In her classes and advising, I learned to appreciate how much semantics can tell us about language. Veneeta also supported and encouraged me in many ways during my graduate studies, and made me feel confident about my work. Liliana Sánchez has also been such a help to me since we first met at Rutgers. Back in Peru, I had heard lots of good things about her, and I was happy to confirm that all those things were true. In every meeting she made me understand many issues of my dissertation and provided me with new solutions (not only with respect to Linguistics, but also grad life). Finally, I was also lucky enough to get to work with one of my favorite semanticists, Valentine Hacquard. She joined my committee late, but many of her insights and questions about my project made this dissertation better.

Contents

List of Abbreviations

ABL	ablative
ACC	accusative
ANT	anterior
AOR	aorist
AUX	auxiliary
CL	clitic
COND	conditional
CONGR	congruent
DECL	declarative
EPIST	epistemic
EV	evidential
FEM	femenine
FOC	focus
HAB	habitual
IMP	imperative
IMPF	imperfective
IND	indicative
INSTR	instrumental
LOC	locative
MASC	masculine
NEG	negative marker
NCONGR	non congruent
NOM	nominative
NOMZ	nominalizer

PTCP	participle
PAST	past
PERF	perfect
PFV	perfective
PL	plural
PR	present
PROG	progressive
SG	singular
SUBJ	subjunctive
TOP	topic

Chapter 1

Introduction

This dissertation is about the meaning and form of mirative sentences, and their relationship with syntactic structure. Specifically, it is about miratives that make use of tense and aspect morphology to express a sense of surprise.

Mirativity has been defined in the literature (DeLancey 1997, 2001) as the grammatical category that encodes speaker's surprise due to new and unexpected information. The main question this dissertation addresses is what role tense and aspect play in the formation and interpretation of a mirative. I will deal with examples such as (1) in Spanish.

(1)   ¡Juan fum-aba!²
        Juan smoke-PAST.IMPF.3SG
         'Juan smokes!'

---

² In most examples, I make use of exclamation points in the English gloss to signal mirativity. However, this must not lead to mistake miratives for exclamative sentences. This issue is discussed in detail in chapter 4.

In (1), the past imperfective, which usually signals past eventualities, can be used to express the speaker's surprise about a present eventuality. A similar effect is found in Albanian: in (2) the present perfect, with the participle preposed to the auxiliary, is used to express surprise about a present habit.

(2)   Ai punua-ka
       3S work.PTCP-AUX.3SG
       '(Wow), he works!' (Duchet and Përnaska 1996:31)

In these examples, we find instances of grammatical tense that do not correspond with their standard interpretation. Roughly speaking, an event that happened before the speech time is described in the past tense. However, in (1) and (2), the past tense is 'fake': it does not describe a past eventuality.

The central claim of this dissertation is that past tense is interpreted temporally (i.e. it is not 'fake') but not in the TP domain, as usual; rather, it is displaced to the CP domain as the time argument of the modal base. This displacement of tense is crucial for the interpretation of miratives. Tense is spelled out, however, in T, due to an Agree relationship between C and T. As for aspect, its influence in the meaning of miratives is an indirect one via the topic of the assertion. Syntactically, there are also aspectual requirements on miratives. This fact is also accounted for via Agreement and feature-checking.

The empirical focus of the dissertation is miratives in Spanish and Albanian, although other languages will be referred to as well.

The remainder of this chapter is dedicated to the following: first, I introduce the topic of mirativity by presenting the main data of Spanish and Albanian, and the issues this data poses regarding the role of tense and aspect, and syntactic structure. Second, I display the assumptions of my analysis, and briefly present the core proposal of the dissertation. Third, I discuss the phenomenon of mirativity in general, as presented in the literature. As we will see, traditionally, mirativity has been lumped together with another category, evidentiality, so the purpose of this section is to show that mirativity is a category on its own. I also discuss data that has been analyzed as miratives, but make use of other strategies, and whose type of 'surprise' meaning is different from the examples we deal with in this dissertation. Finally, the roadmap of the dissertation is presented.

1. Mirativity in Spanish and Albanian

1.1 What is mirativity?

DeLancey's (1997) seminal paper on mirativity argues for the recognition of a new gramatical category that marks information that is new and surprising for the speaker. This meaning has been noted before, as DeLancey points out, in the Balkan literature (called 'admirative'), and by Jacobsen (1964), who called it 'mirative', for Washo, a North American language. The definitions have in common a distinction between old vs. new knowledge, or

expected vs. non-expected information. For DeLancey, mirativity signals that the proposition is "new to the speaker, not yet integrated into his overall picture of the world" (DeLancey 1997:36).

I will provide a formal meaning for mirativity in the next chapter; for now, we can keep the traditional definition in these terms: mirativity is the grammatical category that marks speaker's surprise due to new and unexpected information.

In many of the examples DeLancey discusses, a common feature of mirativity arises: the use of tense and aspect morphology. In the next section, I will illustrate this more fully with Spanish and Albanian data. This will help also in setting up the issues this dissertation addresses regarding these languages.

1.2 'Fake' past

1.2.1 Spanish

Spanish past imperfective, in its declarative reading, makes reference to past eventualities (habitual, progressive or generic aspect) or past states; in its mirative reading, it makes reference to present eventualities (habitual/generic) or present states. (3a) shows a standard past imperfect reading, while (1), repeated here in (3b) shows the mirative counterpart.

(3)   a. Juan fum-aba
         Juan smoke-PAST.IMPF.3SG
         'Juan used to smoke/Juan was smoking'

b. ¡Juan fum-aba!
   Juan smoke-PAST.IMPF.3SG
   'Juan smokes!'

(3b) is felicitous in a context in which the speaker sees Juan lighting a cigarette, or after Juan asked for a lighter, and suddenly realizes that Juan, contrary to what she thought before, is in fact a smoker.

As far as I know, this mirative extension of the past imperfective in Spanish has only been noted before by Sánchez (2004:148-149). She provides the following example:

(4)   Anda, ¡sabía   nadar!
       hey,   know-PAST IMPF.3SG to swim
       'Hey, (s/he) knew how to swim!'

In (4), Sánchez put the gloss in past tense as well; however the interpretation is about a present ability. So, we observe that in the mirative use of the past imperfective there is a shifting of time reference for the eventuality described in the proposition, leaving the past as 'fake'.

A similar pattern is displayed by the pluperfect in Andean Spanish. This form has been subject of much attention by linguists interested in the influence of Andean languages (Quechua and Aymara) on Spanish. In section 3, I review what has been said about the Andean Spanish pluperfect and its connection with Quechua, especially for bilingual speakers. Here, I will show the main data[3] I will analyze in the next chapters.

---

[3] This data come from judgments of mine and from other speakers of Peruvian Spanish.

Morphologically the standard declarative pluperfect consists of a periphrasis of an auxiliary verb in past imperfective plus a participle form of the main verb. The standard pluperfect marks a past of a past reference, as shown in (5), in which the event marked by the pluperfect (the eating event) has happened before the leaving event.

(5)   Cuando lleg-ué a la fiesta,   ellos ya
        when arrive-PFV to the party,   they already
        hab-ían   comido
        AUX-PAST.IMPF.3PL eat.PTCP
        'When I arrived to the party they had already eaten'

In its mirative reading, the pluperfect doesn't have this background reading; rather it conveys a simple past interpretation.

(6)   ¡Hab-ías   fumado!
        Aux-PAST.IMPF.2SG smoke.PTCP
        'You smoked!'

The context for (6) is one in which the addressee was not supposed to smoke, but the speaker founds ashes in her clothes, for instance. In this case, there's not a past of a past interpretation, but rather a recent single past interpretation. Again, we have a case of 'fake' past,

With stative verbs, the standard pluperfect is also found in contexts in which there is a past of the past interpretation (7):

(7)   Antes de enrolarse en el ejército, Juan hab-ía   sido
        before of enrollment in the army, Juan AUX-PAST.IMPF.3SG be.PTCP
        maestro de escuela
        teacher
         'Before his enrollment in the army, Juan had been a school teacher'

In its mirative reading (8), the pluperfect stative may refer to past or present states. In any case, what it is important now is that again we find a 'fake' past reading, since we have a single past interpretation (not a 'past of the past' reading) or a present interpretation.

(8) ¡Juan hab-ía   sido   alto!
     Juan AUX-PAST.IMPF.3SG be.PTCP tall
     'Juan was tall!' / 'Juan is tall!'

A felicitous context for the past stative in (8) is one in which Juan is short as an adult, but one day the speaker looks at pictures of Juan as a child, finding out that he was tall at that time. The present stative reading arises at looking at Juan standing, and finding out he is tall when the speaker had thought he was short. I will discuss in detail the case of pluperfect stative and its availability with present interpretations in chapter 2.

1.2.2 Albanian

Albanian, unlike Spanish, has a complete verbal paradigm for marking mirativity. It is recognized in its grammatical tradition as the admirative mood (Friedman 1981, Newmark 1982, Zymberi 1991, Duchet et Përnaska 1996). However, this 'admirative' mood is based on the indicative mood. The basic comparison is shown in (9).

(9) a. Ai   ka   punuar
        3SG AUX.PRES.3SG work.PTCP
        'He worked'

     b. Ai   punua-ka
        3SG work.PTCP-AUX.PR.3SG

'(Wow), he works!' (Duchet and Përnaska 1996:31)

(9a) is the declarative present perfect, while (9b) is the present mirative. As we see, the mirative is formed by preposing the past participle to the auxiliary.

There is a full mirative paradigm that consists of preposing the past participle to the auxiliary, in various tenses and aspects. So in Albanian there are present as well as past imperfective and past perfect(ive) readings. In all these cases, the same observation we made regarding Spanish holds: there is a 'fake' past that does not contribute its temporal meaning to the assertion.

I will focus on the syntactic peculiarity that Albanian miratives show, namely preposing of the participle, unlike other languages. In chapter 3, I analyze the syntax of Albanian miratives, and also I use it as a support of the semantic analysis analysis presented in chapter 2.

Regarding the mirative meaning, the literature indicates that the mirative is used to express surprise, disbelief, irony or doubt due the speaker's non-confirmation of the truth of the statement, or to statements that contradict speaker's beliefs (Friedman 1980, [4] 1986, Duchet and Përnaska 1996). Also, the surprise meaning ranges from unexpectedness to strong amazement (Zymberi, 1991). I do not make strong claims regarding

---

[4] Friendman (1980) describes in detail the traditional literature on Albanian admirative, characterizing it as expressing surprise.

the semantics of Albanian miratives, although my semantic proposal is the basis for my syntactic analysis of the Albanian data. I believe it accounts for the salient surprise meanings that the Albanian mirativs show, but further analysis is needed to capture all the nuances these forms may have, in the same way I do for Spanish miratives.

1.3 Aspectual restrictions on miratives

1.3.1 Imperfective requirement

Delancey (1997) notices that cross linguistically mirativity is associated with imperfective forms, while perfective aspect disallows it. This also holds in Spanish and Albanian.

Both Spanish forms make use of imperfective morphology: the past imperfect can be used for mirativity, while the pluperfect bears imperfective morphology in the auxiliary. The correspondent perfective forms: the *pretérito* (10) and the (rare) *pretérito anterior* (11), which consists of an auxiliary in perfective plus a past participle cannot be interpreted as miratives.

(10)   Fumaste.
       smoke-PAST.PFV.3SG
       'He smoked' #He smokes!

(11)   Hubo   fumado.
       Aux.PAST.PFV.3SG smoke-PTCP
       'He had smoked' #He smoked!

Albanian also shows a similar restriction. The mirative cannot be formed based on an aorist (perfective) auxiliary (12). However, unlike

Spanish, not only the aorist (13) cannot be a mirative; that restriction applies to the past imperfect (14) as well. The generalization is that Albanian miratives require the presence of the past participle preposed to a present or imperfect auxiliary (15).

(12) *pas-pata
        have.PTCP-AUX.AOR.1SG
        Lit. had-had. #I had (something)!

(13)   pata
        have.AOR.1SG
        '(I) had (something).' #I have (something)!

(14)   kisha
        have.PAST.IMPF .1SG
        'I used to had (something).' #I have (something)!

(15)   a. pas-kam
            have.PTCP-AUX.PR.1SG
            'I have (something)!'

        b. pas-kisha
            have.PTCP-AUX.PAST.IMPF.1SG
            'I used to have (something)!'

1.3.2 'Fake' or real aspect?

We have seen that in miratives the past tense does not get its normal temporal interpretation. What about the aspect morphology found in miratives?

In Spanish, the imperfect mirative gets a present reading but it keeps the readings associated to the imperfect: it is used for generic and habitual statements. The pluperfect is used for eventualities seen as culminated, and the same holds for the pluperfect mirative. Therefore, aspect seems to keep

its standard interpretation in mirative sentences. Now, we find that, in addition, the differences in aspect influence the mirative meanings associated with each of these forms.

Imperfect sentences are used to talk about generic/habitual eventualities, while pluperfect sentences are used to talk about episodic eventualities. This contrast between generic and episodic statements affects the nature of the speaker's surprise. Generic sentences contribute to a surprise feeling due *unlikelihood*, while episodic sentences contribute to a surprise feeling due to *counter expectations*. So, even though aspect is real and not fake, still it makes a contribution to the mirative meaning, as we will explore in detail in the next chapter.

In Albanian, we find a similar situation with one peculiarity. Leaving aside the preposed participle, what is left in the sentence gets interpreted in the normal way. Thus, the tense/aspect morphology of the auxiliary and of any non-preposed participle gets its normal reading. It is only the preposed participle that seems to lose its standard meaning (past and perfect).

1.4. Summary

In this section, I have laid out the main properties of Spanish and Albanian data I will focus on in this dissertation. Basically, I will address the role of 'fake' past in the meaning of mirativity, the issue of imperfective morphology, and the aspectual influence on mirativity. I also propose an

account for the syntactic operation Albanian displays, in a way that is consistent with the semantic analysis.

2. The proposal in a nutshell

I see mirative sentences as modal statements: the modal component brings up the speaker's beliefs relevant to the assertion. These beliefs clash with the discovery of facts that constitutes the assertion. This clash is what triggers the sense of surprise associated with miratives. In order to formalize this idea, I propose a mirative operator M

The operator M relates the assertion to a background of beliefs. Furthermore, the nature of beliefs is such that clashes with the assertion.

Ippolito (2002) in her account of mismatched counterfactuals proposes that the accessibility relations (that provide the right modal base) should be restricted by a time of evaluation. After all, what the speaker knows or believes can change over time. In the same spirit, M takes a modal base (speaker's set of beliefs) with a time argument. This time argument takes the value of [past] tense, so that we get a set of beliefs in the *past*.

The core of my analysis is to consider the past tense morphology found in miratives as the locus of the mirative meaning. However, I do not give a special semantics to this past tense. I assume a regular temporal semantics for the past tense morpheme such as the one given by Kratzer (1998:10), shown in (16); or as we will see in chapter 2, I will follow Kusumoto's (2005)

view on past tense as an operator that introduces the meaning of anteriority.

For now, the definition in (16) is enough to show my point.

(16) $[\![past]\!]^{g,c}$ is only defined if c provides an interval t that precedes t_0. If defined,   then $[\![past]\!]^{g,c}$ =t

Following the definition in (16), the speaker's beliefs hold in an interval that precedes the utterance time (t_0), which is also the discovery time. If this is the case, the beliefs are *past* beliefs up to the discovery of facts. I develop this analysis of *M* and the role of past tense in chapter 2.

In order for *M* to take [past] as a time argument, [past] must not be interpreted in TP (the domain of the assertion) but rather in CP (mirative domain). I assume that functional projections bear interpretable features that have to be checked against corresponding uninterpretable features on lexical projections. The feature-checking relationship between these features is done via Agree (Chomsky, 2000, 2001).

In miratives, since the tense feature is displaced, Agree happens between C (bearing an interpretable [past] feature) and T or V (bearing the uninterpretable but morphologically realized tense feature).

I will also assume a version of Relativized Minimality (Rizzi 2002), in which Agree is established between a probe and its closest goal. This means that there must not be a potential goal intervening between these features. The core of chapter 3 is to show that auxiliaries in Albanian are not the right targets for C, but they act as intervenors between C and the past participle.

This triggers the movement of the past participle to T, in order for it to Agree with C

In (17), I sketch my analysis, focusing on the interpretation of [past] tense. C bears an interpretable [past] tense feature, while T bears the corresponding uninterpretable one. The dashed line represents the Agree relationship.

(17)

CP

C
M_{OP} ... i[past]

TP

T
u[past]

....
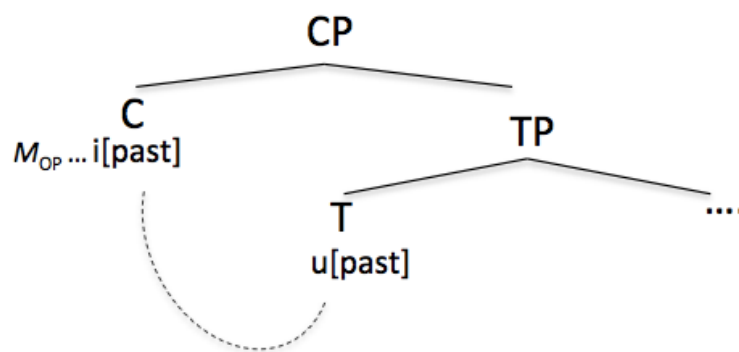
Given the semantics I give for mirativity, surprise by itself is not encoded in *M*, but rather it is derived from the clash between what the past beliefs lead to and the recently discovered state of affairs. Therefore, miratives are not direct expressions of surprise in themselves. In this, they are different from other phenomena such as exclamations or exclamatives that can be analyzed as expressing the speaker's emotions. I discuss this issue in detail in chapter 4.

Finally, aspect, in my analysis plays an indirect role. It basically contributes its (almost) usual interpretations to the assertion, and it is through the assertion that it exerts a degree of influence on the meaning of mirativity. The main contrast I found in miratives is imperfective vs.

perfect(ive) sentences. By imperfective sentences, I mean sentences with habitual or generic interpretations, i.e. patterns of events. By perfect(ive) sentences I mean complete or punctual events. The main idea is that the speaker's past beliefs should be relevant to the topic of the assertion; namely, it should be sensitive to the distinction between episodic and generic eventualities. The role of aspect is discussed in chapter 2, along with the semantics of tense in miratives.

3. Mirativity in context

In this section, I discuss the connection between mirativity and evidentiality, as well as the status of so-called conjunct/disjunct systems, which have been analyzed as miratives in the literature.

3.1. Mirativity and evidentiality

Evidentials mark information source (Ainkhenvald 2004:1). For example, they can express whether the statement the speaker utters is based on what the speaker saw, heard or inferred.

Evidential systems often develop a mirative meaning. A well-known example is Turkish *-miş* (Slobin & Aksu 1982), which marks past tense of indirect experience, either hearsay or inference. It can also get a mirative meaning. I copy below the example provided by Slobin & Aksu 1982:187.

(18)   *Kemal gelmiş*   'Kemal came'

     (a) INFERENCE: The speaker sees Kemal's coat hanging in the front hall, but has not yet seen Kemal.
     (b) HEARSAY: The speaker has been told that Kemal has arrived, but has not yet seen Kemal.
     (c) SURPRISE: The speaker hears someone approach, opens the door and sees Kemal - a totally unexpected visitor.

Ainkhenvald (2004) presents a survey of evidentials in several languages, and observes that the pattern observed in Turkish is quite common. It is usually the non-firsthand evidential that develops a mirative meaning. Given this pattern, one may wonder if mirativity is a grammatical category on its own, or if is rather parasitic on evidentiality.

DeLancey (1997/2001) argues for the status of mirativity as an independent category, different from evidentiality. While the latter encodes source of information, the former marks surprise due to new and unexpected information, regardless of the source of that information (first-hand or hearsay/inference). In the next sub section, I summarize DeLancey's observations and analysis:

3.1.1 DeLancey (1997)

DeLancey starts his argument in favor of a mirative category, taking as his first example the Turkish data showed in (18) and its analysis by Slobin & Aksu. They don't treat the mirative reading as an extension of a basic evidential one, but rather they take the mirative as the core meaning, given that what is relevant for the use of *miş* is the novelty of the information,

and not the source of it, as in a standard evidential. This is shown in the example in (19). The context of this minimal pair is the following: in the early 1970s, both the US President and the Turkish Premier resigned. That the US President resigned (Nixon) was not a surprise at all, but rather something expected; while the resignation of the Turkish Premier (Ecevit) was surprising. In that context, someone hearing both pieces of news on the radio (same source) could report this news to someone else in the following way:

(19)   a. Ecevit istifa   et-*miş*
          Ecevit resignation make- *miş*

       b. Nixon istifa   et-ti
          Nixon resignation make-PAST

Although it is the same source of information, the speaker uses the indirect experience past, *miş*, for the surprising event in (19a), but the direct past one for the expected event in (19b). -*miş* can also be used without hearsay or inference component, but rather with first-hand evidence. This shows that the mirative reading of -*miş* is independent of the source of information, which is marked by evidentiality.

DeLancey also examines mirativity in Hare, Sunwar, Lhasa Tibetan and Korean. His purpose is to show that even though mirative markers are related to inferential interpretations in many cases (Turkish, Hare, Sunwar), the mirative meaning is independent of evidentiality. Furthermore there are languages in which mirativity exists and it is not related with evidentiality at all (Lhasa Tibetan), or it co exists with the evidential morphemes of the

language (Korean). I will briefly summarize his observations regarding this set of data.

a. *Hare* (Athabaskan language)

In Hare, the mirative form *lõ* is independent of the tense/aspect paradigm, but in terms of use, it is similar to the Turkish *-mi̧s*. Moreover, *lõ* presents interactions with the aspectual morphology of the language. The *lõ* mirative associates with imperfective aspect, while the inferential or hearsay reading associates with perfective aspect.

(20)   a. Mary e-wé'   ghálayeyĩda *lõ*
          Mary its-hide work.PFV   *lõ*
           'Mary worked on hides'

       b. Mary e-wé'   ghálayeda   *lõ*
          Mary its-hide work.IMPF *lõ*
           'Mary is working on hides'

(20a) can be uttered, as an inference, in a context in which the speaker sees Mary covered with moose hair. In contrast, (20b) is appropriate when the speaker has seen directly that Mary was working on a hide, but this was something not expected.

DeLancey notices that the mirative reading of *lõ* (unexpected new information, usually direct perception) was very easy to elicit, but only in imperfective clauses. It was also very common in second person sentences (and odd with first person ones, since information about oneself isn't usually new or surprising), which marks that what it is relevant in the use of *lõ* is not

that it is new information for the addressee (usually, second person statements are old news for the hearer), but rather new information/discovery for the speaker.

b. *Sunwar* (Tibeto-Burman)

Sunwar has two existential copulas: /*tshə*/ which marks that the speaker already knows the proposition (21a), while /*'baak-*/ marks that the proposition is new information the speaker recently discovered (via hearsay, inference, or first-hand evidence), as in (21b). Again, we see that the appearance of a mirative form is independent of the source of the information (evidence).

(21) a. Tangka Kathmandu-m   *tshaa*
         Tangka Kathmandu-LOC *tshaa*.3SG
         'Tangka is in Kathmandu'

      b. Tangka Kathmandu-m   *'baâ-tə*
          Tangka Kathmandu-LOC exist.3S.PAST
          'Tangka is in Kathmandu'

Now, as in Hare, when /*'baak-*/ is used with a perfect construction, there is an inferential/hearsay reading, but when used with an imperfective construction, the mirative reading easily arises.

c. *Lhasa Tibetan*

Lhasa Tibetan also manifests a distinction between old and new (unexpected) information in its copula system: *yod* indicates unmarked

contexts, while *'dug* is a mirative However, this distinction is restricted to first person statements.

(22)   a. nga-r dngul   tog=tsam *yod*
      I-LOC money some   exist
      'I have some money' (e.g. I brought some with me)

    b. nga-r dngul   tog=tsam *'dug*
      I-LOC money some   exist
      'I have some money!' (quite to my surprise)

The general pattern regarding the use of these forms is as follows: first person declaratives and second person interrogatives use *yod* (conjunct form), while second/third person declaratives and first/third person interrogatives use *'dug* (disjunct form). Therefore, we shouldn't expect a disjunct form with a first person statement, but when this happens, there is a mirative reading associated with it, as in (22b). This conjunct/disjunct marking in the person system has been noted for several other languages (Tibetan, Barbacoan).

This mirative is quite different from the others, both because it is not associated with tense/aspect, and because it is restricted to first person sentences, something that DeLancey found odd for the other languages he discussed. The meaning that arises is really one of lack of control/awareness. So, to what extent does Lhasa Tibetan (and the other languages with this paradigm) display mirativity? I discuss the case of conjunct/disjunct systems as miratives further in section 3.2.

d. *Korean*

Korean has a suffix *-kun* that can be analyzed as a mirative (new unexpected information); it contrasts with another suffix *-ci*[5] that marks 'integrated' knowledge. These suffixes do not have evidential readings. In fact, they can combine with the evidential paradigm of the language, since they are in different verbal positions:

(23)   a. chəlsu   naka-ss-na-po-*kun*
             Cheolsu go.out-PRES-INFERENTIAL-*kun*

          b. chəlsu   naka-ss-na-po-*ci*
              Cheolsu go.out-PRES-INFERENTIAL-*ci*

              'Cheoulsu must have gone out'

Both these sentences have an inferential context: the speaker infers that Chelsou has gone out. For instance, the speaker looked for Chelsou around the house and did not find him. The contrast between these sentences has to do with a distinction between expected/unexpected information. Thus, in (23a) the speaker arrived to the conclusion that Chelsou has gone out after searching the house, while in (23b) the speaker already suspected it.

DeLancey's article shows that it is possible to disassociate mirativity from evidentality.   Another important point made by DeLancey is the

---

[5] *-kun* and *-ci* are part of a larger set of final suffixes/particles. For some authors (Lazard 1999, Ainkhenvald 2004), the status of *-kun* as a mirative is questionable. Cinque (1999:53) calls it 'evaluative mood' suffix, since it carries a sense of surprise to the speaker. *-kun* (and the set of suffixes associated with that position) appears before speech act suffixes.

relevance of tense/aspect in the construction of the mirative (both in form and meaning). He notices that it seems to hold cross linguistically that imperfective forms allow a mirative meaning, while perfect(ive) forms favor an inferential reading, or in any case, it disallows the mirative. His explanation is that the speaker uses a past time reference (actually, perfect(ive) aspect) when it is an event that is old knowledge already, therefore, susceptible of hearsay/inferential interpretations. Miratives make reference to immediate discoveries (the event itself may be old, but what matters is the recent discovery), and that's why imperfective is favored. As we see in chapters 2 and 3, I depart from this explanation, given my analysis for the role of past tense in miratives. I will also provide an explanation for the imperfective requirement of miratives.

Regarding the relationship between evidentials and miratives, it must be clear by now that the mirative meaning is distinct an evidential one[6]. However, an important question still remains: why does the mirative use the same morpheme as the non-first hand evidential, even in cases when the mirative arises due to first-hand evidence? For DeLancey this is explained if we assumed that the unmarked form, the first-hand evidential, only marks old/expected knowledge. Recent accounts (Peterson 2008, Krawczyk 2012) tried to address this question in pragmatic accounts, but they restrict the mirative only to cases of direct perception, something that we have seen is

---

[6] For an opposite view regarding the relationship between evidentiality and mirativity, see Lazard (1999).

not exactly correct. I will not tackle this question, since in the languages I study directly miratives do not present evidential readings. I think it is possible to extend my semantic analysis to the mirative meanings some evidentials display, taking in account the role of tense/aspect, and assuming a logical independence between these categories, despite the fact that the same marker is used. But I don't have anything to say regarding their evidential meanings, and therefore, I won't attempt to discuss the connection between miratives and evidentials in this dissertation.

3.1.2 Evidentiality in Andean Spanish

The non-standard meanings of the pluperfect in Spanish in contact with Quechua and Aymara have been noted by several linguists (Kany 1947, Herrero 1969, Laprade 1981, Hardman 1982, Escobar 1994, Cerrón-Palomino 1990, Zavala 1999, Sánchez 2004). The general view is that the pluperfect in bilinguals acquires semantic values from the Quechua past narrative *-sqa*. The Quechua *-sqa* refers to non-experienced/reportative past, and as such itis used often in narratives, as in (24a), but it can also have a mirative meaning as in (24b).

(24)   a. Manku Qhapaq-qa Titiqaqa qucha-manta-s lluqsimu-*sqa*
        Manco Capac-TOP Titikaka lake-ABL-EV   emerge-*sqa*
        'Manco Capac emerged from the Titicaca lake'
                               (Cusihuamán 2001:161)

    b. Rupha-n kay kafi-y-qa   ka-sqa!
       hot-FOC this coffee-NOMZ-TOP   be-PAST
         'This coffee is hot!'   (Cusihuamán 2001:162)

The pluperfect in bilingual speakers is mainly used as a reportative past,[7] as we see in (25):

(25) según dice que *había aparecido* por ahí... dos señores una señora y un señor..

'As it is said, two people a lady and a man appeared around there' (Escobar 1994:26)

The pluperfect in bilinguals also gets a mirative reading although it is not as common as the reportative use.[8]

(26)   Tú hab-ías   sido   canosa.
        You AUX-PAST.IMPF.2SG be.PTCP white-haired
        (with surprise) 'You happened to be white-haired' (Zavala 1999:72)

In monolingual Andean Spanish (at least for my dialect), it seems that the pluperfect, in addition to its standard interpretation, takes only the mirative meaning but not the reportative one. (Pérez 2004) In any case, either in bilingual or monolingual Andean Spanish[9], and even Quechua, the mirative meaning of the pluperfect is independent of the information source. Thus, direct perception as in (24b) for Quechua, or (26) for Andean Spanish can be the source of information for the mirative use. But it can also be new information that comes from hearsay. For example, if someone told me the

---

[7] See Sánchez (2004) for an account on this convergence of evidential/tense features in Quechua-Spanish bilinguals.

[8] Escobar's data (24 Quechua-Spanish bilinguals, all of them in earlier stages of acquisition of Spanish) shows the following distribution of the pluperfect: 85% with reportative use, 12% with standard temporal function, and only one case (3%) is a mirative.

[9] Kany (1947) indicates that the surprise use of the pluperfect is found not only in Andean countries such as Ecuador, Bolivia and Peru, but also in Argentina and Uruguay. There is some small presence of Quechua in Argentina that may explain this development.

(surprising) news that a friend has got married, then, when I encounter this friend I can say to him te sentence in (27).

(27) ¡Te   habías   casado!
        CL.2SG AUX.PAST.IMPF.2SG   get.marry.PTCP
          'You got married!'   (Laprade 1981:223)

This independence between the source of the information and the mirative meaning also applies to the past imperfective. In general, in the data I will analyze, these forms do not have any specific evidential value. As we said before, the discovery time is usually concomitant of the speech time, and this favors direct perception, but it would be wrong to restrict the mirative only to first-hand contexts, given that its appearance is felicitous regardless of the evidence source.

I should point out that the evidence source also does not play a role in Albanian. The consultant I worked with accepted miratives in contexts of direct perception, inference, or hearsay. In the grammars of the language, no evidential meaning is mentioned for these forms.[10]

---

[10] Ainkhenvald (2004:210) mentions that the 'admirative' mood in Albanian is a term for non-first hand evidential, and as such, it can get a mirative reading, and cites Friendman (2003). Friedman, however, characterizes the Albanian admirative as 'non-confirmative', which expresses reportedness, dubitavity and mirativity. In the examples he provides for the first two cases it is not clear that the main meaning are those and not the surprise (in the reportative case there is also a verb of saying in the clause). He also says: 'in both cases there are nuances of surprise or disbelief' (Friedman 2003:343).

3.2 Conjunt/Disjunct systems as grammaticalized mirativity

As reviewed above, so-called conjunct/disjunct systems have been analyzed as marking mirativity in some languages (DeLancey 1999, Dickinson 2000). My goal in this section is to show that they differ in several respects from the miratives that make use of tense/aspect means, or from those assumed to be specific markers of mirativity (Hare, Korean). I will follow Curnow's (2000) arguments regarding this topic.

3.2.1 The system

As far as I know, only two language families display this conjunct/disjunct system for person marking. These are the Tibeto-Burman family, and the Barbacoan family (spoken in Ecuador and Colombia). The main generalization is that there is a 'conjunct' form that is used for first person subjects in declaratives, and second person in interrogatives. The other persons (in declaratives and interrogatives) make use of a (usually) zero mark, called 'disjunct'. In Lhasan Tibetan, as shown in 3.1.1, and other Tibeto-Burman languages, this distinction appears in the copula system, but in Newari (another Tibeto-Burman language) it is marked as suffixes in the verb. Tsafiki (Barbacoan) also shows this distinction in the verb paradigm.

Analyses of this system (Hale 1980, Hargreaves 1990) explain the appearance of conjunct forms as marking a higher actor that co-references with the actor of the clause. In declaratives, this higher actor is the speaker,

and that's why the conjunct form is used with first person; but in questions, this actor is the addressee, and that's why, in interrogatives, the conjunct form shows up with second person.

Usually the conjunct forms are used with verbs that denote control and agency. So when a disjunct form appears instead, then, the reading is one of lack of control or awareness. We already saw an example of Lhasa Tibetan in (22). Let's see now an example of Tsafiki from Dickinson (2000) notes a similar pattern for Tsafiki. In (28), the conjunct form *-yo* (labeled CONGR in the gloss) is used with first person subjects, while the disjunct form (zero mark or *-i*)[11] is used with third and second person.

(28)   a. tse   Tsachi jo-*yo*-e
          1FEM Tsachi be-CONGR-DECL
          'I am a Tsachi'

       b. ya/nu Tsachi jo-e
          3/2   Tsachi be-DECL
          'He/you are a Tsachi'

But, as in Lhasa Tibetan, it is possible to have minimal pairs in the first person. When a disjunct form is used with first person (29b), the meaning is that the action was done unintentionally, while the (expected) conjunct form *-yo* implies the speaker was in control of the action performed.

(29)   a. la   ya=ka machite=chi   pore-*yo*-e
           1MASC 3=ACC machete=INSTR cut-CONGR-DECL
             'I cut him (intentionally) with the machete'

---

[11] Dickinson argues for a tripartite system: *-yo* for congruent, zero for unmarked verb, and *-i* for noncongruent.

b. la   ya=ka machite=chi   pore-*i*-e
    1MASC 3=ACC machete=INSTR cut-NCONGR-DECL
    'I cut (unintentionally) with the machete'

Dickinson analyses this use of the disjunct form in first person declaratives as mirativity, following DeLancey's analysis for Lhasa Tibetan. Dickinson replaces the terms 'conjunct' and 'disjunct' with 'congruent' and 'non congruent' respectively, since in her analysis, the congruent form appears when the proposition aligns with the speaker's set of assumptions (knowledge, cultural/social norms, etc.), and the non congruent form appears when the situation does not correlate with the speaker's assumptions. The proposition denotes an unanticipated situation that conveys lack of intention, control, agency, surprise, ignorance, and even irony etc.

Tsafiki's congruent/noncongruent system is quite complex, since it interacts with the verb class system, and I won't discuss all the details here, the reader is referred to Dickinson's work for a thorough understanding of this system. What matters to me is that the definition Dickinson gives for the mirative form in Tsafiki is very similar to the one we have discussed in general for mirativity: "A noncongruent mirative marker indicates that there is a contradiction between the speaker's set of established expectations and assumptions and one or more factors in the immediate experienced situation. The contradiction is most commonly, but not necessarily, surprising". (Dickinson 2000:389)

However, we still see that this mirative meaning is restricted to sentences in the first person, and the interpretation in these examples is lack of agency, rather than a clash with previous beliefs (or assumptions/expectations, in Dickinson terms). In the next section, I review the arguments made by Curnow, who claims that conjunct/disjunct systems cannot be considered examples of grammaticalized mirativity.

3.2.2 Curnow 2000

Curnow finds several problems in what he calls DeLancey's hypothesized grammaticalization, which is presented in (30).

(30)   Mirative ('new knowledge') > Disjunct ('non-first person')
       Non-mirative ('old knowledge') > Conjunct ('first person')

The first problem consists of seeing statements about first person to be old information, while considering statements about non first persons as new knowledge. Curnow cites work by Guentchéva et al. (1994), about the interaction of miratives with person, with data from Turkish, Bulgarian, Armenian and Albanian. What they found is that mirative reading arises easily with the 3rd person, while the mirative with 1st person very rare. On the contrary, in conjunct-disjunct systems, 1st person is conjunct, while non-first person are disjunct. However, 1st person may be used with disjunct

forms in some contexts, marking lack of agency; while the opposite, non-first person with conjunct never occurs.

Regarding tense, Curnow finds two problems. One is that miratives go easily with recent past events, while conjunct/disjunct sentences can co-occur with any past time event. The second problem is that conjunct/disjunct systems can have future time reference, while miratives are restricted to realis contexts.

Another issue has to do with markedness. Mirative morphemes are usually the marked ones. In conjunct/disjunct systems, the marked form varies, but usually the marked one is the conjunct form, while the disjunct form is unmarked (zero). Again, Curnow observes that this goes against DeLancey's hypothesis, since we would not expect the marked form (mirative) to become the unmarked disjunct.

The final issue is about the agency/lack of agency that conjunct/disjunct systems displays. For Newari (Tibeto-Burman) and Tsafiki, the conjunct form refers to the 1st person subject. But in Tibetan or Awa Pit (Barbacoan), it is the 1st person participant (subject/agent or object/patient) that bears the conjunct form, and this one contrasts with the disjunct form used in non-first persons (that may be agent or patients as well). This split that goes beyond agency has little to do with old vs. new knowledge. Curnow is right that whatever role the speaker has in the proposition (agent or patient), her knowledge of the event must be identical. Again, following

DeLancey's hypothesis, in Newari and Tsafiki, we should expect that regardless of the grammatical function, if the speaker has 'old' knowledge of the situation described in the proposition, the marking should be the same (conjunct). However, this is not the case, since, in these languages, the conjunct/disjunct distinction only occurs for 1st person subjects, suggesting that the conjunct/disjunct marking is controlled by grammatical person (and agreement), and grammatical functions rather than by mirativity.

In summary, my take on the conjunct/disjunct systems is that even though lack of control/volition may trigger speaker's surprise, this is of a different nature of the surprise we encountered in miratives, in which the surprise is due to the clash between previous beliefs and what is discovered by the speaker. Therefore, I put this kind of system aside in this work. I think there may be ways to subsume these two phenomena, maybe under a higher-level category, but this goes beyond the scope of the dissertation.

4. Roadmap of the dissertation

Leaving aside the introduction, the structure of the dissertation is as follows:

In Chapter 2 I propose a meaning for mirativity; namely, miratives are assertions made against a background of beliefs. These beliefs lead to a conclusion that contradicts the assertion. This clash between the speaker's beliefs and the current state of affairs described in the assertion is what

triggers the surprise effect. This is modeled by way of an operator M, which I place in the C domain, as not-at-issue content. After reviewing the literature on fake past in counterfactual conditionals, I propose an analysis that sides with proposals that see the past tense as 'real', i.e. it contributes its normal temporal meaning, but not to the assertion itself but rather to the counterfactual/mirative meaning. I follow specifically Ippolito's (2002) account of mistmatched counterfactuals, in seeing the past tense as the time argument of the modal base. In the mirative case, the beliefs that clash with the assertion are *past* beliefs that held up to the discovery time. I also discuss the role of aspect in bringing up certain differences among miratives in Spanish.

In Chapter 3 I analyze the Albanian mirative syntax. I propose that since C requires a past feature, this is accomplished via Agreement between C and T. This relationship must be local, i.e. without intervenors. Locality is what motivates the movement of the participle to T (attached to the auxiliary). I also discuss in morphosyntactic terms, the aspectual requirements Albanian miratives have, in order to account for the complex cases. I then extend this syntactic analysis to Spanish and other languages.

Chapter 4 consists of two parts. In the first part, I argue that miratives cannot be analyzed in terms of exclamations or exclamatives sentences. I show that although often miratives and exclamations share a similar meaning, there are several properties that set apart these constructions. In

the second part, I strengthen the similarities between counterfactuals and miratives, and present a morphosyntactic account that covers both phenomena.

Chapter 5 summarizes the main claims of the dissertation, and explores some of the cross linguistic implications of this proposal.

Chapter 2

The Semantics of Mirativity: the role of tense and aspect

1. Introduction

This chapter discusses the meaning of mirativity and its relationship with tense and aspect morphology in Spanish. The central claim is that tense contributes its standard meaning to mirativity, and that mirativity is sensitive to the aspectual interpretation of the assertion. In this section, I present the main Spanish data, and lay out the structure of the chapter.

In Spanish, the past imperfective can express surprise about present habits or states, as we see in (1).

(1)   a. Juan fum-aba.
            Juan smoke-<u>PAST.IMPF</u>[12].3SG
            'Juan smokes!'

---

[12] From now on, in mirative examples, I will underline the past morpheme in the gloss to mark that the sentence does not have a canonical past tense interpretation. In the English translation I will make use of exclamation points in order to convey the sense of surprise miratives trigger. I discuss the relationship between exclamations and miratives in Chapter 4.

(Context: you see Juan lighting a cigarette and you realize he has the habit of smoking, something that you didn't expect.)

    b.   Eras   alto.
        be.<u>PAST.IMPF</u>.2SG   tall
         'You are tall!'

(Context: you are introduced to Juan and you realize he's tall, something that you didn't expect.)

This is puzzling because in its declarative use, the past imperfect is about past habits (or states) or past ongoing eventualities, as we see in (2).

(2)   Juan fum-aba.
       Juan smoke-PAST.IMPF.3SG
       'Juan used to smoke. /Juan was smoking.'

The sentences in (1) do not have a past interpretation, but rather a present one. This is similar to other constructions, in which the past tense is called 'fake', for instance counterfactuals (Iatridou 2000). In contrast, the aspect, in a mirative sentence, maintains its normal interpretation, since (1a) gets a habitual meaning, which is expected for imperfective morphology, and (1b) is a stative.

As mentioned in the previous chapter, Spanish varieties in contact with Quechua or Aymara (Andean Spanish) have also developed a mirative use of the pluperfect form (3) that can be used to express surprise about episodic eventualities. This can be used for present or past states, as we see later in the chapter (along with differences with the imperfect form). For now, what is relevant is that even in the Andean Spanish pluperfect, when used for

mirativity, the tense is 'fake'. It does not show the standard meaning of the pluperfect, namely, a past of the past interpretation. Contrast (3) with (4), which shows the normal use of the pluperfect.

(3) Juan hab-ía   fumado
    Juan Aux-PAST.IMPF.3SG   smoke-PTCP
    'Juan smoked!'

(Context: you thought Juan didn't smoke at the party, but then you see ashes on his clothes.)

(4) Cuando llegué a la fiesta,   Juan había   fum-ado
    when arrived to the party Juan AUX-PAST.IMPF.3SG   smoke-PTCP
    todos los cigarrillos.
    all   the cigarettes
    'When I arrived at the party, Juan had smoked all the cigarettes.'

As in the imperfect form (1), we find that this mirative retains its expected aspectual meaning (in this case, a perfective reading), in which the event is regarded as culminated. The real puzzle about aspect in miratives is its contribution to the sense of surprise. We find that the imperfect mirative tends to give a surprise-effect that involves unlikelihood, namely, the speaker found unlikely that Juan would be a smoker. The pluperfect mirative (3), on the other hand, tends to involve counter expectations: the speaker is surprised because she thought Juan didn't smoke at the party. This difference is clearly evident in statives, in which these two miratives form minimal pairs.

The main questions this chapter addresses are the following: What is the role of past tense in deriving the mirative meaning? What is the role of

aspect in deriving these differences in the surprise-effect?

The structure of the chapter is as follows. Section 2 introduces an *M* operator, which accounts for the role of past tense morphology in miratives, along the lines of what has been proposed recently for counterfactuals. Section 3 explains the relevant contrast between miratives with distinct aspectual morphology and develops the role of aspect in accounting for these differences. Section 4 discusses in detail the status of statives in mirativity. Section 5 reviews and discusses other accounts of the semantics of mirativity and its relationship with tense/aspect morphology. Section 5 is the conclusion.

2. Tense and mirativity

Let us begin then by looking at the central puzzle posed by tense in miratives. Why does it have past tense morphology but seem not to use it in the interpretation? In other words, why does tense appear to be fake in the case of the imperfective mirative and partially fake in the case of the pluperfect mirative?

2.1 Interpretable vs. uninterpretable tense

In the previous chapter, in (17), I sketched the central claim of my analysis, repeated here in (5).

(5)

CP

C
$M_{OP} \dots i[past]$

TP

T
u[past]

....
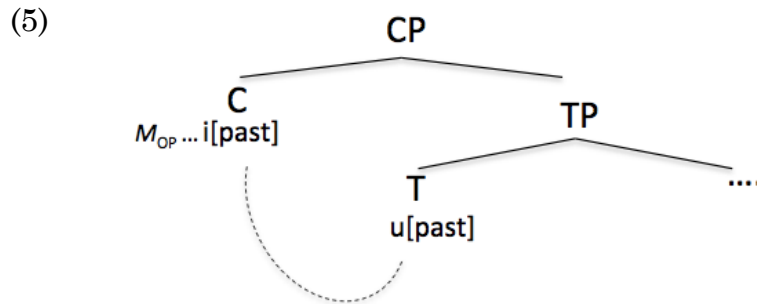
In (5), I argue that [past] tense in miratives is not interpreted in TP, but rather it is displaced to C, where it gets interpreted. This poses two crucial questions: i) how is tense interpreted in CP, such that we get the mirative meaning from this *displacement* of tense; ii) how is the assertion (TP) interpreted, once [past] is no longer interpreted there? In order to answer these questions, let us build first the meaning for mirative constructions.

2.2 The mirative meaning

Recall that the mirative sentences I analyze in this work have the form of declarative sentences that convey a sense of surprise, and that have as a key feature the presence of past tense morphology that does not receive its canonical interpretation. Miratives are interpreted as the speaker being surprised due to the discovery of a fact. Why does this surprise arise? It cannot be simply due to new information, since new information by itself does not necessarily trigger surprise. It should be then information that contradicts certain beliefs the speaker holds. Since the speaker now considers

the assertion to be true, it follows that up to the time of discovery, the speaker's beliefs could not support the truth of the assertion.

I propose that the surprise associated with mirativity arises as a consequence of the clash between the speaker's previous beliefs and the current state of affairs, which is discovered at the speech time. The surprise itself is not encoded in mirativity; rather it is a pragmatic consequence triggered by this clash.

In (6a), we see that the mirative sentence is factive: what is asserted is considered true by the speaker, as shown by the infelicitous follow-up. On the other hand, the speaker's previous beliefs that contradict the assertion can be overtly expressed as shown in (6b):

(6)   a. Eras   alto. #De hecho, no lo eres.
          be.<u>PAST.IMPF</u>.2SG tall   in fact, you're not.
            'You're tall! #In fact, you're not'

      b. Eras   alto. Yo creía/pensaba que no.
          be.<u>PAST.IMPF</u>.2SG tall   I believed/thought that no
            'You're tall! I believed/thought you weren't'

A full account of the speaker's surprise in miratives should therefore take into account the factivity of the assertion, and the speaker's previous beliefs regarding the asserted proposition. I will treat mirative sentences then as modal statements: the modal component brings up the speaker's beliefs relevant to the assertion. We have three pieces to account for: i) the assertion ii) the speaker's past beliefs; and iii) the clash between this

assertion and the set of beliefs. The operator *M* aims to put together these pieces.

2.3 The *M* operator

I propose that mirative sentences in Spanish contain a covert operator M[13]. *M* asserts the proposition *q* against a background of beliefs *p*. These beliefs are structured in the form of an entailment relation: $p \subseteq \neg q$. What the speaker believed entails $\neg q$. However, by also asserting *q*, *M* posits a clash between these beliefs (the modal base) and the assertion, triggering the feeling of surprise we find in miratives. A schematic version of the mirative operator *M* is given in (7).

(7)   (preliminary) $M_{OP} = \lambda p\ \lambda q[[p \subseteq \neg q] \wedge q]$

In (7), *M* conveys that when the speaker utters *q* there is a contrast between *q* and the speaker's beliefs *p* regarding that assertion. This contrast can be paraphrased in the following way:

(8)   In view of my beliefs *p*, ¬*q* should hold, BUT *q* holds.

---

[13] In chapter 3, I propose that in some languages, such as Korean or Hare, *M* can be spelled out through a specific mirative morpheme.

As we see in (8), the clash is similar to the role of the conjunction 'but': instead of the expected ¬q, the speaker encounters q, something that does not follow from the set of beliefs q.

So far, *M* only expresses that the speaker's beliefs entails a proposition that contradicts the assertion. However, if this were the case, we would find that the assertion contradicts the speaker's *current* beliefs. This is problematic given that since the speaker believes in the truth of the assertion, it cannot be the case that the speaker at the same time believes q and ¬q. Therefore, these beliefs should have a restriction. In the next section, I argue that this restriction comes from the past tense morphology.

2.4 The role of past tense in mirativity

2.4.1 Some preliminary assumptions on tense

Before exploring the issue of past tense in miratives, let us see first what the role of grammatical tense in natural languages is. Tense is used to relate the time of an event to another time, for instance, the utterance time. Roughly speaking, an event that is located at the time of speaking is described in the present tense, an event that happened before the speech time is described in the past tense, and one that is located after the speech time is described in the future tense.

Reichenbach (1947) refined this view, arguing that tense manipulates three points of time, instead of just 'now' and 'then'. These points of time are

the speech time (t*), the reference time (t'), and the event time (t). In the case of the [past], the event time is located before the speech time. In this case, the event time and the reference time coincide, as shown in the timeline in (9).

(9) ————t'/t————————t*————

In the case of the pluperfect, the event time is located before a reference time. which in turn is located before the speech time, as seen in (10). We get then a 'past of the past' interpretation.

(10) ————————t————t'————t*————

The tense morphology found in mirative forms does not follow this characterization. The time of the eventuality in the past imperfect is not located before the speech time and neither is the event time in the pluperfect located before the reference time.

2.4.2 'Fake' past tense

We have seen in the previous chapter that (to a large extent), cross linguistically, miratives are based on past tense forms. However, these past tense forms do not contribute any temporal meaning to the proposition. This is similar to what happens in counterfactuals (CF). In present counterfactuals as in (11), the antecedent receives a present or future interpretation and in past counterfactuals as in (12) the pluperfect in the antecedent clause is not the past of the past, but rather a simple past.

(11) If he had money, he would buy a car.

(12) If he had had money, he would have bought a car.

Traditionally, past tense morphology in CF has been analyzed as 'fake'[14], namely, that past tense is not marking a temporal past but rather another category. For instance, for Fleischman (1986) past tense in CF marks a metaphorical distance or remoteness. For Iatridou (2000) past tense is actually an exclusion feature that can range over times (a temporal meaning) or over worlds (a modal meaning).

Recently, Ippolito (2002, 2003) and Arregui (2004) have argued for an analysis that sees the past tense in CF as 'real' past tense, namely, as contributing its normal temporal meaning to the meaning of CF. I side with these recent analyses by proposing that in miratives past tense morphology is also real temporal past. However, it is not interpreted in the proposition (TP) but rather in CP, as the time argument of the modal base in the operator *M*. Before presenting my own proposal, let us review Ippolito's and Arregui's accounts, regarding the role of past tense as real past tense in CF.

2.4.3 Real past tense in counterfactuals

2.4.3.1 Ippolito (2002, 2003)

In Ippolito's proposal the past tense in one-past subjunctive

---

[14] The case of 'fake' past tense in counterfactuals has been pointed out and analyzed by Anderson 1951, Steele 1975, James 1982, Palmer 1986, Fleischman 1989, Iatridou 2000.

conditionals like (13) is analyzed as a perfect operator that is the hallmark of a subjunctive conditional. It sets up a time interval, whose right boundary is the utterance time. The modal 'would' quantifies over the set of accessible worlds that are compatible with that time interval and an evaluation world (by default, the actual world). We need an accessibility relation R that provides the right set of worlds (the modal base). Since those worlds need to be compatible with the time interval established by the perfect operator, R needs to be time-dependent.

(13)   If Charlie took his Advanced Italian test tomorrow, he would pass.

Informally, (13) is true if and only if there is a time interval, whose right boundary is the utterance time, such that in all possible worlds accessible from that interval, it is true that Charlie takes his test tomorrow, it is true also that he passes.

In standard past counterfactuals like (14), the assumption is that given two layers of past, one of those layers is the perfect operator that is interpreted in the modal domain while the other one is the past tense that stays in the proposition as the time of the eventuality.

(14)   If Charlie had taken the Italian test yesterday, he would have passed.

However, there are cases in which the past counterfactual does not have a past meaning, but rather is future oriented as in (15). These cases are called

'mismatched counterfactuals' by Ippolito.

(15)   If Charlie had taken the Italian test tomorrow, he would have passed..

In (15) the question is what happens with the second layer of past and what role it is playing. Ippolito's answer is that it is actually real past tense but it is not interpreted in the proposition but rather in the modal domain constraining the right boundary of the perfect operator. In this case, it is not the utterance time that constrains this right boundary, but rather it is the time in the past. There is a contextually salient past time in which there is a set of worlds compatible with the actual world at that time. In that (past) actual world, it was still possible for Charlie to take the test tomorrow. However, we know that even though this sentence is future oriented, there is a sense of impossibility, namely, the proposition in the antecedent is not going to happen. And this is because, in the current actual world, that is not a possibility: the set of worlds in which Charlie takes the test tomorrow are no longer compatible with the actual world. In this way, Ippolito's account provides an answer for the role of the extra past tense layer and also links this past layer to the source of the impossibility of the antecedent being true.

Ippolito's account of tense in counterfactuals, I believe, provides a way to answer the question we are interested in, namely, the interpretation of tense in miratives. It is therefore worth taking a closer look at the details of her proposal. I sketch Ippolito's proposal in (16). We see that the accessibility

relation R takes a world and a time argument. This world argument is the evaluation world, by default, the actual world. The time argument is usually the utterance time, unless it is constrained by another time. In the case of mismatched counterfactuals, this time takes the value of [past]. The modal now quantifies over worlds that were accessible in the past, in which a future event of Charlie playing tomorrow (and the team losing) was still a possibility.

(16) Simplified version of Ippolito (2003:162)[15]

q
λw Charlie will pass in w

Modal
λp λq ∀w ∈ W[p(w) = 1 → q(w) = 1]

p
λw Charlie will take the test tomorrow in w

$t_{[past]}$

R

$w_@$
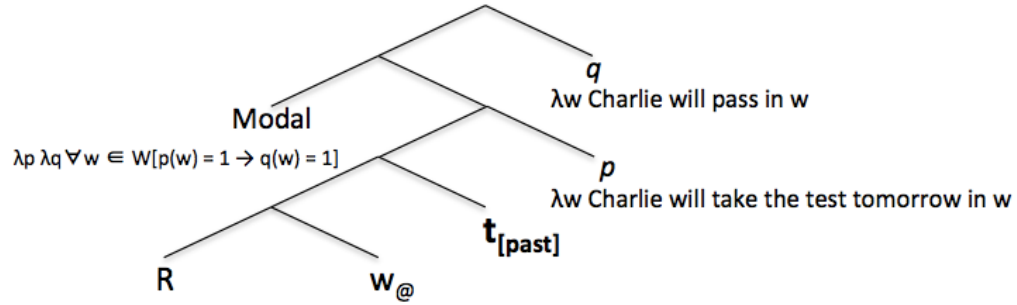
Ippolito gives the following informal description of the truth conditions of (16) as "true if and only if for all worlds w, such that w is a possible future of the actual world at a certain (contextually salient) past time, and such that Charlie takes his Advanced Italian test tomorrow in w, he passes in w". (Ippolito 2003: 160)

---

[15] I am omitting from (16) the similarity relation that gives the most similar worlds to the actual world.

2.4.3.2 Arregui (2004)

For Arregui, counterfactuals that use past tense morphology make "a claim as to what would have happened if the past had been different". For instance, in (17) "if the past has led to this: 'she loves him', it would also lead to this: 'she won't marry him'".

(17)   She doesn't love him. If she loved him, she wouldn't have married him.

A would-conditional makes *de re* claims about the past. We consider counterparts of the actual world in the past, in which the antecedent is true and we check if the consequent is also true in those worlds. Since they are counterpart worlds they need to be similar enough to the actual world, but different enough that they allow for a deviation of the facts (the counterfactual hypothesis).

Arregui treats the real past tense as the one borne by the modal 'would' (would as past of *woll*). This past tense c-commands the tense variable in the antecedent (as a sequence of tense effect) and gives it the morphological value of past.

In a sense, this approach is not that different from Ippolito's. In both cases, the past tense constrains the accessible worlds. For Ippolito, it is about worlds compatible with the speaker's knowledge in the *past* with respect to the actual world. For Arregui, it is about counterparts of the actual world in the *past*.

I will follow Ippolito's proposal since it makes explicit the tools I need to handle the role of past tense in mirativity. As Ippolito points out, what we know, believe or desire *changes over time.*

> Knowledge, beliefs, plans, desires, and other human attitudes change over time. Therefore, the set of worlds over which modal operators quantify will depend not only on what the actual world is but also on what the time of evaluation is. What I know, believe, plan, or desire may be different from what I knew, believed, planned, desired in the past. Therefore, what was compatible with knowledge or beliefs or plans then may be incompatible with knowledge, beliefs, or plans now. (Ippolito 2003: 155)

In a similar vein, I will argue in the next section that mirativity is about *past* beliefs, beliefs that are revised due to the new state of affairs encountered at the discovery time.

2.4.4. Real past tense in mirativity

We have already seen that the failure of past interpretation applies to miratives as well. This is shown more clearly if we try to get a 'real' past tense reading in miratives by adding a phrase that forces a past interpretation. If we do this, the mirative meaning is cancelled or gets neutralized, as the pair in (18) shows. In order to get a surprise reading,

there is need of some admirative marker such as '*Oh*' or '*Look*' or an exclamation intonational contour.

(18)   a. # Juan fum-aba   hace diez años
       Juan smoke-<u>PAST.IMPF</u>.3SG   ago   ten years
       'Juan used to smoke ten years ago!
       (Context: you look at old pictures in which Juan is portrayed
         smoking.)

    b. #Ayer   cuando llegué, María ya   había
       yesterday when arrived   Maria already   AUX.<u>PAST.IMPF</u>.3SG
       comprado   las   verduras
       buy.<u>PTCP</u>   the vegetables
       'When I arrived yesterday, María had already bought the
       vegetables!'

We have seen that Ippolito puts forward an analysis that sees this 'fake' tense as a temporal real tense, but one that is interpreted in the domain of the modal operator. My claim that the past tense is not interpreted in the proposition (TP), but rather is interpreted higher (in CP) is consistent with the view that 'fake' tense can provide the time argument of the modal base (the speaker's beliefs). Therefore, in mirativity, [past] represents the past beliefs of the speaker up to the discovery time in which she realizes that the actual state of affairs contradicts her previous beliefs.

In order to develop the proposal about tense sketched above, it is worth first seeing how tense is interpreted in simple declarative sentences.

2.4.4.1 More assumptions on tense

I follow Kusumoto's (2005) approach to tense[16]. Under this approach the past tense morphemes are semantically vacuous, they are time variables that have to be licensed by a null tense operator. This null operator carries the meaning of anteriority ($t < t_1$) associated with past tense. There is also an indexical item t^* which is the speech time given by the context. It is placed above the tense operator and it saturates the time argument of the operator. Below I provide the definitions for all these elements, adapted from Kusumoto. I am also adding a world item w^*, which is the actual world and serves as the evaluation world that saturates the world argument of the tense operator.

(19) a. $[\![t_2]\!]^g = g(2)$

b. $[\![ipast]\!]_{OP} = \lambda P \lambda t_1 \lambda w_1 [P(w_1)(t) \wedge t < t_1]$

c. $[\![t^*]\!]^{g,c}$ = the speech time provided by the context

d. $[\![w_@]\!]^{g,c}$ = the actual world

I also assume the structure in (20), where VP denotes a property of events and combines with Aspect to yield a property of times (AspectP). Tense combines with Aspect P and yields a proposition (TP).

---

[16] Thanks to Valentine Hacquard (p.c.) for pointing out the relevance of a relational view on tense for my account of mirativity and tense. However, I believe that the core of my proposal of tense, i.e. that past tense is interpreted under the domain of the modal operator, can be implemented under any theory of tense, either a referential or a relational approach.

(20)

```
          TP
        /    \
      T        AspP
              /    \
                      VP
                    /  \
                   /____\
```
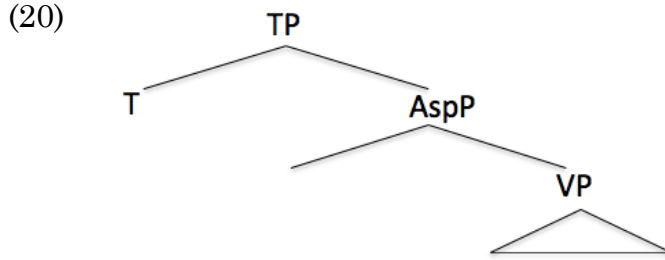
Keeping this in mind, let us see how the basic past imperfect sentence in (21)

can be interpreted.

(21)   Juan fumaba
       Juan smoke-PAST.IMPF.3SG
       'Juan used to smoke./Juan was smoking.'

Ignoring events[17] for sake of simplicity, we start at the Aspect Phrase

level. Tense takes as its argument the property of times denoted by AspectP

and returns a proposition. [ipast] is the operator that introduces the meaning

of anteriority, $past_2$ is the morpheme that just introduces a time variable and

saturates the time argument of AspP. t^* and $w_@$ saturate the time and world

arguments of [ipast].

---

[17] I assume Kratzer's (1997) definition for the imperfect: it locates the reference time within the event time: $[[imperfective]] = \lambda P. \lambda t. \lambda w. \exists e[t \subseteq \tau(e) \ \& \ P(e)(w) = 1]$.

(22)
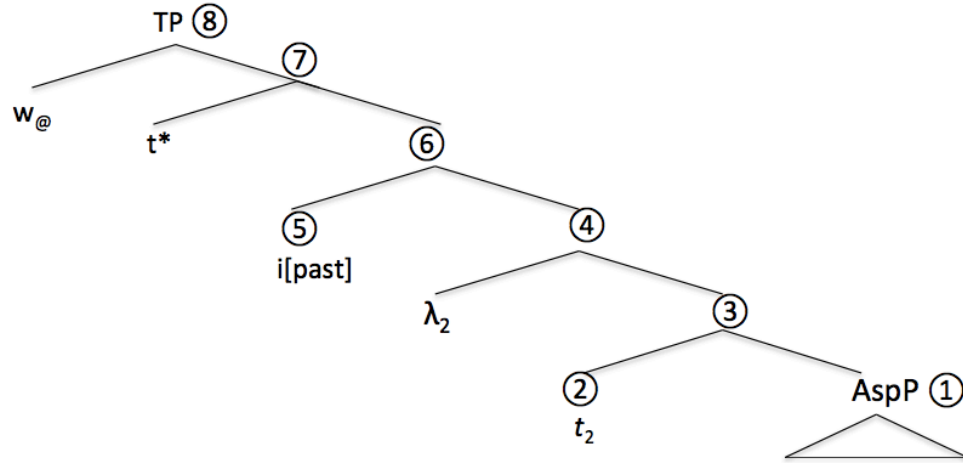
① $\lambda t \lambda w$ (Juan smokes in w at t)

② $t_2 = g(2)$

③ $\lambda t \lambda w$ (Juan smokes in w at t) $(t_2) \Rightarrow$ λw (Juan smokes in w at t_2)

④ $\lambda_2 \lambda w$ (Juan smokes in w at t_2)

⑤ $\lambda P \lambda t_1 \lambda w_1 [P(w_1)(t) \wedge t < t_1]$

⑥ $\lambda t_1 \lambda w_1 [\lambda_2 \lambda w \text{ [Juan smokes in w at } t_2] (w_1)(t) \wedge t < t_1]$

       $\Rightarrow \lambda t_1 \lambda w_1 [\text{Juan smokes in } w_1 \text{ at } t \wedge t < t_1]$

⑦ $\lambda t_1 \lambda w_1 [\text{Juan smokes in } w_1 \text{ at } t \wedge t < t_1] (t^*)$

       $\Rightarrow \lambda w_1 [\text{Juan smokes in } w_1 \text{ at } t \wedge t < t^*]$

⑧ $\lambda w_1 [\text{Juan smokes in } w_1 \text{ at } t \wedge t < t^*] (w_@)$

       $\Rightarrow$ Juan smokes in $w_@$ at $t \wedge t < t^*$

(22) is true if and only if Juan smokes at the actual world at a time before the speech time.

     Let us turn now to the pluperfect, which has been traditionally

analyzed as having two layers of past (Lascarides and Asher 1993, Steedman 1997, Iatridou 2000, among others). I assume therefore a lower T2 head[18]. The time reference of the event time then is located in the past relative to the past of the higher tense, as shown in (23). I am simplifying the LF for the pluperfect, omitting the time and world variables.

(23)

```
                    TP ⑦
             ╱            ╲
                      T' ⑥
                  ╱         ╲
              T ⑤           T2P ④
             i[past]      ╱      ╲
                                T2' ③
                            ╱         ╲
                        T2 ②          AspP ①
                       i[past]         △
```
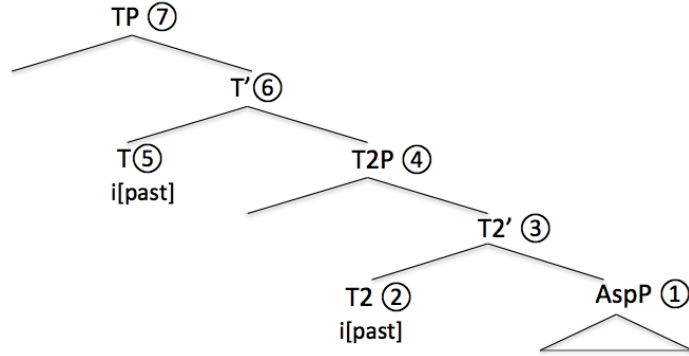
① $\lambda t \lambda w$ [Juan smokes in w at t]

② $\lambda P \lambda t_1 \lambda w_1 [P(w_1)(t) \wedge t < t_1]$

③ $\lambda t_1 \lambda w_1$ [$\lambda t \lambda w$ [Juan smokes in w at t] $(w_1)(t) \wedge t < t_1$]

     $\Rightarrow$ $\lambda t_1 \lambda w_1$ [Juan smokes in w at t $\wedge$ $t < t_1$]

④ $\lambda t_1 \lambda w_1$ [Juan smokes in w_1 at t $\wedge$ $t < t_1$]

⑤ $\lambda P \lambda t_2 \lambda w_2 [P(w_2)(t_1) \wedge t_1 < t_2]$

⑥ $\lambda t_2 \lambda w_2 [\lambda t_1 \lambda w_1$ [Juan smokes in w_1 at t $\wedge$ $t < t_1$] $(w_2)(t_1) \wedge t_1 < t_2$]

     $\Rightarrow \lambda t_2 \lambda w_2$[Juan smokes in w_2 at t $\wedge$ $t < t_1 \wedge t_1 < t_2$]

⑦   Juan smokes in $w_@$ at t $\wedge$ $t < t_1 \wedge t_1 < t^*$

---

[18] The pluperfect has the auxiliary in imperfective morphology but this does not contribute to the interpretation. The pluperfect sees the event as culminated, and that is why, although not shown in the derivation, I assume a perfect reading (given by the past participle), along the lines of Kratzer's definition: [[perfect]] = $\lambda P. \lambda t. \lambda w.\exists e[\text{time } (e) < t$ & $P(e)(w) = 1]$, 'event over by reference time'.

(23) is true if and only if Juan smokes at the actual world at a time that is located before a past time.

2.4.4.2 Putting together the pieces

Let us see how the ideas discussed above help us flesh out our central claim that past tense in miratives should be interpreted under the modal operator M. I take it that the accessibility relation R represents the speaker's doxastic domain, and takes a time as its first argument. If this is the case, then, the displaced [past] can combine with R. This gives us the first piece of the operator M: the background of *past* beliefs P. Applying the M operator, P entails $\neg Q$, but it also asserts Q as true in the actual world. We finally get the meaning of the mirative sentence (at the CP level): the speaker asserts a proposition Q that is contrasted against a set of *past* beliefs that entail $\neg Q$. This clash between the Q and what followed from the past beliefs (up to the discovery/speech time) is what triggers the sense of surprise associated with miratives.

Before going to the derivations, let us unpack the main pieces we need: the mirative operator M, and the accessibility relation R.

(24) $M_{OP} = \lambda P_{<<i<s<st>>} \quad \lambda Q_{<<i<s<st>>>} \quad \lambda t_1 \lambda \quad w_1[[P(w_1)(t_1) \subseteq \quad \lambda w \quad \neg Q(w)(t_1)] \wedge$

$Q(w_1)(t_1)]$

(25) $R = \lambda t \lambda w \lambda w'$ [w' is compatible with speaker's beliefs in w at t]

In the structure below, the pieces for building the mirative meaning are displayed: the operator *M,* the interpretable [past] tense morphology (with the same semantics we used for the declarative cases), and the accessibility relation *R.*

(26)

We can see now how the displaced [past] gets into the picture. It combines with R, providing the set of beliefs in the *past*. This set of *past* beliefs will feed P in the mirative operator. Then, the assertion (TP) will feed Q. In the final derivation at the highest point, CP, t_1 and w_1 will get the values of the speech time and the actual world, respectively. Let us see how this structure derives the results we want, starting first with the imperfect mirative

a. The imperfect mirative

Let us combine our proposal for the modal domain with the rest of the sentence, using an imperfect mirative for illustration. In the case of the imperfect mirative, we see that [past] gets interpreted in C, and the assertion

in TP gets a present reading. There is an uninterpretable past tense feature in T, and I will assume that no interpretation occurs in that node. Therefore, the denotation of AspP percolates to TP. TP has, however, a time argument that will be bound by λt_1, and it will get the value of the speech time. The structure and derivation is shown in (27).

(27)
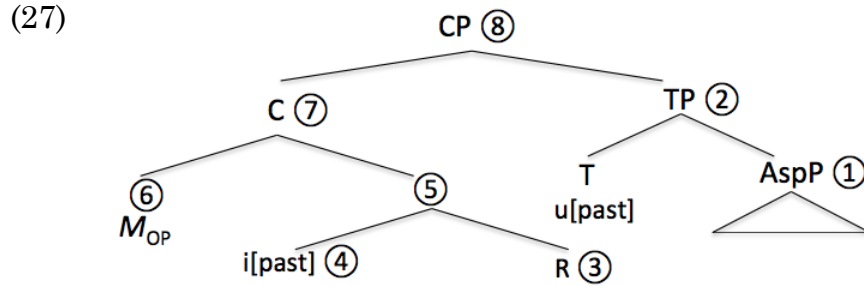
① $\lambda t \lambda w$ [Juan smokes in w at t]

② $\lambda t \lambda w$ [Juan smokes in w at t]

③ $\lambda t \lambda w \lambda w'$ [w' is compatible with speaker's beliefs in w at t]

④ $\lambda Z \lambda t_1 [Z(t_2) \wedge t_2 < t_1]$

⑤ $\lambda t_1 [\lambda t \lambda w \lambda w'$ [w' is compatible with speaker's beliefs in w at t] $(t_2) \wedge t_2 < t_1]$

       $\Rightarrow \lambda t_1 [\lambda w \lambda w'$ [w' is compatible with speaker's beliefs in w at $t_2 \wedge \underline{t_2 < t_1}]$
                                                         PAST

⑥ $\lambda P \lambda Q \lambda t_1 \lambda w_1 [[P(w_1)(t_1) \subseteq \lambda w \neg Q(w)(t_1)] \wedge Q(w_1)(t_1)]$

⑦ $\lambda Q \lambda t_1 \lambda w_1 [\lambda t_{1[}[\lambda w \lambda w'$ [w' is compatible with speaker's beliefs in w at $t_2 \wedge t_2 < t_1] (w_1)(t_1) \subseteq \lambda w \neg Q(w)(t_1)] \wedge Q(w_1)(t_1)]$

       $\Rightarrow \lambda Q \lambda t_1 \lambda w_1 [\lambda w'$ [w' is compatible with speaker's beliefs in w_1 at $t_2 \wedge t_2 < t_1] \subseteq \lambda w \neg Q(w)(t_1) \wedge Q(w_1)(t_1)]$

⑧ $\lambda t_1 \lambda w_1 [\lambda w'$ [w' is compatible with speaker's beliefs in w_1 at $t_2 \wedge t_2 < t_1] \subseteq \lambda w \neg \lambda t \lambda w$ [Juan smokes in w at t] $(w)(t_1) \wedge \lambda t \lambda w$ [Juan

smokes in w at t] (w₁) (t₁)]

⇒ λt₁λw₁ [λw' [w' is compatible with speaker's beliefs in w₁ at t₂ ∧ t₂ < t₁] ⊆ λw ¬ [Juan smokes in w at t₁] ∧ Juan smokes in w₁ at t₁]

Default values for w₁ and t₁ = w_@ and t*, respectively.

⇒ λw' [w' is compatible with speaker's beliefs in w_@ at t₂ ∧ t₂ < t*] ⊆ λw ¬ [Juan smokes in w at t*] ∧ Juan smokes in w_@ at t*]

Informally, (27) reads as follows: the speaker's beliefs *in the past* with respect to the actual world entail that it is not true that Juan smokes, but it is true that Juan smokes in the actual world at the present time. The derivation above makes explicit that the speaker's beliefs are beliefs in the past up to the point of the discovery time *t**, which I take, for the most common uses of the mirative, as the same as of the speech time. However, this is not necessarily the case. In certain cases, such as when someone reports news, using a mirative (28a), or in embedded miratives (28b), the discovery time precedes the speech time.

(28) a. Oye, te   habías   casado.
    Hey, 2CL Aux.PAST:IMPF.2SG get.marry-PTCP
    'Hey, you got married!'

   b. Resulta   que Fabiana estaba   embarazada.
    turn.out.PR.3SG that Fabiana be-PAST.IMPF.3SG pregnant.
    'It turns out Fabiana is pregnant!'

Given these cases, even though I am assuming that by default *t** is both the discovery time and the speech time, it is important to keep them apart as

well.

One further point is the relationship of precedence between the past beliefs and the discovery time. I am adopting in the derivation the usual representation such as t < t*, but since we know these beliefs immediately precede the discovery time, it would be better to characterize this precedence as an abut relationship ⊃⊂ to signal that the past beliefs and the speech/discovery time share a common boundary. I take this abut relationship from Kamp and Reyle (1993), who represent the temporal relation of the result state and the event in the perfect as abutting: "the state starts at the very moment the event ends" (p. 573). We know that the deictic past makes reference to a contextually salient interval that precedes the speech time. In this sense, in miratives, the contextually salient past interval is the one that abuts the discovery time. I will take this abutting relationship as a crucial point to explain why other past tenses (such as the past perfective) cannot form a mirative. I will implement this is in a feature-checking analysis in chapter 3.

The derivation also makes explicit two other points: i) the assertion gets interpreted in the present and with respect to the actual world, i.e. the speaker believes the proposition q to be true; ii) the past beliefs entail that $\neg q$ should have held; however, at the discovery/speech time the speaker realizes that q is true, contradicting her (very recent) previous beliefs.

To conclude this part, I have shown how tense in miratives is

interpreted as real tense, using the imperfect mirative as illustration. I now extend the analysis to the pluperfect mirative.

b. The pluperfect mirative

We have seen how tense plays out in imperfect miratives. In this section we will see that the interpretation of tense in pluperfect miratives follows straightforwardly from the semantics we have. Recall that we are analyzing the pluperfect as having two layers of tense. Under the analysis I am proposing, one layer of past is displaced to the mirative domain, as the time argument of the modal base, while the second past tense layer is interpreted in the proposition generating the past episodic reading. (cf. Iatridou's and Ippolito's proposal for past counterfactuals). Let us see how the derivation works in (29). I start the derivation at node 3, where TP feeds into the operator *M*. The previous steps are the same as for the imperfect case.

(29)
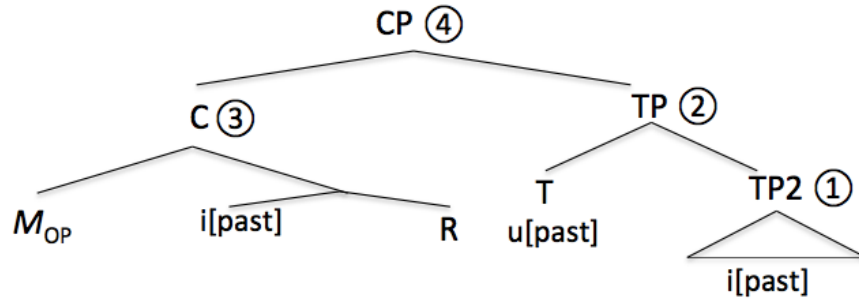
① $\lambda t_3 \lambda w$ [Juan smoked in w at t' $\wedge$ t' $< t_3$]

② $\lambda t_3 \lambda w$ [Juan smoked in w at t' $\wedge$ t' $< t_3$]

③ $\lambda Q \lambda t_1 \lambda w_1 [\lambda w'$ [w' is compatible with speaker's beliefs in w_1 at t_2 $\wedge$ $t_2 < t_1$] $\subseteq$ $\lambda w \neg Q(w)(t_1) \wedge Q(w_1)(t_1)$]

④ $\lambda t_1 \lambda w_1 [\lambda w'$ [w' is compatible with speaker's beliefs in w_1 at $t_2 \wedge t_2 < t_1] \subseteq$ $\lambda w \neg \lambda t_3 \lambda w$ [Juan smoked in w at t' $\wedge$ t' < t_3] (w)(t$_1$) $\wedge \lambda t_3 \lambda w$ [Juan smoked in w at t' $\wedge$ t' < t_3] (w$_1$)(t$_1$)]

$\Rightarrow \lambda t_1 \lambda w_1$ [$\lambda w'$ [w' is compatible with speaker's beliefs in w_1 at $t_2 \wedge t_2 < t_1] \subseteq \lambda w \neg$ [Juan smoked in w at t' $\wedge$ t' < t_1] $\wedge$ Juan smoked in w_1 at t' $\wedge$ t' < t_1]

Default values for w_1 and $t_1 = w_@$ and t^*, respectively.
$\lambda w'$ [w' is compatible with speaker's beliefs in $w_@$ at $t_2 \wedge t_2 < t^*] \subseteq \lambda w \neg$ [Juan smoked in w at t' $\wedge$ t' < t^*] $\wedge$ Juan smoked in $w_@$ at t' $\wedge$ t' < t^*

The meaning of (29) is that the speaker's beliefs in the past entail that it is not true that Juan smoked at a time before the speech time; however, it is true that Juan smoked. As we see in the derivation, in the pluperfect mirative case, the higher tense node bears an uninterpretable [past] feature, which means that no interpretation is assigned to the node. The higher TP then gets the same denotation as the lower TP2. This T2 phrase has a simple past interpretation reading (there is a time t', defined only if t' <t_3). t_3 will get the value of t_1 and finally the value of the speech time. In TP, the reading is of a past eventuality (in this case, of the smoking event). In CP, the interpretable [past] feature is interpreted as *past* beliefs.

In summary, eventive pluperfect miratives use one past tense layer for the time argument of the modal base and the other past tense layer for the past episodic meaning of the assertion.

2.4.4.3 Some remarks on the syntax

In the structure in (26), I have made some assumptions about the syntax that bear a little discussion. Recall that the semantic analysis argues for a semantic displacement of the past tense to the CP domain, where the past tense provides the time argument of the accessibility relation, and hence, it is no longer interpreted inside the proposition. Syntactically, I argue that this displacement should be analyzed in terms of an Agree relationship between C and something bearing morphological past. In this way, I propose that the past morphology in the clause is a reflex of the past interpreted in C. I analyze this as agreement. Under that view, the interpretable [past] feature in CP must enter into a relationship with the uninterpretable [past] feature in TP. In (26) [past] appears properly contained inside the C head. I assume under these circumstances that the whole C counts as bearing the interpretable [past] feature so that it c-commands the uninterpretable [past] feature in T.

There is another way to implement the interpretable past feature i[past] in C, so that it c-commands directly the uninterpretable past feature u[past] feature in T. This can be done by incorporating the meaning of i[past] directly in the *M* operator, as shown in (30a). In this version, *M* combines directly with the accessibility relation R. At the end of the derivation, we get the same result as in the derivations above. In (30b), I give this alternate structure, and below it the derivational steps. I am not resolving Q since that part of *M*

remains exactly the same as we had it before in (27).

(30) (alternate version)

a. M_{OP} = $\lambda R\lambda Q\lambda t_1\lambda\ w_1[\lambda t_1[R(t_2)\ t_2 \wedge \underline{t_2 < t_1}]\ (w_1)(t_1)] \subseteq \lambda w\ \neg Q(w)(t_1) \wedge\ Q(w_1)(t_1)]$
$\phantom{a. M_{OP} = \lambda R\lambda Q\lambda t_1\lambda\ w_1[\lambda t_1[R(t_2)\ t_2 \wedge}$ PAST

b.
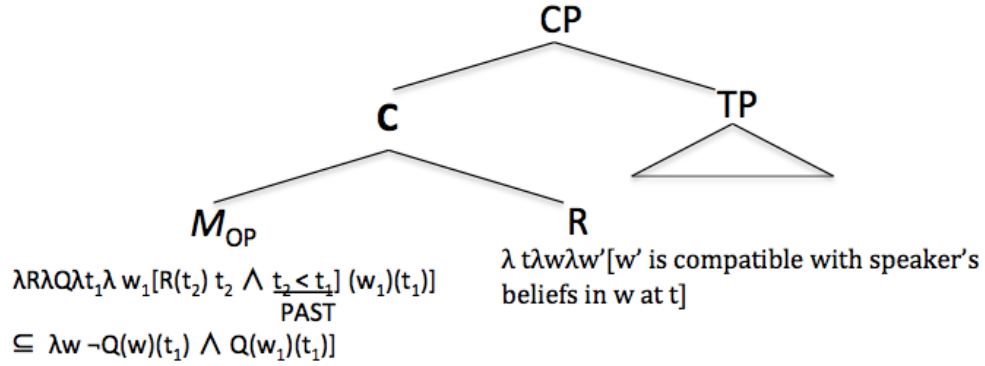
$$[[C]] = \lambda Q\lambda t_1\lambda\ w_1[\lambda t_1[\lambda t\lambda w\lambda w'[w'\text{ is compatible with speaker's beliefs in } w \text{ at } t]$$
$(t_2)\ t_2 \wedge t_2 < t_1]\ (w_1)(t_1)]$
$\Rightarrow \lambda Q\lambda t_1\lambda\ w_1[\lambda t_1[\lambda w\lambda w'[w'\text{ is compatible with speaker's beliefs in } w \text{ at } t_2$
$\wedge\ t_2 < t_1]\ (w_1)(t_1)]$
$\Rightarrow \lambda Q\lambda t_1\lambda\ w_1[\lambda t_1[\lambda w'[w'\text{ is compatible with speaker's beliefs in } w_1 \text{ at } t_2 \wedge$
$t_2 < t_1](t_1)]$
$\Rightarrow \lambda Q\lambda t_1\lambda\ w_1[\lambda w'[w'\text{ is compatible with speaker's beliefs in } w_1 \text{ at } t_2 \wedge$
$t_2 < t_1]$

2.5 Mirativity as not-at-issue content

To conclude this section, let me discuss the status of the modal component in

miratives. In analyzing the role of tense in miratives, I posited an M operator

that has two components, a modal component that has counterfactual

entailments and an assertion about the actual world. These two components

were treated as having the same discourse status. This aspect of the analysis, however, requires some discussion.

Following the literature on the topic of *projective* meanings (Potts 2005, Simons et al. 2010, Murray 2010), some types of assertion can be seen as having two components. One that is "at-issue" content, which is a proposal to update the common ground, and thus, it is negotiable and can be challenged. The other is "not-at-issue" content, which is added directly to the common ground, and cannot be challenged. Phenomena such as implicatures, parentheticals, evidentials, expressives, and so on, can be analyzed as projective meanings, whose main feature is being not-at-issue. The not-at-issue content is not the main point in discourse, although it could be interesting and new for the hearer. The main test is that this not-at-issue content cannot be denied directly, only indirectly rejected.

Recall that the key piece of the mirative meaning is the clash between the assertion and the background of past beliefs. In (31), we see that the speaker cannot cancel the clash; neither can the hearer deny it (32). It can however be indirectly challenged, as it is in (33).

(31) A: Oh, Juan fum<u>aba.</u> #Pero yo ya lo sabía. / #Pero no me sorprende.
        Oh, Juan smokes! #But I already knew it. #But I'm not surprised.

(32) A: Oh, Juan fum<u>aba</u>.
        Oh, Juan smokes!
      B: #No, no estás sorprendido.
        #'No, you're not surprised.'

(33) A: Oh, Juan fum<u>aba</u>.
      B: ¡Pero si ya lo sabías!

'But you already knew that!'

Moreover, the interaction of negation and mirativity shows that the mirative meaning scopes above negation, supporting the view of miratives as projective meaning.

(34) No eras   alto.
      NEG be.<u>PAST.IMPF</u>.2SG tall
      'I am surprised you're not tall.' / #'I am not surprised you're tall.'

We have evidence then that mirativity contributes not-at-issue or backgrounded content. It seems adequate to take mirativity out of the assertion domain and place it in the CP domain, as a way to model the mirative meaning. However, the *M* operator, as I have presented here, does not distinguish between these two levels of meanings, the assertion and the not-at-issue component. While this no doubt needs to be done, it lies beyond the scope of the dissertation. I would like to emphasize, however, that the main point of this investigation, namely the role of tense in the semantics of mirativity would not be affected by the details of such an implementation.

2.6 Summary

In this section I have proposed a meaning for mirativity that takes as central the role of past tense morphology. I have argued in favor of a real past tense analysis in which the past tense keeps its normal semantics but is displaced to CP, where it restricts the time of the modal base. Miratives are

then assertions contrasted against beliefs that hold in the past up to the discovery/speech time. These beliefs entail a conclusion that clashes with the assertion, triggering a revision of past beliefs and resulting in the sense of surprise typically associated with mirative sentences. In a sense, the modal operator brings up a kind of counterfactual meaning: if the speaker hadn't encountered the actual state of affairs, her beliefs would have been at odds with the facts in the actual world. This is sketched in (35).

(35)

$$\neg q\,(w)$$

beliefs p

$$t \supset \subset t^* \quad q\,(w_@)$$
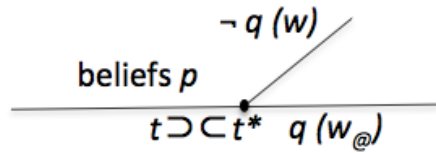
3. Aspect and mirativity

In this section I address the issue that aspect seems to make two contributions to mirative sentences. On the one hand, it maintains its usual interpretation in the assertion, dealing with the durational properties of the eventuality. On the other hand, aspect seems to correlate with differences regarding the nature of the sense of surprise in miratives.

3.1 The problem

So far, I have shown that the past tense morphology contributes to the mirative meaning, and not to the tense value in the assertion. Aspect,

however, keeps its usual interpretation, as we can see in (1a), repeated here in (36), and in (37). In these examples, the past imperfect is used for habitual and generic meanings, respectively. These are two of the normal readings for the imperfect[19] in Spanish.

(36) Juan fum-aba
      Juan smoke-PAST.IMPF.3SG
      'Juan smokes!'

(37) Los gatos mord-ían
      the cats   bite-PAST.IMPF.3PL
      'Cats bite!'

We observe a similar effect with respect to the pluperfect. Both (3), repeated here in (38), and (39) convey a perfective meaning. This is aspectually like the standard pluperfect, which is used for events that have occurred (and culminated) before another time in the past.

(38) Juan hab-ía   fumado
      Juan Aux-PAST.IMPF.3SG   smoke-PTCP
      'Juan smoked!'

(39) Hab-ías   traído   la cámara
      Aux-PAST.IMPF.2SG   bring.PTCP   the camera
      'You brought the camera!'

      (Context: you thought Juan didn't bring the camera to the party, but on departing, he takes the camera out of his pocket).

---

[19] When the imperfect is appropriately framed, it can also generate progressive readings. This meaning is not available for the mirative. However, it is possible to use a progressive construction (be + -ing) in the mirative, and we get a present continuous interpretation, as in (i).

    (i) Estabas trabajando
      be.PAST.IMPF.2S working
      'You are working!'

The examples above show that the choice of aspect determines how the eventuality denoted in the assertion is seen: either as a plurality of events (habitual) or as a specific culminated event (perfective). However, we might wonder about the choice of the two forms in a given context. Let us contrast the two miratives in a situation in which both are equally possible[20]. Consider the following context: I am in Roger's office, and I smell tobacco. This smell is something unexpected, so I can utter either (40a) or (40b)

(40) a. Roger fumaba.
        Roger smoke-<u>PAST.IMPF</u>.3SG
        'Roger smokes!'

    b. Roger había   fumado.
        Roger <u>AUX-PAST.IMPF</u>.3SG smoke-PTCP
        'Roger smoked!'

Speakers perceive a difference in the nature of surprise regarding these forms. In rough terms, (40b) triggers a stronger sense of surprise. A good follow-up for (40a) could be 'I didn't consider Roger to be a smoker', while for (40b) could be 'I thought he didn't smoke'. Given this, the question is what exactly determines which form the speaker would use? How does this correlate with the differences in suprise-effect?

In both examples in (40), we have the same type of evidence, namely the tobacco smell. This smell is something unexpected. But why is it unexpected? It could be because I know Roger likes to go to farmer's markets, to buy organic food, and that he prefers vegetarian food; so I wouldn't expect him to

---

[20] Since the eventive pluperfect refers to past events, it wouldn't be felicitous in a context in which I see someone smoking, for instance.

be a smoker. The clash then is because of general beliefs I have regarding Roger's habits, personality, and so on. The other possibility is that earlier that day Roger himself told me he was not going to smoke that day, since he's trying to quit. If that's the case, the beliefs I have are about a specific eventuality. As we see, the specific sense of 'unexpectedness' has to do with the kind of previous beliefs the assertion is contrasted with.

To summarize, we find that (40a) is felicitous if my previous beliefs have to do with Roger's habits (he's health-conscious, he's not a smoker), while (40b) is felicitous if my previous beliefs have to do with a specific event regarding Roger (he didn't smoke that day). Let us see in the next section how we can associate this difference in the nature of the surprise with the differences in aspectual morphology.

3.2 The proposal

I put forward the idea that the set of beliefs in the modal base is sensitive to the aspectual interpretation of the assertion. In short, if the assertion has imperfective morphology, the relevant beliefs have to do with habitual or generic eventualities. If the assertion has perfect(ive) morphology, the relevant beliefs have to do with particular eventualities.

The association between generic sentences and imperfect aspect, and the one between episodic sentences and perfect(ive) aspect has been well established in the literature. Generic sentences convey generalizations (Krifka et al. 1995); they express our beliefs/knowledge of the world. Generic

sentences can be habitual ones, when they use episodic properties: they express generalizations over a pattern of events. On the other hand, particular sentences express concrete events, specific episodes or facts. Morphologically, across languages, we find that generic sentences make use of imperfective morphology, while particular sentences use perfect(ive) morphology. As Krifka et. al. (1995:6) point out: "There is a correlation with aspectual distinctions: progressive and perfect sentences show at least a strong tendency toward a particular, noncharacterizing interpretation." Keeping this in mind, let us see how this association relates the differences we find in miratives.

Let us start with the imperfect mirative. In the context of smelling tobacco giving the speaker evidence about Roger's (actual) habits, the beliefs must be sensitive to this habitual interpretation. We know these beliefs need to entail the opposite proposition 'Roger doesn't smoke', which is going to be contrasted against the discovery of the fact denoted by the assertion. For instance, we can have the following pattern of inference:

(41)   Roger is health-conscious
        Health-conscious people don't smoke
        ∴ Roger doesn't smoke (BUT) Roger smokes!

The beliefs that are involved here are generic/characterizing; they mirror the aspectual interpretation of the assertion. Now, at the discovery time, the speaker encounters the opposite --that Roger smokes--, and then the clash arises. The speaker may not have had direct beliefs about Roger and his

smoking habits, but the conjunction of beliefs about health-conscious people and Roger being a health-conscious person does lead to a clash with the fact of him being a smoker Now, the sense of *unlikelihood* associated to the imperfect is explained if we know that the speaker's beliefs, although entailing 'Roger doesn't smoke' did not include this proposition in the set of beliefs. Furthermore, the beliefs are merely generic/characterizing, and we know generic sentences allow for exceptions[21] (Krifka 1995). Therefore, what needs to be revised is neither of the two beliefs that trigger the surprise – the speaker can continue to believe that healthy people don't smoke and that Roger is health conscious. The only revision involved is that Roger is not a canonical example of a health conscious person with regard to smoking.

However, for some speakers, the imperfect mirative can be uttered also if the speaker believed for sure that Roger doesn't smoke. In that case, the effect of surprise would be stronger, since the speaker will have to change that belief. We will have the situation in (42). As we see, the speaker finds at the discovery time a state of affairs that directly contradicts her previous beliefs. Note, however, that although we get *counter expectations* in this case, it is related to a belief regarding Roger's habits, so the aspectual morphology is still preserved (generic/characterizing). The belief being changed still has the same aspectual quality as the mirative sentence.

---

[21] This idea was pointed out to me by Veneeta Dayal (p.c.)

(42) Roger doesn't smoke
      ∴ Roger doesn't smoke (BUT) Roger smokes!

Let us analyze now the case of the pluperfect. The assertion, in this case, is about an episodic eventuality, i.e. that Roger smoked earlier that day even though he (or someone else) told the speaker he didn't do so. We want the configuration in (43). We find that in this case a strong sense of contradiction between the assertion and the previous beliefs arises.

(43) Roger didn't smoke today at his office.
      ∴ Roger didn't smoke (BUT) Roger smoked!

Now, it is possible that the beliefs didn't include 'Roger didn't smoke'. Imagine that the chair of the department had sent an email prohibiting smoking in the building for that day. If that's the case, we have the configuration in (44)

(44) Noone smoked at the Linguistic Department today.
      Roger worked at his office today.
      ∴ Roger didn't smoke

We see that in (44), the beliefs that contrast with the assertion are also particular ones, so they still mirror the aspectual morphology of the assertion. This link between particular eventualities explains why the pluperfect mirative leans towards a feeling of *counter expectations*, not simply unlikelihood

The differences in nature of surprise then can be accounted for. We know that at the discovery time, the speaker faces a contradiction between

the new state of affairs and the conclusion entailed by her previous beliefs. The speaker needs to resolve this contradiction. When the beliefs on which the conclusion was based are generic, the contradiction could be resolved without changing entirely those beliefs. But if those beliefs were specific, the only way to resolve the contradiction is via a complete revision of the previous beliefs.

3.4 Summary

In this section, I have provided an explanation of how aspectual morphology in miratives, besides its normal contribution to the assertion, determines the differences we find between the imperfect mirative and the pluperfect mirative. We see that even in contexts in which either mirative could be possible, the choice between them has to do with the nature of the beliefs that the assertion is contrasted against. The imperfect conveys a flavor of *unlikelihood*, which is explained if we associate imperfect aspect with generic/ sentences, while the pluperfect has a flavor of *counter expectations*, regarding a specific event, and this is accounted for if we associate perfect(ive) aspect with particular sentences.

4. Statives and mirativity

4.1 Apparent problem

The analysis for pluperfect eventives that I have given in section 2 assumes two layers of past tense structure: one goes to CP, while the other stays in TP and yields the past episodic interpretation. Schematically this is shown in (45):

(45)   [C PAST$_1$ ....[T t$_1$ ...... [T2 ... PAST$_2$ ....]]]

While the predictions of the analysis are strongly confirmed by pluperfect eventive miratives, they are less clearcut with pluperfect statives. The obvious prediction is that pluperfect statives should be interpreted as past statives and this is indeed possible. Consider a context in which I am looking at old pictures of Juan, who is short for an adult, and I realize he was a tall child. I can utter (46). This sentence also works in a context in which Juan (who I considered to be short) is already dead, and at his funeral, I realize his coffin is surprisingly large.

(46)   Juan habia   sido   alto
        Juan <u>Aux-PAST.IMPF</u>.3SG   be-<u>PTCP</u> tall
        'Juan was tall!'

Context 1: Looking at pictures of Juan, who is short as an adult, when he was a child.
Context 2: At Juan's funeral seeing how large his coffin is.

In these contexts, we understand that the property denoted by the individual

level predicate 'being tall' is over. The analysis in (45) straightforwardly extends to (46).

However, while these two contexts confirm our analysis, it is also true that the context to utter a pluperfect stative that comes most readily to mind is the one in (47), in which we understand that the property holds in the present.

(47)   Juan había   sido   alto
        Juan <u>Aux-PAST.IMPF</u>.3SG   be-<u>PTCP</u> tall
        'Juan is tall!'
        (Context: looking at Juan standing)

I will show that (47) is not a counterexample to (45). I will argue that in both (46) and (47) the interpretation of the property being interpreted as over or not is due to the interaction of the evidence at the speech time and lifetime effects. Let us start by presenting the central ideas about lifetime effects and stative predicates from Musan (1997).

4.2 Statives and lifetime effects

Musan (1997) shows that individual-level predicates behave differently from stage-level predicates in past tense clauses, with respect to the lifetime of their subjects.

(48)   a. Gregory was from America.
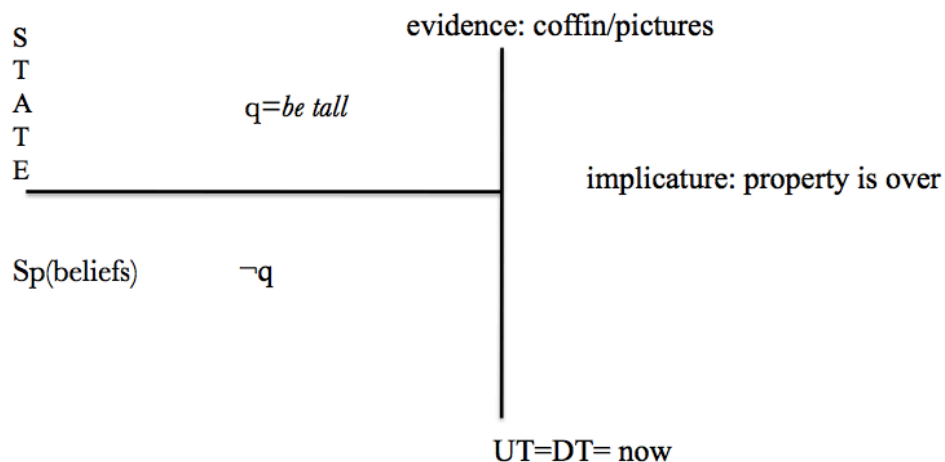   b. Gregory was happy

(48a) implicates that Gregory is dead, but (48b) does not. This is so because stage-level predicates refer to temporary properties of an individual, such as being happy, while individual-level predicates cover long-term properties of an individual, usually the whole time that the individual exists. Musan explains the lifetime effects associated with (48a) as an implicature that arises due to maximal informativeness. Since a sentence like 'Gregory is from America' is more informative than (48a), the choice of (48a) cannot be felicitous if Gregory is still alive (in that case, the speaker should have chosen 'Gregory is from America'). Then, the speaker by choosing (48a) is implicating that the property in question is over. Since the property is an individual-level predicate that holds for the life duration of Gregory, the speaker implicates that Gregory is dead. Only in a context when there is a well-framed past interval, this lifetime effect doesn't arise, for instance, in (49).

(49)   I was introduced to Gregory. He was from America.

Now, let us return to miratives and see how lifetime effects play out in the pluperfect stative constructions. I claim that, in fact, in all the relevant cases the assertion, strictly speaking, is about a time in the past. In (46) and (47), we are dealing with an individual-level stative predicate such as 'being tall'. We expect it to trigger lifetime effects. However, in (46) the discovery time provides evidence that frames the past interval and we interpret the property as being over without the subject being dead, for example in the

context in which we are looking at pictures of Juan when he was a child. In the coffin context, we get both implicatures: the property is over and the subject is dead. This is illustrated in (50).

(50)   *Juan habia sido alto* (in the past)/ 'Juan was tall'

```
S
T
A            q=be tall                    evidence: coffin/pictures
T
E  _____|
                             |            implicature: property is over
Sp(beliefs)       ¬q         |
                             |
                             |
                             |
                             |
                        UT=DT= now
```

In (50) we see that the semantics of 'was tall' only asserts that the property held in the past. It is the evidence available at the utterance time/discovery time that triggers the implicature that it doesn't hold in the present, namely, that the property is over.

Let us see now the interpretation of (47), in which the same stative 'was tall' gets a present reading, in absence of any overt time frame. Extending the analysis above, I claim that in (47) the semantics is the same as in (46): the property held in the past. What is puzzling is why (47) does not implicate that the property is over; on the contrary, we understand that the property still holds.

I claim the implicature of the property being over fails to arise because

of the nature of the evidence. The context is one in which the speaker sees Juan standing there, so the speaker knows Juan is alive. We get then a present interpretation in order to prevent the predicate from triggering lifetime effects. In absence of an explicit time frame, interpreting the property as being over would implicate that the subject is dead (since 'being tall' is an individual level predicate) and this would be inconsistent with the evidence. This is illustrated in (51), in which the property is not closed in the past, but rather it extends to the present, given the context.

(51)   *Juan habia sido alto* (in the present)/*Juan is tall!*
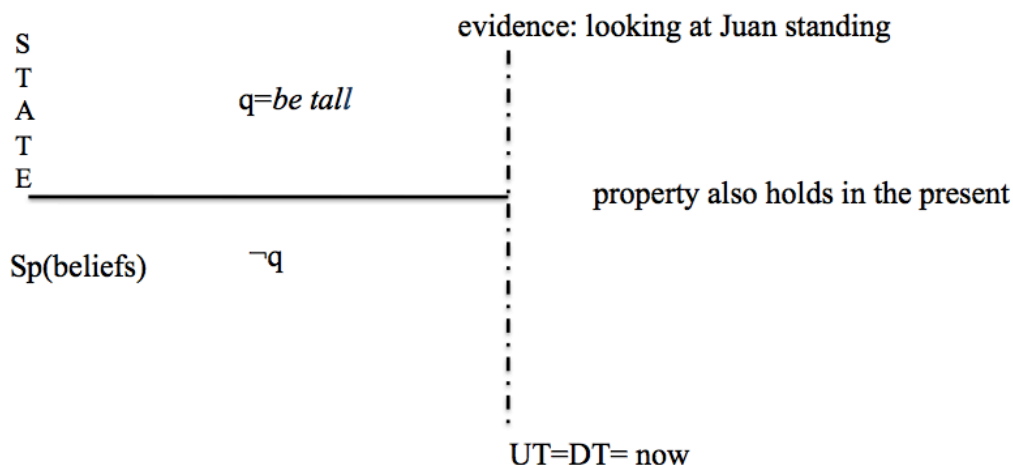
As mentioned above, a stage level predicate like 'being happy' does not trigger lifetime effects. If the explanation I am giving is on the right track, we predict that stage level predicates would behave differently in the pluperfect form. And this is indeed the case. We expect that the default interpretation for a mirative sentence like *Juan habia estado feliz* ('Juan was happy!') is

that the property is over, which is borne out. In a context in which Juan is still smiling, such a sentence would sound odd.

In summary, a pluperfect stative in a mirative sentence only tells us that the state holds in the past, but the interpretation that the property is over or that it still holds in the present depends on the interaction between the evidence provided by the context at the discovery time and whether the predicate triggers lifetime effects (individual level predicates vs. stage level predicates).

4.3 Further confirmation

In this section I want to look at a further contrast between two minimally contrasting pairs of mirative sentences (52) and (53), which differ only in aspectual morphology. As we see, the reading is the same for both sentences 'Juan is tall', but speakers note that (53), with pluperfect morphology, expresses a stronger sense of surprise.

(52) Juan era   alto
      Juan be.PAST.IMPF.3SG tall
      'Juan is tall!'

(53) Juan había   sido   alto
      Juan AUX.PAST.IMPF.3SG be.PTCP tall
      'Juan is tall!'

I think this distinction follows from the difference between unlikelihood, linked to generic beliefs, vs. counter expectations, linked to particular beliefs,

similar to what we have seen for eventive verbs in section 3.2.

Now, statives can be involved in both generic and particular sentences about individuals, as we see in (54) and (55) respectively.

(54) Peruvians are short.

(55) Juan is short

Given this, we expect that the relevant beliefs in statives can be generic or specific. Thus, for (52), the imperfect mirative, we want beliefs that entail 'Juan is not tall'. Such beliefs could be generic as in (56):

(56)   Peruvians are short
         Juan is Peruvian
         ∴ Juan is not tall

It could also be that the speaker has the particular belief of Juan not being tall. If that holds for some speakers, then the degree of surprise should be stronger in that case.

For the pluperfect mirative, in principle, the same thing applies. Generic or specific beliefs are allowed in the set of beliefs. However, given that the stative pluperfect mirative is, in all cases, a *past* stative, the beliefs should entail 'Juan *was* not tall'. In this case, I claim that to utter a past stative presupposes that the speaker has a particular belief regarding this past state of Juan. Therefore, the set of beliefs is reduced *to 'Juan was not tall'*. Again, we have the effect of counter expectation linked to the pluperfect.

Counter expectations, in contrast with unlikelihood, triggers more surprise, since in the first case the speaker has to do a revision of her beliefs, while in the second case, the speaker only has to accommodate for the fact that Juan is not a typical Peruvian.

Now, I think that this contrast could also be explained in terms of implicatures. If a speaker already has a form for the present stative, namely, the past imperfect, why would she use the pluperfect for the same interpretation? The choice of the pluperfect has to do with the fact that the pluperfect is more informative, namely, the speaker had a particular belief regarding Juan's height, while the imperfect stative is reserved for generic beliefs about the present.

Recall, however, that nothing prevents the imperfect stative to include particular beliefs, or the pluperfect stative to include generic beliefs. This could well be the case for speakers that do not have both forms (for example Peninsular Spanish speakers), and thus, the imperfect stative can trigger surprise due to particular beliefs.

Similarly, some data from Quechua Spanish bilinguals tend to favor an analysis in which the pluperfect is about generic beliefs, as we see in (57).

(57) Tú hab-ías   sabido   quechua,
     you AUX-PAST.IMPF.2G know.PTCP   quechua

     conversemos   mejor en quechua.
     talk-IMP.1PL better in quechua

     'Ah, you know quechua, let's talk in quechua instead'. (Zavala 1999:72)

(57) is addressed to the researcher, who is from Lima. It could be the case that given this characteristic, the speaker in (57) believed for sure that the researcher didn't know Quechua, but it is likely the belief set only has a generic belief such as that Lima speakers usually don't speak Quechua.

To summarize, we have seen in this section that this minimal pair not only allows us to offer further support to the proposal about the interaction between miratives and aspect, but also confirms that the pluperfect stative is not a 'defective' pluperfect but rather it keeps its features, thus triggering the expected mirative meaning. The present tense interpretation that we see in some cases is due to the interaction between individual level predicates, the context and lifetime effects.

5. Other accounts

In this section, I will review other accounts of the semantics of mirativity. Some of them provide a formal account of the meaning expressed by mirative constructions; others focus on the role of past tense morphology. I will show that even though some of their insights are correct, my proposal differ from these accounts in significant ways.

5.1 On the meaning of mirativity

We have seen in the previous chapter that mirativity has been defined along the terms of 'new and unexpected information', 'speaker's unprepared mind' or just simply as a category that expresses surprise (Slobin and Aksu 1982, DeLancey 1997, Ainkhenvald 2004). In the previous section, I aimed to give a formal definition of what constitutes the surprise miratives convey. The *M* operator formalizes the definition I give for mirativity: it is a clash between the factivity of the assertion and speaker's previous beliefs. There are two other formal accounts of mirativity, using data from other languages. I review these accounts in this section.

5.1.1 Ivanova-Sullivan (2007)

Ivanova-Sullivan provides a formal account of mirativity, using data from Bulgarian. Following Zanuttini and Portner's (2003) account of exclamative clauses, Ivanova makes use of the *Widening* operator, arguing that miratives trigger widening of the initial domain of elements. For wh-exclamatives, *Widening* expands the domain of quantification of the wh-phrase: the new domain (D2) is greater than the initial domain (D1), and these new elements in D2 have a greater value than any elements in D1, according to a pragmatically given scale.

For a mirative, according to Ivanova-Sullivan, *Widening* expands the initial domain (i.e. the epistemic ground of the speaker) to a new domain, which is updated at the utterance moment. The surprise content in the

mirative comes from the gap between the initial domain and the widened domain. What differentiates a mirative from an exclamative clause is that the elements in the domain are not degree values, but sets of possible worlds and time frames. Thus, exclamatives express surprise at some unexpectedly high value, while miratives express surprise at some unexpected possibility.

Ivanova-Sullivan's core idea regarding the meaning of mirativity is right since it shows that the surprise comes from this clash between previous knowledge and the new state of affairs. But this is not captured adequately via the *Widening* function. Speakers are always updating their epistemic or doxastic world, but this updating does not necessarily trigger surprise. In fact, for Zanuttini and Portner, the surprise in an exclamative clause is an implicature that arises only if, given a certain context, the speaker finds the content of an exclamative surprising. This is neither encoded nor derived from the *Widening* operator by itself.

5.1.2 Peterson (2008)

Peterson provides a pragmatic account of mirativity, focusing on Gitksan (Apathaskan) and Hare (Tibeto-Burman). In his proposal, mirativity is always an implicature, resulting from the flouting of the quantity maxim, since the proposition p is already in the common ground.

Peterson's analysis fails in assuming that miratives are always redundant, namely, the mirative cannot be reduced to cases in which p is

already in the common ground. As also observed in the previous chapter, it is common for miratives to make reference to states or situations the hearer already knows (it is often the case that the sentences describe situations about the hearer), but it is also possible to get mirative sentences with propositions the hearer didn't know previously, and it counts for new information for her as well, for example in (58a). It is also possible to get a mirative sentence that tells something about the hearer, but that could also constitute new information for her, as in (58b).

(58)   a. Oye, Juan hab-ía   estado   casado
           Hey, Juan Aux-PAST.IMPF.3SG be.PTCP   married
           'Hey, Juan is married!'

        b. Hab-ías   sido   inteligente
          AUX-PAST.IMPF.2SG be-PTCP   smart
          'You're smart!'

Also, it does not seem that flouting the quantity maxim would necessarily trigger surprise as an implicature, since there may be other implicatures or reasons for the speaker to be redundant. For Peterson, the mirative implicature is an extension of evidentiality; he sees the mirative meaning as a 'metaphorical use' of the evidential. However, his analysis does not answer the question of why those markers are used for mirativity, since a redundant assertion without those specific markers can also flout the maxim of quantity, but no surprise meaning arises.

5.2 On the role of past/aspect morphology

In this section, I compare my proposal to other accounts regarding the role of past tense in mirativity. Although these accounts do not have as their target Spanish miratives, the same phenomenon of 'fake' tense is present (or fake aspect, as in Zhang 2013), so it's worthwhile to compare them.

Friedman (1981) discusses the phenomenon of mirativity in Bulgarian. As we can see in (59), there is also past tense (the past participle morpheme -*l*) that does not contribute to the assertion.

(59) Ti   si   bi-l   visok!   (Ivanova 2007:01)
     you AUX.2SG be-PTCP tall
     'You are tall (to my surprise)'

Unlike Ivanova (2007), Friedman (1981) addresses the role of the past tense morphology. In his analysis, past tense is seen as an indicator of the event being also true in the past. Although we can say that in all cases this is true (what the speaker discovers is something that also held in the past), this interpretation does not provide the clash which the speaker's beliefs, which generates the surprise. If past tense in miratives only marks the tense of the assertion, what would be the difference with a declarative sentence in past tense?

Nishiguchi (2007) analyses the role of fake past in Japanese, which also renders mirative meaning, as we can see in (60).

(60) A, warat-ta.   (Nishiguchi 2007:194)

oh smile-<u>PAST</u>
'Oh, (the baby) is smiling'
He analyzes this use by proposing that fake past is itself a modal operator that selects a negative presupposition (for instance, in (60), that the baby wasn't smiling), and a positive predicate. Basically, the analysis aims to encode the implicature 'While expecting ¬p, it is p', or to mimic the predicate 'surprise' (as in *I am surprised that p*). Nishiguchi's operator is similar to mine, since it captures both the speaker's expectations and the assertion, but there is not an account of past beliefs, and its connection with the past tense morphology. Thus, even though it captures the surprise meaning (in a way assumed for the predicate *surprise*, cf. Guerzoni and Sharvit 2007, although these authors do mention past expectations), it does not provide a compositional analysis of it, by capturing why the past tense morphology marks surprise.

Nishiguchi does mention counterfactuals, since fake past is seen as a mark of 'contrary-to-fact', and that could be extended to miratives as well. However, for miratives, we would rather say that what is contrary to fact is not the assertion p, but rather the speaker's prior beliefs (that ¬p). In this sense, miratives are actually 'reverse' counterfactuals, since the former asserts p as holding in the actual world (and projecting ¬p as false at the discovery time), while in counterfactuals, it is ¬p which is true, and p is asserted as desirable, hypothetical, etc. I develop the comparison between miratives and counterfactuals in chapter 4.

Finally, a very recent analysis of mirativity in Mandarin is the one pursued by Zhang (2013). The presence of the perfect(ive) marker *le* with individual-level predicates indicates a mirative reading.

(61) Zhe gen   shengzi duan-*le* san gongfen.
      this Classifier rope   short-*le* three centimeter
      'This rope is three centimeters shorter than expected'

Zhang follows Iatridou's analysis for CF, and argues that *le* is 'fake' aspect, and it is marking the Exclusion feature proposed by Iatridou (2000). However, *le* is not marking counterfactuality, but rather counter expectations. The Exclusion feature says, in the case of CF[22], that the topic world excludes the reference world (the actual world). In the case of mirative *le*, for (61), the topic world is the size of the rope, and the reference world is the expected size. The speaker finds that the size of the rope is shorter than what was expected, and thus, a mirative reading happens. However, in Iatridou's analysis of CF, the topic worlds are the worlds we are talking about, and the reference world is the actual world. So, it is not clear why in Zhang's analysis, the worlds we are talking about is the actual world rather than the worlds in which the speaker considered the rope had a different measure, and how these worlds (the expected ones) are excluded. In any case, her purpose is to derive counter expectations rather than counter factuality. But as, also pointed out by Iatridou and Arregui (2004), the Exclusion feature itself does not derive

---

[22] When the Exclusion feature ranges over times, it says: the topic time excludes the reference time. If the reference time is the speech time, then we get a 'normal' temporal past interpretation.

counterfactuality *per se*. It requires that the worlds *we are talking about* do not include the actual world, but it could be the case that other worlds (that has to do with the proposition) include the actual world. That is why for Iatridou, the counterfactual meaning is really an implicature. Given this, in Zhang's analysis, the use of an Exclusion feature that leaves us only with the actual world (the world in which the rope is three centimeters shorter) does not necessarily derive counter expectations.

I have also developed an analysis in Iatridou's terms for mirativity (Torres Bustamante 2010). However, I have discarded it for two reasons: i) it does not provide the necessary clash between the assertion and the speaker's previous beliefs, and ii) it misses the fact that the past tense morphology is required, rather than a marker of 'other worlds' such as subjunctive mood, for instance. Even in counterfactuals, in Spanish, we need *past* subjunctive morphology. Iatridou's analysis tries to connect the temporal meaning of [past] with another modal one via the Exclusion feature, but as pointed out by Arregui (2004), it is not clear in which contexts this feature applies to times, and in which applies to worlds. Zhang applies the 'temporal' Exclusion feature to the meaning of perfect aspect in *le*. So, she attempts to unify the temporal and mirative use of *le* in Iatridou's terms. However, for the reasons outlined above, her analysis fails in deriving the counter expectation meaning that *le* can get in certain contexts.

6. Conclusion

The *M* operator was proposed as a way to model surprise related to mirativity. I define this sense of surprise as the clash between the speaker's previous beliefs and the current state of affairs. *M* asserts q against a background of beliefs p that entail $\neg q$. When the speaker encounters q instead, the clash happens and surprise arises.

The role of past tense morphology in Spanish miratives is seen as contributing to the mirative meaning. However, I do not appeal to different temporal semantics. I claim that tense conveys its usual meaning. The past tense is interpreted outside the proposition, as the time argument of the modal base. Aspect plays a role by influencing the set of relevant beliefs. This analysis allows us to explain the contrast between the imperfect mirative and the plperfect one in Spanish.

Chapter 3

A Syntax Analysis of Mirativity

1. Introduction

In this chapter, I address the syntax of mirativity, aiming to account for Albanian miratives data[23], and to extend this analysis to Spanish and other languages. The main question I address in this chapter is the following: why do Albanian miratives present overt movement of the past participle? And why doesn't it happen in Spanish?

Let us start with the basic data. (1a) shows a declarative present perfect sentence. (1b) shows the past participle *punuar* pre-posed to the auxiliary *ka* ('have'). This sentence has a present interpretation with a mirative reading: the speaker is surprised about the eventuality described.

(1) a. Ai ka   punuar
        3SG AUX.PRES.3SG work.PTCP
        'He has worked'

---

[23] Albanian data that does not cite source comes from my own elicitations with a native speaker of Albanian (Gheg dialect), who was born and raised in Kosovo, Yugoslavia.

> b. Ai   punua-ka
>   3SG work.PTPC-AUX.PR.3SG
>   '(Wow), he works!'   (Duchet and Përnaska 1996:31)

The explanation I will develop in this chapter is based on two claims: i) the semantics of mirativity asks for past tense to be interpreted outside the T node, an argument already presented in the semantics chapter; ii) syntactically, a way to do this displacement of tense is through agreement between C and the lower head that bears the relevant past feature (T or V). This relationship must be local. I argue that movement of the participle in Albanian happens to satisfy this locality requirement.

The structure of the chapter is as follows. Section 2 illustrates these claims with a simple pattern: the present mirative, based on the present perfect. After presenting my theoretical framework, basically, a version of 'reverse' Agree model based on several recent papers (Zeijlstra 2010, Bjorkman 2011, among others), I apply this model to the present mirative and the present perfect mirative, which has two participles. Section 3 extends the analysis to the rest of the mirative paradigm, taking into account the aspectual requirements of miratives. Section 4 extends this analysis to Spanish and other languages. Section 5 concludes the chapter.

2. The simple pattern

In (1b) two things are shown: first, the proposition gets a present tense reading, despite having a past participle. Second, the past participle is preposed to the auxiliary.

As a preliminary, one can ask why this piece of data is interpreted as head movement of the participle; and not, for instance, as VP movement. Furthermore, how do we know that the participle is not moving even higher, for instance directly to C. Some further data will rule out these options.

Normal word order in Albanian is SVO. (2) shows a simple transitive sentence:

(2)   Unë kam   pasur   para
        1SG AUX.PR.1SG have.PTCP money
        'I have had money.'

The mirative version of this sentence is shown in (3), in which the direct object remains in situ, and does not move along with the participle, nor does the participle move over the subject pronoun.

(3)   Ua, unë   pas-kam   para!
        Wow, 1SG have.<u>PTCP</u> money
        'Wow, I have money.'
        (Context: after I found it unexpectedly in my pocket.)

In (4), the prepositional phrase also remains in situ, next to the mirative verb.

(4)   Pjetri po   punua-ka   në kopsht
        Pjetri PROG work.<u>PTCP</u>-AUX.3SG in garden
        '(Look!), Pjetri was working in the garden!   (Zymberi 1991:113)

The negative particle *s'*, which is used to negate the whole sentence, is placed before the verb in the indicative mood, as in (5)

(5)   S'kam   para
        NEG.AUX.PR.1SG money
        'I don't have money.'

The same particle is used to negate admirative sentences, and we can see in (6) it is placed before the whole verb, and not between the raised participle and the auxiliary.

(6)   Dhe unë s'-pa-kam   ditur   gjë!
        And 1SG NEG-<u>PTCP</u>-AUX.PR.1SG know.PTCP   thing
        'And I really didn't know (haven't known) a thing!' (Newark 1982: 76)

Moreover, I am putting forward an analysis that calls for head movement of the participle, placed on V, to T. This movement makes a new morphological unit: the mirative[24]. The fact that it is not possible to put any material between the preposed participle and the auxiliary and that the participle gets phonologically reduced suggests both that they form a unit, and that this happens on a single head.

---

[24] Rivero (1990) discusses non active voices in Albanian and Greek. She touches upon very briefly the mirative form (in non active voice), in Albanian. She analyzes the present auxiliary *-kam* as an admirative suffix ("identical in shape to the Perfect Aux but different in meaning") and places it in the Mood/Aspect/Voice slot, above VP, V undergoes movement to attach to the suffix.
(i)   Do te u   la-kam.
        Fut NAct wash-Adm-Pres-1S
        'I will actually be washed!'
This analysis does not take into consideration that the mirative is based on the perfect, and that in complex tenses the verb remains in situ and that the participle still attaches to the auxiliary ('the perfect/admirative affix'): *pas-kam lare*. In Rivero's analysis, we will expect instead *pase la-kam*, which is not borne out.

In semantic terms, the presence of past tense morphology is integrally related to the semantics of mirativity: this requires that CP (modal domain) takes a time argument with past value. How does CP receive this past value in (1b)? I propose that this is done via agreement with the past feature of the past participle, which is initially located in VP. However, in (1a), the auxiliary *ka*, with a present tense feature on T, intervenes between C and VP, affecting locality. In order to overcome this blocking, the past participle moves to T and thus, C can check its tense feature against T locally. This is sketched in (7). The arrow indicates movement, while the dashed lines indicate Agree relations.

(7)

```
                    CP
            _____|_____
           C                 TP
        [past]         _____|_____
                       T            vP
                  _____|_____    ___|___
                [past]ᵢ [pres] v        VP
                punua(r)  ka             |
                                        PTCP
                                         tᵢ
```
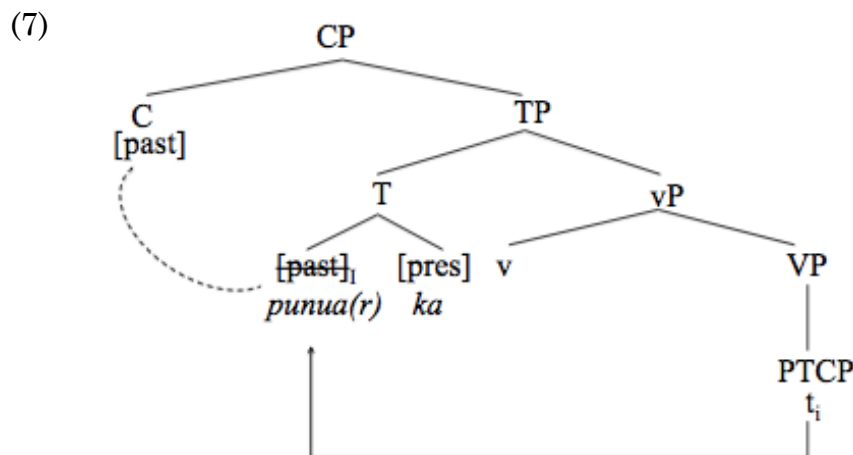
How more specifically does this Agree relation between C and T work? I see this relationship in terms of feature checking. The Agree version I follow for my analysis is based on the view that Agree can happen downward in the tree, allowing an interpretable feature to probe an uninterpretable feature in

a lower head. As for the locality requirement, I basically follow a version of Relativized Minimality (Rizzi 2002)

2.1 Reverse Agree

2.1.1 Standard Agree

In the standard Agree approach (Chomsky 2000, 2001) only uninterpretable (and unvalued) features act as probes looking for a goal that bears a matching interpretable (and valued) feature. In (8), we sketch this proposal: if α bears an uninterpretable feature uF and β has a matching interpretable feature iF, they can enter into Agree, provided that α c-commands β, and that there is not a matching goal γ that c-commands β and not α. After Agree has taken place, uF on α is checked.

(8)

$$\alpha$$
$$uF$$

$$\beta$$
$$iF$$
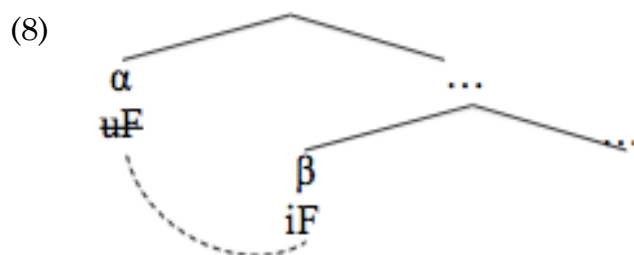
If we apply this model directly to our analysis in (7), C must bear an uninterpretable feature, which seems counterintuitive to the semantics of mirativity. We want C to bear an interpretable tense feature, and be capable, at the same time, of probing a matching goal. In the next section I review

Pesetsky and Torrego (2004) Agree version, which seems more promising for our analysis, but which also poses other issues.

2.1.2 Pesetsky and Torrego's Agree version

In the Agree approach pursued by Pesetsky and Torrego (2004, from now on P&T), it is possible to have two new types of features: uFval (uninterpretable, valued), iF[ ] (interpretable, unvalued), in addition to uF[ ] (uninterpretable, unvalued) and iFval (interpretable, valued). These two latter combinations were the only ones allowed in Chomsky's system.

For P&T, examples of iF[ ] and uFval are, respectively, the T feature in Tense and the T feature in v. The interpretation is in the Tense node, and in many languages, the finite verb bears the morphology of tense distinctions, so tense on v is an uninterpretable feature. Since Tense c-commands v, its feature T is the probe in this agreement relation. So, if interpretable T on Tense is the probe, it must be unvalued; in the same way, uninterpretable T on v is valued and acts as the goal. In the Chomsky's Agree version only uninterpretable (and unvalued) features can be probes, while in P&T system, by breaking the dependence between valuation and interpretation, both interpretable and unvalued features can be probes. This is sketched in (9).

(9)
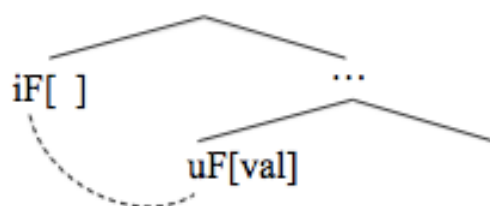
This more flexible Agree version seems helpful so far, but the restriction that the probe must bear an unvalued feature, which will get valued by the goal via Agree, does not help since we do not want C to come into the derivation unvalued. If C were unvalued, this would allow for a configuration in which the closest goal bearing a tense feature value could value C, resulting in the wrong derivation for the mirative, namely, C getting a non-past tense value from T. Although syntactically possible, this would yield a meaning we do not observe, since miratives are defined on past tense terms.

What we want is a configuration for Agree that allows an interpretable and valued feature to probe a matching goal with an uninterpretable feature. This will result in checking the uninterpretable feature, and will license the interpretable feature. In the mirative, the semantic interpretation is on C but the morphological realization takes place on the verb (usually on T, after v/V-to-T movement has taken place). As we see, this analysis calls for a 'reverse' version of Agree. This kind of analysis (with some variations) has been put forward by several recent proposals (Wurmbrand 2011, Bjorkman 2011, Zeijlstra (2010)). In what follows, I summarize this version of Agree, framing it in terms of checking instead of feature valuation, so that it can be applied to my proposal for mirativity.

2.1.3 Reverse Agree

Bjorkman (2011) uses Agree in order to account for verbal inflection. If the role of functional projections such as T or Asp is to introduce verbal inflection and to be the locus of semantic interpretation, both the standard Agree and P&T approach cannot handle this assumption properly. In these views, all probes need to be either unvalued or uninterpretable, and the goal, for instance V, should come into the derivation already valued. A reverse Agree approach overcomes this obstacle, since valuation will occur downward in the tree. For verbal inflection, then, interpretable (and valued) inflectional features are in the higher functional projections and Agree with unvalued features in lower heads, such as V. For mirativity, we also assume that the semantic interpretation occurs higher in the tree, in this case, in C. We need a configuration that allows C to bear interpretable features and to Agree with lower uninterpretable ones.

Zeijlstra (2010) also notices that classic versions of Agree, in which the c-commanded goal values the c-commanding probe, encounters problems in analyzing phenomena such as negative concord, sequence of tense, multiple case assignment, etc. In all these cases, the higher element receives semantic interpretation, while the lower ones have to get their uninterpretable features checked, otherwise the derivation would crash. This is sketched in (10).

(10)
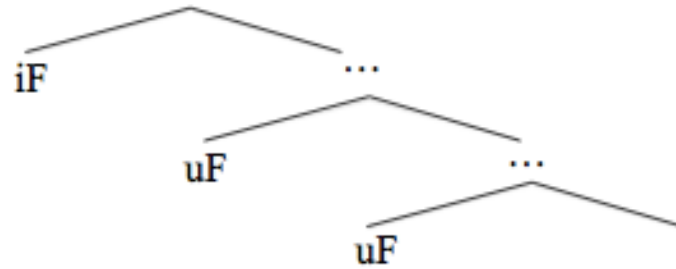
As we see, that's the configuration we also want for miratives. We want the lower feature on V to get checked against the higher element on C, which is an interpretable feature.

To finish this section, let us define in (11) the definition of Agree I use in my proposal

(11)   *Agree* (adapted from Zeijlstra 2010[25])

Agree is a relationship between two features such that an uninterpretable   feature F is checked, iff
a. A head α containing uF is c-commanded by a head β containing iF.
b. There is no head γ containing a matching feature iF, such that γ c-commands α, and β c-commands γ.

Before moving on to the analysis, let me spell out some basic assumptions regarding feature checking and locality. Based on Adger (2002), I adopt the following definitions:

(12)   a. Feature checking: uninterpretable features must be checked, and once checked they can delete, in order to meet Full Interpretation.
b. Full Interpretation: the structure the semantics access to must not contain uninterpretable features.

---

[25] Zeijlstra's Agree definition is as follows: " Agree is a relation between a probe α and a goal β, such that (i) α and β are in a proper local domain; (ii) α has some uninterpretable feature [uF]; (iii) β has a matching interpretable feature [iF]; (iv) α **is c-commanded by** β**;** and (v) there is no matching goal carrying [iF] in between α and β" (p.14).

The locality condition I adopt is the one expressed by Relativized Minimality (Rizzi 2002:225, 229), in terms of *Minimal Configuration*, as defined in (13).

(13)   Y is in a Minimal Configuration (MC) with X iff there is no Z such that
        a. Z is of the same structural type as X, and
        b. Z intervenes between X and Y

As we see, the locality requirement imposed on Agree in (11b) follows from MC. Rizzi also accounts for feature checking in terms of MC, as stated in (14).

(14)   Feature K is licensed (checked, valued...) on (Head,XP) only if
        a XP is in a MC with H, and
        b. c-command holds

Head,XP interactions refer to specifier/head, head/complement and head/specifier-of-the-complement. The Agree definition in (11) captures the requirement in (14) for feature-checking.

2.2 The simple pattern explained

Let us see again the basic Albanian data, repeated here in (15).

(15)   a. Ai   ka   punuar
           3SG AUX.PR.3SG   work.PTCP
           'He has worked.'

        b. Ai   punua-ka
           3SG work.PTPC-AUX.PR.3SG
           '(Wow), he works!'   (Duchet and Përnaska 1996:31)

Adopting the 'reverse' Agree approach, C bears an interpretable feature with past tense value that acts as a probe for a matching goal that bears an uninterpretable past tense feature. The derivation of the simple pattern in Albanian is shown in (16).

(16)
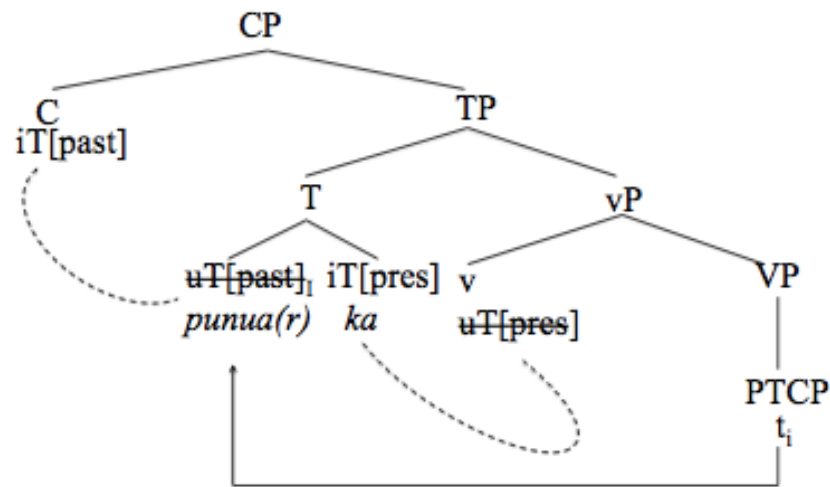
In (16), C bears iT[past], T bears iT[pres] (already checked against uT[pres] on v), and V bears uT[past]. C probes V, but T with its tense feature is intervening. So V moves to T via head movement (I'm assuming that skipping the v head is not a violation of the head movement constraint, given that there is no lexical material on v), so that now C can probe T and checking takes place. All uninterpretable features are deleted by checking under Agree in order to meet Full Interpretation. Now, the sentence has a present mirative meaning. The past time argument is interpreted on C, while the proposition (TP) gets a present reading due to the present time feature borne

by the auxiliary. After checking, unintepretable tenses, such as uT[past] gets deleted.
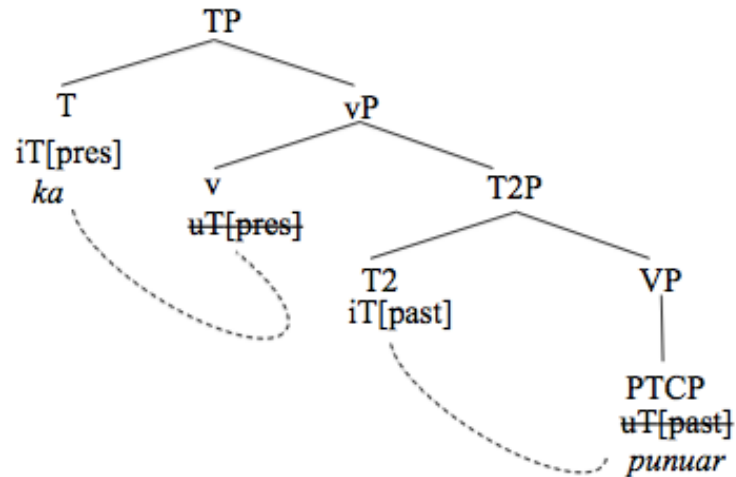
If movement didn't take place, we will have the ill-formed structure in (17). There, C cannot Agree with the participle, since T is intervening.

(17)
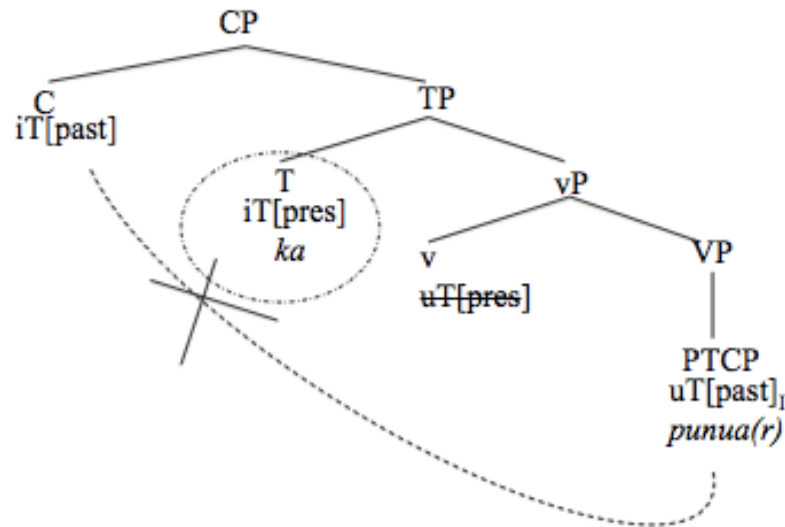
What about the corresponding declarative sentence (15a)? Since in this case, C is no playing any semantic role (maybe it spells out a speech act feature such as 'assertion'), V needs to checks its feature against another head. This head must bear an interpretable tense feature, which gives the meaning of anteriority/pastness to the present perfect. As movement and intervention effect do not occur, we can safely assume that this head is located below vP. I label this head T2. (18) shows the derivation of a declarative present perfect sentence in Albanian.

(18)

```
                    TP
             _____/_____
            T              vP
        iT[pres]        __/_____
          ka            v          T2P
                    uT[pres]    ___/_____
                              T2            VP
                           iT[past]          |
                                            PTCP
                                          uT[past]
                                           punuar
```

2.3 A more complex case

Albanian's mirative paradigm also includes complex forms that use a double participle form. In (19a) there is the declarative double perfect[26]. The first participle in this construction undergoes participle raising to form (19b), which is the mirative present perfect. The pattern effect is the same: one past tense layer goes to be interpreted in the C domain, while the other one remains in TP to contribute the event time.

(19) a. Pjetri ka   pasë[27]   punuar
         Pjetri AUX.PR.3SG   have.PTCP work.PTCP
         'Pjetri had worked.'

      b. Pjetri pas-ka   punuar
         Pjetri have.PTCP-Aux.PRES.3SG work.PTCP
         'Pjetri has worked!'

---

[26] Data in this section follows Friedman's (2000) terminology for the Albanian forms.
[27] The past participle of the auxiliary 'have' is *pasur*, but in compound forms, this takes the old form of *pasë* (cf. Newmark 1982, p. 50)

We can extend the analysis presented in 2.2 to account for this case. Let us start with (19a), the declarative double perfect. Following the reasoning we presented for declaratives in (17), we propose a layer of T2P for each participle. Each one checks its uninterpretable past tense feature with its corresponding functional head. This is shown in (20).
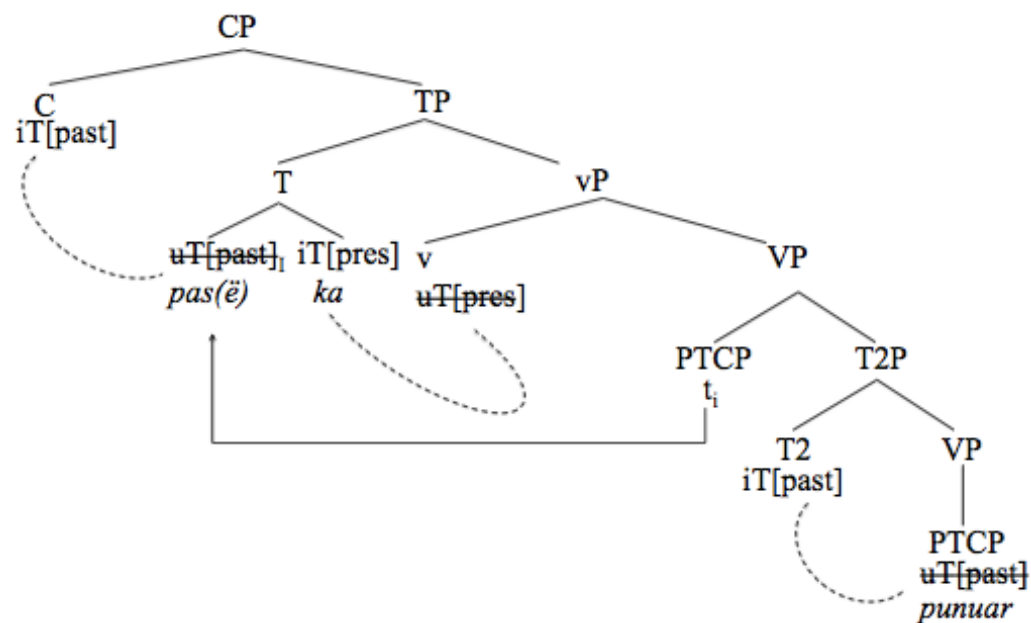
(20)
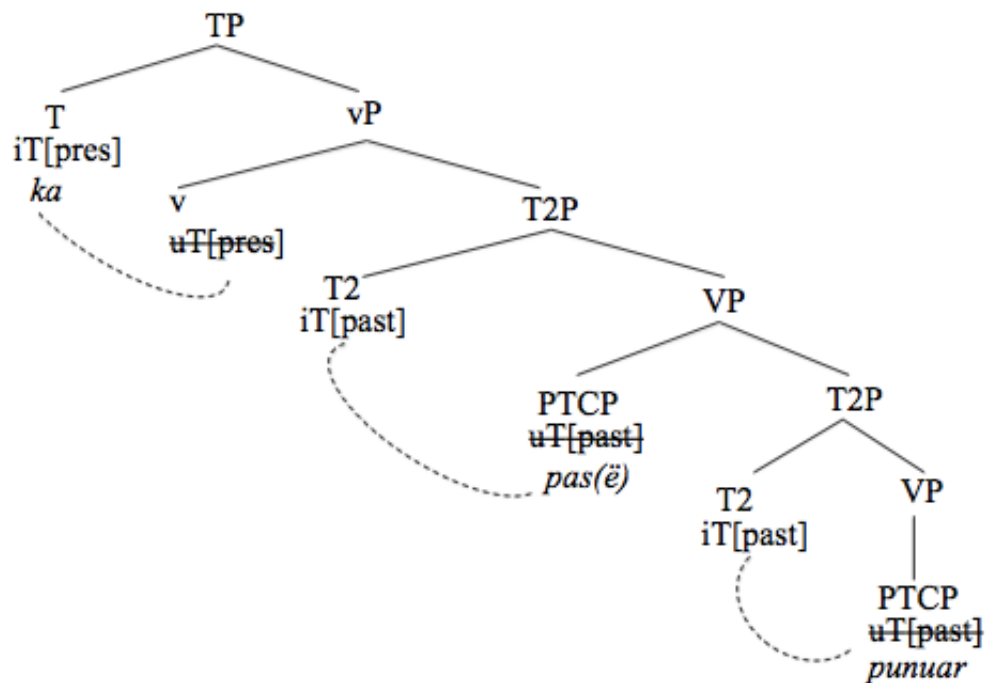
Now for the mirative version (19b), one of the past tense features needs to be interpreted on C so we do not generate the layer of T2, and leave it to C to check the participle tense feature. We see in (21) that it is the higher participle that moves to T and now can agree with C. Due to locality requirements, it makes sense that it is the closest participle to T that moves,

instead of the lower one which would have to skip many heads in order to move to T. In contrast, if the lower participle keeps its T2 layer, then it does not need to check its past tense feature elsewhere. It remains on VP, which along with the present auxiliary on T gives the reading of a present perfect, which is correct.

(21)

```
                        CP
              ┌──────────┴──────────┐
              C                     TP
           iT[past]         ┌────────┴────────┐
                            T                 vP
                    ┌───────┴──────┐     ┌─────┴─────┐
                uT[past]ᵢ iT[pres]  v          VP
                  pas(ë)   ka    uT[pres]  ┌────┴────┐
                                         PTCP      T2P
                                          tᵢ    ┌───┴───┐
                                               T2      VP
                                            iT[past]    │
                                                      PTCP
                                                    uT[past]
                                                    punuar
```

2.4 Some inaccurate predictions

As it stands, my model predicts the following:

1. In absence of an auxiliary that could be a potencial intervenor, if C bears a past tense feature, it can agree locally with the past tense feature on v. For instance, a simple past verb could get a present mirative reading. This derivation is shown in (22).

(22)
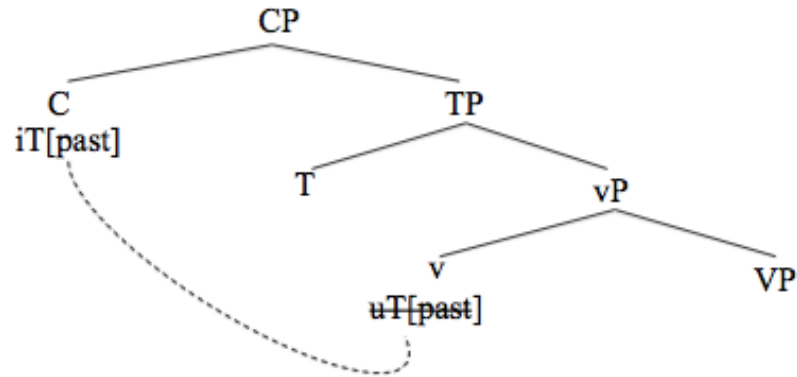
2. In presence of a past auxiliary, there is no need to move the participle, assuming a derivation in which the uninterpretable tense feature on v moves to T, and checks its feature against C, and the uninterpretable past tense feature on the participle is checked locally against the interpretable feature on T. Since v does not have lexical material, the result will be the same as in the declarative sentence. (23) shows this derivation.

(23)
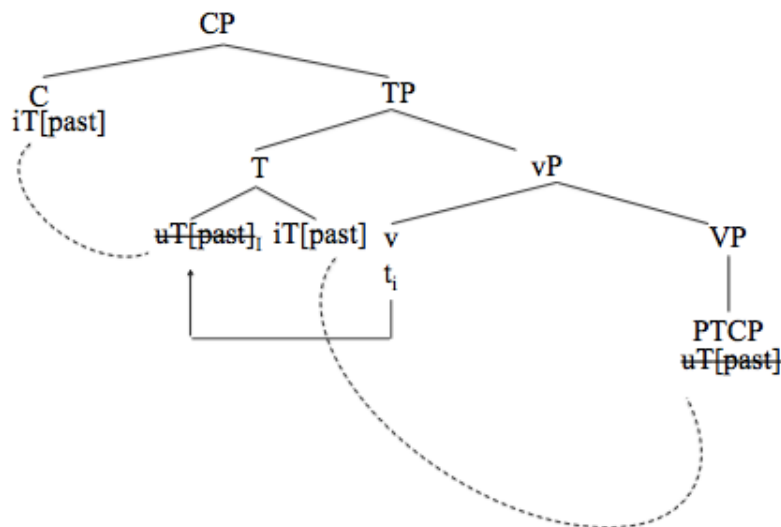
Unfortunately, these predictions are not borne out in Albanian (although we see later that they are in Spanish). We see in (24) that the simple past imperfective in Albanian does not get a mirative reading. (25) shows that it is possible to have a mirative with an auxiliary in past tense. The mirative in (25a) is an imperfect mirative, based on (25b), which is a pluperfect that has the auxiliary in past imperfective. (25b) also shows that the declarative form on its own is not a mirative. As we see in (25a) participle movement is obligatory in order to form the Albanian mirative, even if the auxiliary itself is past.

(24)   punonte
       work-IMPF.3SG
       'He used to work'/ # 'He works!'

(25)   a. Pjetri punua-kësh
          Pjetri work.PTCP-Aux.IMPF.3SG
          'Pjetri used to work!'

       b. Pjetri kësh   punuar
          Pjetri AUX.IMPF.3SG   work.PTCP
          'Pjetri had used to work' # 'Pjetri used to work!'

Given these false predictions, I need to refine the model in order to account for (24) and (25). The solution to this puzzle will require expanding our set of features, so that aspectual features also play a role in the system.

3. The full Albanian paradigm

The goals of this section are two-fold. First, we want to rule out the declarative past form as a mirative. Second, we want to account for the obligatory participle movement for miratives of all tenses. These two problems can be solved in a unified way by including aspect in the set of features needed by mirativity to work, not only for Albanian, but also for a universal view on mirativity.

3.1 Aspectual requirement on miratives

3.1.1 Aspect in mirativity

We have seen in the semantics analysis that aspect influences the mirative meaning. That is, the set of beliefs taken into account is sensitive to the aspectual interpretation of the TP. So far, we have seen no need to C to take aspectual values.

We have seen that in Spanish, there is no 'fake' aspect, in the sense that TP keeps its morphologically expressed aspectual interpretation in the mirative sentence. Thus, the imperfective mirative yields habitual or generic sentences, and the pluperfect yields perfect (episodic) meanings. This is also true in Albanian, *once the participle has been preposed*. This needs further clarification. What I mean is that the moved participle does not contribute any meaning to TP. Assuming the participle has a [perfect] value, this value

does not contribute to the interpretation of the assertion. For instance, the mirative sentence *punuaka* means 'he works', and there is not trace of a perfect interpretation. The same holds for the complex forms, in which the only perfect interpretation comes from the participle that remains in the proposition; in those sentences, we encounter two participles but only one perfect interpretation. However, other aspectual (and tense) values remaning in TP (such as those borne by the auxiliaries) get interpreted in the proposition.

Now, even though the moved participle does not contribute meaning to the proposition in a mirative sentence; in order to form the mirative, Albanian only allows perfect forms, as we see in (26). Simple mperfective and perfective (aorist) tense clauses do not form miratives (27a-b). The aorist form of the auxiliary does not even allow participle movement to fix the blocking and form a mirative (27c).

(26) a. pas-kam
    have.<u>PTCP</u>-AUX.PR.1SG
    'I have (something)!'

   b. pas-kisha
     have.<u>PTCP</u>-AUX.PAST.IMPF.1SG
    'I used to have (something)!'

(27) a. kisha
     have.PAST.IMPF .1SG
    'I used to have (something).' #I have (something)!

   b. pata
     have.AOR.1SG
    '(I) had (something).' #I have something)!

    c. *pas-pata
       have.<u>PTCP</u>-AUX.AOR.1SG
       Lit. had-had. #I had (something)!

We have seen in chapter 1 that a common feature of miratives, cross linguistically, is that they are are formed on imperfective and perfect forms (DeLancey 1997, Aikhenvald 2004). Even though when the language has a specific marker for miratives (such as Hare), the mirative reading only arises when the verb bears imperfective morphology. This suggests that this ban on perfective forms both Albanian and Spanish display is not something unusual. However, it is striking that Albanian does not allow the mirative to be formed solely on the imperfect, as Spanish does. The fact that the Albanian imperfect cannot be a mirative suggests that it is different from the Spanish imperfective. Some piece of data can support this idea.

For instance, the Albanian imperfect can get culmination readings, especially the verbs *jam* 'to be' and *kam* 'to have' (cf. Newmark, 1982: 69), which is not available for the Spanish imperfect. In the following example, the relevant form is in bold (also in the gloss). As we see, the predicate 'being his first job' in the context provided by the sentence is not marking background information, but rather is a terminative eventuality, with a clear endpoint. However, the predicate is in imperfective aspect, and not perfective as expected.

(28)   Jam këtu inxhinier E.D., i cili ka përvijuar projektimin e parkut të Korçës. **Ishte** (be.IMP.3SG) puna e tij e parë, mbasi kreu studimet.

'I am here with engineer E.D., who has outlined Korçë's park project. It **was** his first job, after he completed his studies'. (Newmark, 1982:71)

In Spanish, the corresponding sentence in imperfective aspect is ungrammatical:

(29)   ***Era** (be.IMP.3SG) su primer trabajo, después que completó sus estudios.
'It **was** his first job, after he completed his studies'

This difference can account for the fact that the Albanian imperfect is somewhat defective in the set of features it contains. However, even though it can get culmination readings, it is still different from perfective (aorist), since the latter (as auxiliary) does not support participle movement to form the mirative, unlike the imperfective auxiliary, as we saw in (27c).

In summary, we get the following paradigm regarding mirative forms: simple forms in imperfective and aorist cannot be miratives, but the imperfective auxiliary only allows for participle movement and thus, a mirative is formed. In Spanish not only the imperfective can be a mirative, but also the pluperfect (with an imperfective auxiliary), suggesting that C strongly conflicts with perfective/aorist forms. In Albanian, C selects perfect forms while in Spanish, C is compatible with imperfect, and indeed, this is preferred.

Before introducing my proposal regarding the Albanian aspectual system, I will try to account for the ban on perfective forms in miratives sentences.

3.1.2 Why does perfective aspect not get mirative readings?

So far, in our semantic analysis of miratives there is nothing to prevent perfective forms to become miratives. If perfective forms bear a [past] tense feature, then we can apply the same analysis: the past feature is interpreted in TP, and the proposition remains tenseless. There is something however, that can give us a hint. In the previous chapter, we suggest that the contextually salient past interval miratives ask for must *abut* the discovery time. We need a [past] tense feature that makes reference to an interval whose right boundary is the discovery time.[28] If only the [past] tense associated with imperfective (and some perfect forms) is able to do so, then, we can rule out the past perfective.

Perfective aspect is also banned cross linguistically [29] on counterfactual conditionals. Iatridou (2000) observes that the 'fake' past on counterfactuals

---

[28] This resembles Ippolito's [[perfect]] operator for counterfactuals.

[29] Bjorkman and Halpert (2011) show that in Palestinian Arabic, Polish and Russian, it is possible to have CF in perfective aspect. This data leads them to consider that the reason why CF do not allow perfective forms in several languages is because perfective does not bear a [past] feature unlike the imperfective. The past imperfective found in some languages (Greek, Romance) only specifies [past], and no aspect value, and that is why it s the preferred form for CF in such languages. For Palestinian Arabic, it is perfective that bears [past], and for Russian and Polish both imperfective and perfective are marked for [past], and thus, either form can be used for CF, keeping its real aspect interpretation. Although this account seems interesting, I won't pursue it here, since we will have to prove first that the *preterito*

is accompanied by imperfective aspect. Once you put perfective aspect, "the past becomes real". So, there is an incompatibility between 'fake' past tense or, in our terms, *displaced* real tense and perfective aspect.

The imperfect has been associated to the meanings of durative, continuous and indefinite, in contrast with the terminative, punctual and definite sense of the perfective Cipria and Roberts 2000: 300). It is also claimed (Bhatt 1999, Lenci and Bertinetto 2000, Cipria and Roberts 2000, Hacquard 2000) that the imperfect, unlike the perfective, has an intensional meaning, i.e. it contains a modal element into its meaning. This modal element accounts for the fact the imperfective aspect, in combination with modals, does not trigger 'actuality entailment', unlike the perfective (cf. Bhat 1999, Hacquard 2009).

So, if perfective has the meanings of terminative (the event is seen as completed) and punctual, this suggests that it always entails a past eventuality. If this happens, then, Iatridou's observation is accounted for. The perfective makes the 'fake' past real, in the sense that it 'gets trapped' in the proposition as a past interpretation of the eventuality denoted in the proposition. There's no possibility for the [past] in perfective to get displaced to another domain, unlike the imperfective. If this idea is in the right direction, then, it makes sense that i) miratives (and counterfactuals) cannot make use of past perfective for its modal domain, and ii) since perfective sees

---

or aorist are not specified for [past]. Moreover, it will predict that in a language in which the perfective has a [past] feature, then, a mirative could be formed based on that form. However, so far, cross linguistically, we don't find such a case.

the event as a subset of the reference time (and thus, the event is seen as completed/punctual), it does not provide the right interval for the modal base to hold. The set of beliefs in miratives holds in the [past] up to the point of the discovery time (this is signed by the abut relationship, in (30a). We don't want these to be 'punctual' beliefs in the past (30b). Given this requirement, the past imperfective (or the perfect) is the best choice for feeding the [past] feature in mirativity.

(30)

a.

$t[past]$ $t^{\bullet}$

b.
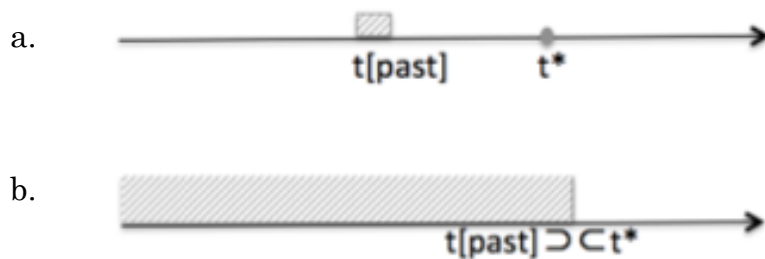
$t[past] \supset \subset t^{\bullet}$

3.1.3 i[past, unbounded]

I will implement this aspectual requirement on the past tense on miratives in terms of the set of syntactic features. I propose that C asks for a i[past, unbounded] feature. I am choosing the [unbounded] feature as the contribution of imperfective aspect, following a definition given by Pancheva (2003) in which [unbounded] sets up the event time as a superset of the reference time. [bounded] (the feature of perfective) sets up the event time as a subset of the reference time.

Now, in order to account for the difference between Spanish and Albanian, my claim is that this [unbounded] feature is not found in the Albanian imperfective, but rather only n the aspectual makeup of the past participle (perfect form). I list now some arguments in favor of this view.

First, we have seen above that the Albanian imperfective can get culmination readings (Newmark 1982). This is consistent with a third kind of viewpoint aspect, 'neutral', that has been claimed for several Slavic languages (Smith 1991); some of them (like Bulgarian) showing a tripartite morphological distinction (imperfective, perfective, neutral). The neutral aspect shares properties of both perfective/imperfective; so depending on the kind of predicates and adverbs it is combined with, it can trigger different readings. Pancheva's (2003) defines [neutral] along the lines of Smith (1991): aspect that makes reference to the beginning point of an eventuality but not the endpoint.

Second, perfect forms have been characterized as having either a universal (31a), or existential/experiential (31b), or resultative (31c) meanings. The examples are taken from Pancheva (2003:277).

(31)   a. Since 2000, Alexandra has lived in LA.
        b. Alexandra has been in LA (before).
        c. Alexandra has (just) arrived in LA.

Pancheva argues that these different readings can be obtained depending on the interaction between the perfect and viewpoint aspect. If

perfect combines with imperfective ([unbounded]) we get the universal reading: the interval introduced by the perfect is seen as a subset of the event time. If it is combined with [neutral] or [bounded] (perfective), we get the experiential reading: it asserts that the beginning of the event is included in the perfect interval or that the entire event is included in that interval. For the resultative reading, Pancheva adds an extra aspect, resultative, in order to achieve this meaning.

Now, Pancheva mentions that in some languages the availability of the universal reading depends on the aspectual make up of the perfect participle. Thus, for instance, Greek marks perfect participles as perfective, so the universal reading is not available. In contrast, Bulgarian has non-perfective participles (imperfective or neutral), so the universal reading is available.

Although more work is required, I will consider Albanian perfect participle as having the feature [unbounded]. This is suggested by the fact that the present perfect gets universal readings, as the following examples show (the past participle in bold, the adverb in italics):

(32)   a. Partia jonë **ka pasur** *kurdoherë* në qendrën e vëmendjes së saj
       zhvillimin e shkollës sonë të rë.
       'Our party **has** *always* **had** the development of our new school at the
       center of its attention.'

       b. Duhet ta dish ka *tre vjet* që ma **ka molepsur** mola shpirtin.
       'You should know that it's been (lit.'it has') *three years* that the
        moth **has infected** my soul.   (Newmark 1982: 72-73)

Pancheva also mentions that depending on the adverb modifying the perfect, we can get different readings. The universal reading is allowed by adverbs such as *since (2000), for 10 days now, ever since (2000).* Adverbs such as *before, 5 times, lately* modify the experiential perfect. The resultative reading is obtained with *just now*. A quick view on the adverbs that modify the perfect listed in the Albanian grammar (Newmark 1982) shows that they pattern with the universal reading rather than with the experiential one. We find adverbs such as *always, whenever, since that day, since then, from that week (up to today).*

In summary, since in both Spanish and Albanian (and cross linguistically), perfective/aorist is not accepted for miratives, I claim that the C needs a past tense feature, restricted by an [unbounded] feature. Now, what this feature selects as matching feature is language specific. In table 1, I present my aspectual classification for Albanian and Spanish. As we see, [unbounded] selects perfect in Albanian and Spanish, but also selects imperfective in Spanish. The Albanian imperfective is considered a realization of neutral aspect, which can explain why the Albanian imperfective can express perfective meanings as well, and why is not used for miratives. However, since it does not bear a [bounded] feature like the aorist, it does not block the raising of the participle, so that it can check its feature against C.

|	[bounded]	[neutral]	[unbounded]
Spanish	*pretérito*		imperfect ┊ (perfect)[30]
Albanian	aorist	imperfect	perfect

Table 1

3.2 Resolving the false predictions

We can now revisit the predictions the previous system made. Recall that we want only to allow perfect forms as miratives in Albanian, and to rule out completely the presence of an aorist form in a mirative (for example, as part of the auxiliary). Let us start first with the present mirative, based on the present perfect. The analysis of this is almost the same as before, with the difference that we add the [unbounded feature] to C, and to the participle. Once the participle moved, to avoid the present auxiliary blocking, Agree takes place. This is shown in (33).

---

[30] The Spanish present perfect has different uses across dialects. In some of them (Peninsular, esp. Madrid) it is used instead of the simple past (*pretérito*), so it may take perfective values. In other dialects (American Spanish), the connection with the present is needed. For a comprehensive review of the uses of the present perfect across Spanish dialects, see Westmoreland (1988).

(33)
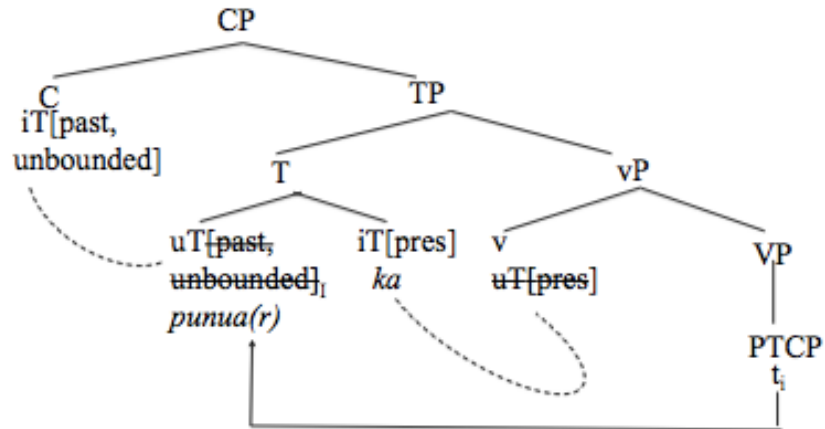
With this derivation in mind, we can resolve the first wrong prediction. For sake of simplicity, let us put together the Tense and Aspect functional projection together, as T/Asp. T/Asp in the simple imperfective sentence bears [neutral], not [unbounded], and as such, even if the u[past] on v moves to that head, Agree won't take place. There is no way for C to agree directly with T/Asp, in a sentence with a simple past imperfective verb form, since T/Asp does not have the matching aspectual feature. Thus, a simple past imperfective form such as *kisha* cannot be a mirative in Albanian, given that it is [neutral], and not [unbouded] as the [past] on C requires. In absence of a perfect form, C cannot license its mirative feature, and the derivation crashes, as we see in (34).
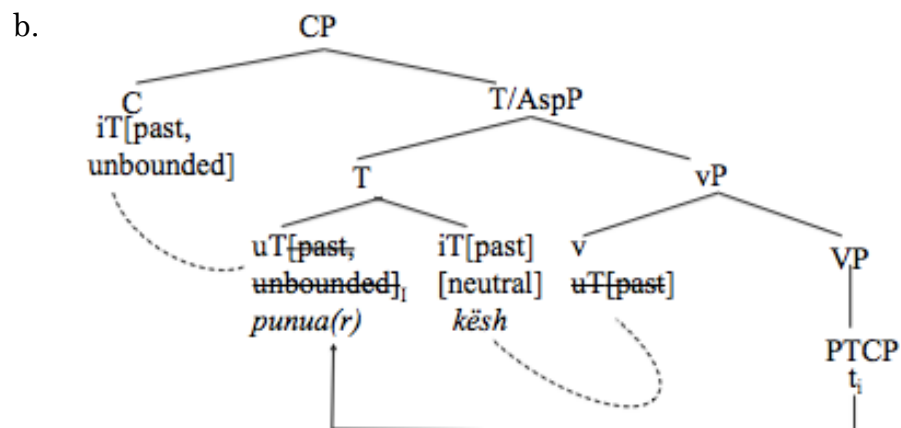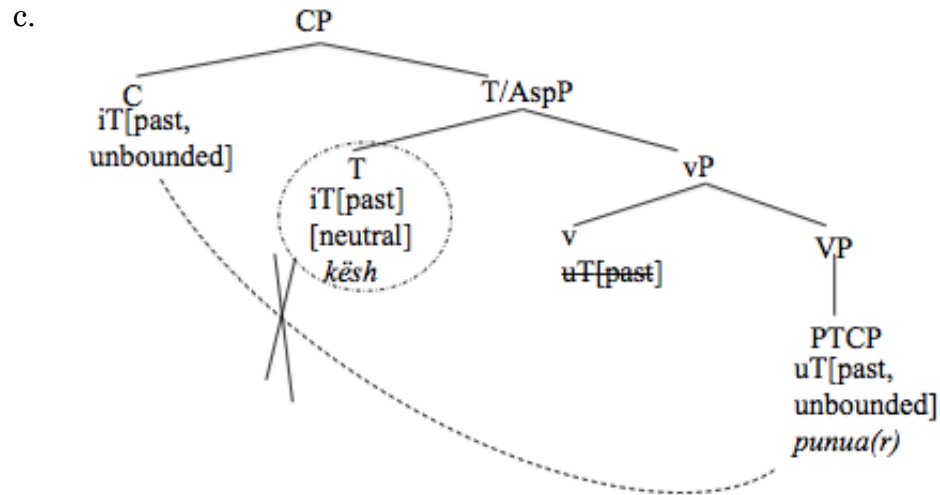
(34)
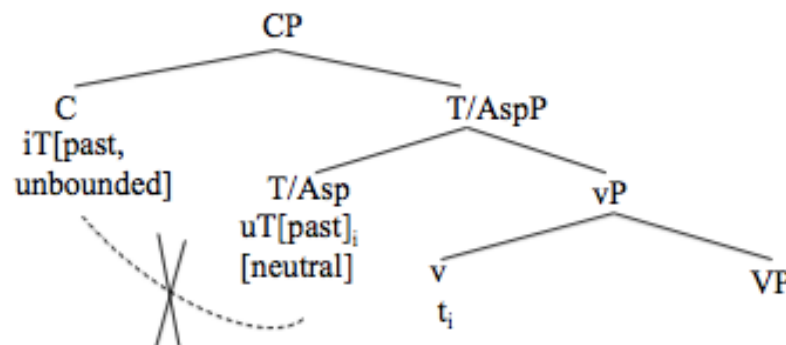
The same idea applies for the simple aorist form: it does not bear [unbouded], but rather [bounded], a feature that is not required by C in miratives.

The second wrong prediction was that a pluperfect form, with the auxiliary in past imperfective can be a mirative without movement of the participle. This is also out because C probes for [past, unbounded], again, the auxiliary on T/Asp does not have the matching feature. We need the participle, which bears the needed feature, to raise to T in order to agree locally with C, so that intervention is solved. The derivation for (35a) is shown in (35b). (35c) shows a structure without movement, in which Agree cannot take place between C and the participle, and therefore, it is ungrammatical, as a mirative.

(35) a. Pjetri punua-kësh
         Pjetri work.PTCP-AUX.IMPF.3SG
         'Pjetri used to work!'

   b.

c.

```
                        CP
          ┌──────────────┴──────────────┐
          C                          T/AspP
      iT[past,              ┌────────────┴──────────┐
      unbounded]          ⟨ T ⟩                     vP
                         ⟨iT[past]⟩          ┌────────┴────────┐
                         ⟨[neutral]⟩         v                 VP
                         ⟨ kësh ⟩         uT[past]             │
                                                              PTCP
                                                              uT[past,
                                                              unbounded]
                                                              punua(r)
```

Now, we still have to explain why participle movement cannot take place when the auxiliary is an aorist form. I believe that this has to do with a clash between having [unbounded] and [bounded] features, in the same node. In contrast, since [neutral] allows for imperfective reading, [neutral] and [unbounded] can be compatible. (36b) shows the failed derivation of a form such as (36a), which is a mirative form based on an aorist.

(36)   a. *La-pata (from 'pata larë', the pluperfect with aorist auxiliary)
            wash.PTCP-AUX.AOR.3SG
            'He has washed!' (mirative)

b.
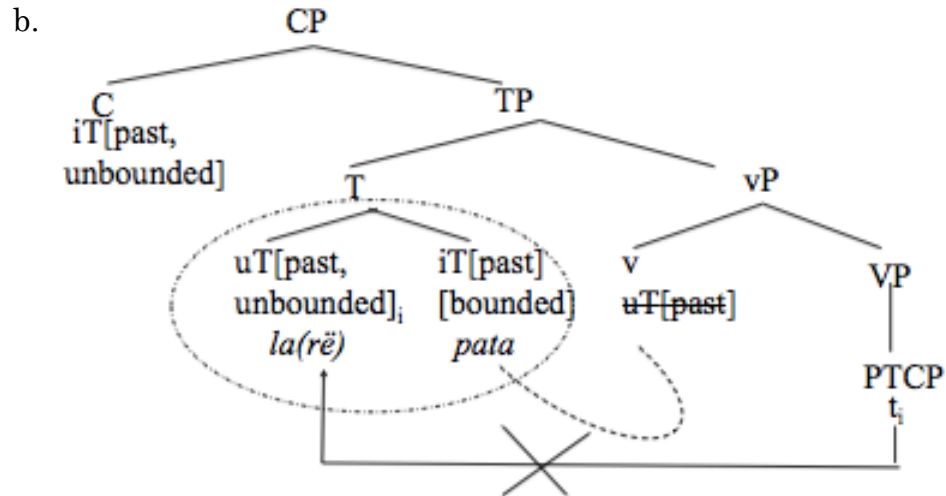
To conclude this section, let me go over the full mirative paradigm of Albanian in order to show how my analysis accounted for it. In Table 2, I copy the paradigm presented in Friedman (2000:342). The mirative forms are contrasted with the indicative forms.

	Indicative	Admirative
Present	*kam*	***paskam***
Perfect	*kam pasur*	***paskam pasur***
Imperfect	*kisha*	***paskësha***
Pluperfect (impf.)	*kisha pasur*	***paskësha pasur***
Double Perfect	*kam pasë pasur*	*paskam pasë pasur*
Double Pluperfect	*kisha pasë pasur*	*paskësha pasë pasur*
Aorist	*pata*	_____
2nd Pluperfect (aor.)	*pata pasur*	_____

2nd Double Pluperfect (aor.)	*pata pasë pasur*	_____

Table 2

I put in bold the forms Friedman acknowledges as the more common mirative constructions. The mirative double perfect and double pluperfect are considered to be marginal in modern language (Friedman 1986: 180). In the table, we observe that there are no mirative forms based on the aorist, and that is accounted for by my analysis, given that the aorist's [bounded] features clashes with the [unbounded] feature required by the mirative. The attested mirative forms are accounted form by movement of the participle (the closest one in complex forms) to T in order to Agree locally with C. Both the present and imperfect auxiliary (*kam* and *kisha*) are considered to be intervenors between C and the participle, but given that they do not carry a fatal [bounded] feature, movement is still possible to fix the blocking. Finally, even if rare, one may wonder about the marginal double perfect and double pluperfect miratives that do not seem to have an attested indicative form to be derived from. Although rare, I assume that these are valid mirative forms, and I also assume that they are based on (possible) forms with three participles: *kam pasë pasë pasur*; *kisha pasë pasë pasur*.

3.3 Summary

In this section, I accounted for the requirement Albanian miratives present, namely, the obligatory presence of perfect forms. This account is strongly linked to the general ban on perfective forms in miratives. First, I have proposed that the [past] tense on miratives makes reference to a contextually salient interval that is seen as extended, and that abuts the discovery time. The aspectual forms that allow this view are the imperfective and the perfect, but not the perfective. Following an account from Pancheva (2003), I claimed that the Albanian perfect participle bears an [unbounded] feature, while the imperfective bears [neutral]. Since C in miratives asks for [past, unbounded], the restrictions on miratives forms are explained.
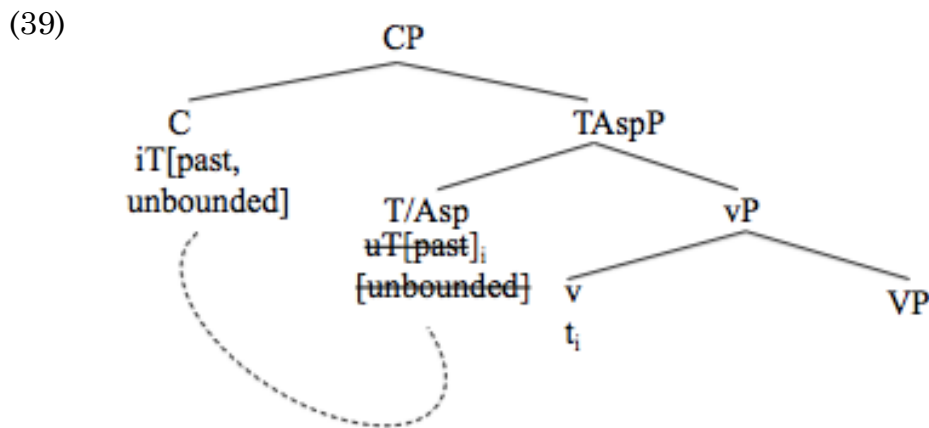
4. Extensions to other languages

In this section, I provide a syntactic account for the Spanish miratives, building on the discussion above. I also discuss the case of Bulgarian, and I take a quick look on another languages such as Hare, Korean, and Arumanian.

4.1 Spanish

I repeat below the basic Spanish data. As we see both mirative forms have imperfective morphology, whether on the main verb or the auxiliary.

(37) Juan fumaba
      Juan smoke-<u>PAST.IMPF</u>.3SG
      'Juan smokes!'

(38) ¡Juan había   fumado!
   Juan <u>AUX.Past IMPF</u>.3SG   smoke.PTCP
      'Juan smoked!'

In order to account for these two forms, I propose that in both cases, the imperfective form bears the [unbounded] feature. v bears u[past], and it moves to T/Asp (as in the standard derivation for the declarative counterpart). Once these two features are in T/Asp, C checks its feature against it. I assume that the T/Asp node also bears the relevant features for its interpretation in the assertion (such as an operator for habitual or generic meanings). We see now how it is possible for the imperfect in Spanish to get a mirative reading. This is shown in (39).

(39)

```
                        CP
                   /         \
              C             TAspP
          iT[past,         /       \
          unbounded]   T/Asp        vP
                       uT[past]ᵢ   /    \
                       [unbounded] v      VP
                                   tᵢ
```

For the pluperfect mirative in Spanish, we have first to rule out movement of the participle. Since the auxiliary already bears imperfective

morphology, we assume that it also bears the [unbounded feature] in Spanish. In that respect, the derivation is similar to the simple imperfect. The past reading these miratives get (even in statives, as seen in the previous chapter) is due to the past participle which remains in the proposition together with its additional tense layer T2, as shown in (40). Since Agree happens locally between the feature in C and the features in T, then there is no need for movement of the participle to take place, as in Albanian.

(40)
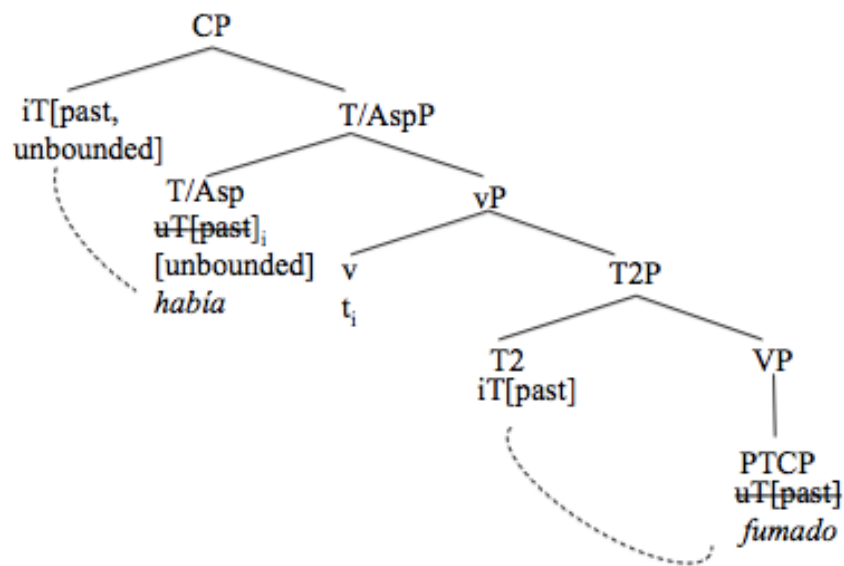
Similar to Albanian, we also rule out both the *pretérito* (the simple past perfective) and the *pretérito anterior* (the past perfect, with the auxiliary in perfective morphology), since these forms have a [bounded] feature which is not allowed in miratives.

Finally, I will attempt here to answer why in Spanish, the imperfect mirative does not take the progressive meaning, as we mentioned in the previous chapter. The progressive or ongoing meaning of the imperfect arises when it is appropriately framed as in (41).

(41) Juan cantaba   mientras yo cocinaba.
      Juan sing-PAST.IMPF.3SG   while   I cook-PAST.IMPF.1SG
      'Juan was singing, while I was cooking'

However, even with this temporal framing, the mirative does not get a progressive interpretation as shown in (42).

(42) # Dormias   mientras yo trabajo!
       sleep-PAST.IMPF.2SG while   I   work.PR.1S
       'You are sleeping while I am working!'

Counterfactuals that make use of imperfective morphology also do not get the progressive reading (Iatridou 2000, Anand and Hacquard 2009, Ferreira 2011), which leads Iatridou (2000) to propose that aspect in CF is 'fake', since the imperfect does not mean progressive. As we see, Iatridou is treating the progressive as the core value for the imperfect. We also know that the feature [unbounded] applies to the progressive. So, we can split the imperfect into the following values[31]:

---

[31] This approach, the one that assumes different operators for the imperfect, is explored by Hacquard (2006). She departs from the idea of a single Imperfective operator, but rather independent ones for each use (including the counterfactual use).

(43)   a. progressive : [unbounded]

      b. generic: GEN operator

      c. habitual: HAB operator

Assuming that the Aspect node can have any of these three values, it is only the [unbounded] feature that is *displaced* to the C domain, so that it gets interpreted there and not in AspP. The aspect node is left then only with the values of generic and habitual, and this explains why the ongoing reading is ruled out[32]. This is sketched in (44)

(44)
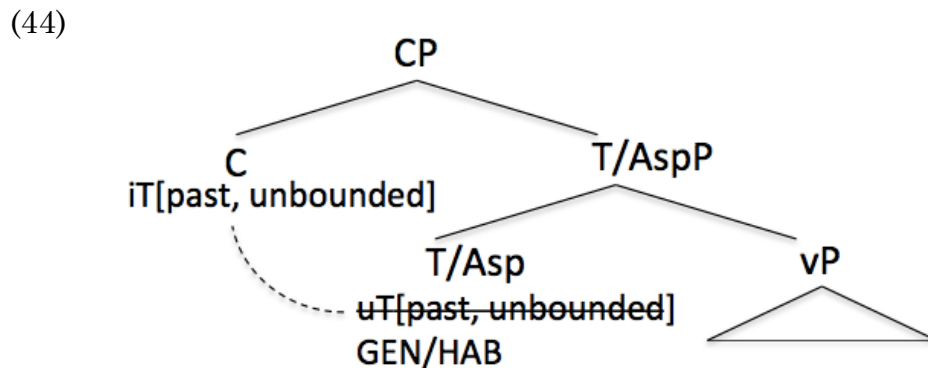
It is possible for the mirative to get a progressive reading, but not through the simple imperfect, but rather via a gerundive construction as in (45). In this case we can say that there is an overt progressive feature (spelled out in the -ing form) in a lower Aspect head. [33]

---

[32] See Ferreira (2011) for an explanation of why the progressive reading is ruled out in counterfactuals with imperfect morphology.

[33] In Albanian, it is needed a progressive particle *po* to get the ongoing interpretation in the mirative. However, unlike Spanish, the Albanian imperfect by itself rarely can be used with

(45) Estabas   trabaja-ndo
      be.<u>PAST.IMPF</u>.2SG   work-PROG
      'You are working!'

4.2 Bulgarian

In Bulgarian, the present perfect can be used as a mirative, as well for evidential uses, as shown in (46).

(46)   Ti   si   bi-l   visok!
        2SG   AUX.2SG   be.IMPF-PTCP tall
        'You are tall (to my surprise)' (Ivanova 2007:01)

(46) can be seen as a problem for our analysis, since the auxiliary with present tense feature is a possible intervenor for Agree between C and the participle, and no participle movement takes place. In this respect, Bulgarian behaves syntactically like Spanish, but as in Albanian, its mirative is based on the (imperfective) participle. The issue here is how Agree works in Bulgarian mirative.

My proposal is that the present auxiliary in Bulgarian is defective in T/Asp features, and this makes it possible for C to Agree directly with the participle, so no movement is necessary. This is supported by the following facts.

First, in the third person, the auxiliary verb is omitted (47).

---

a progressive meaning. It also needs the particle *po* in order to convey such meaning (Newmark 1982:69).

(47)   Toj chetjal!
       3SG read-IMPF.PTCP
        'He can (has the ability to) read!'   (Ivanova 2007:07)

According to some Balkanists, only this construction represents the evidential (same form as the mirative), and the participle marker -*l* is reanalyzed as the evidential marker. However, it is possible to get evidential/mirative meanings in all forms, and moreover, it is also possible to get auxiliary deletion in declarative sentences. (Friedman 1986).

Second, auxiliaries in Bulgarian have been analyzed as second position clitics (Legendre 1998, Tomic 2006). This explains why when the subject is phonologically null, the participle comes before the auxiliary (48b), while when the subject is overt, the auxiliary precedes the participle (48a). The examples below are taken from Legendre (1998).

(48) a. Az sŭm   mu   go dal
         I   have-1 to-him it given
         'I have given it to him'

     b. Dal   sŭm   mu   go
        given have-1 to-him it
        '(I) have given it to him'

Putting all this together, I claim that in Bulgarian, the present auxiliary in Bulgarian is defective, and thus not visible for Agree. This 'transparency' for Agree operations leads to cliticization in PF, and thus, it is not visible for syntactic operations such as Agree. (49) shows the derivation

for the Bulgarian mirative. The auxiliary is not visible, and thus Agree between C and V can happen directly.

(49)
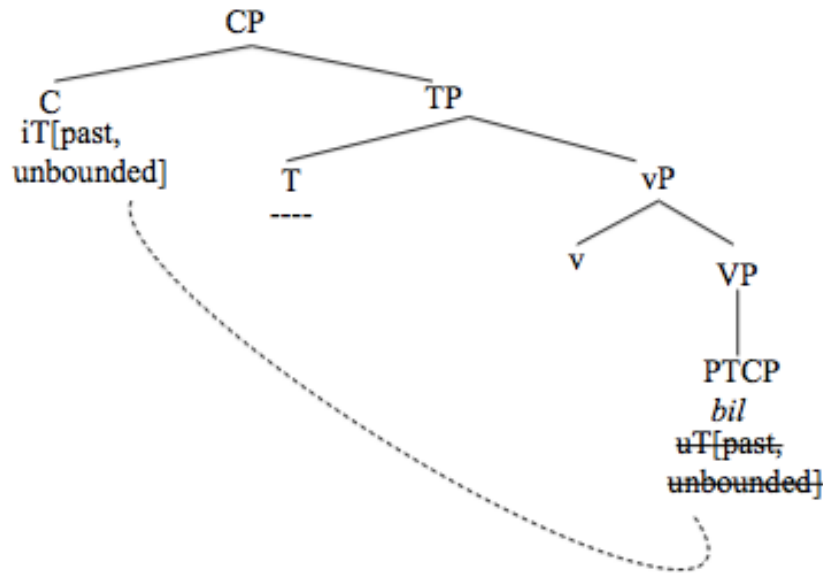
Now, since both features of the participle (past/perfect) are interpreted in C, the proposition remains tenseless, so we predict that the default reading for these constructions will be only present statives and habitual meanings, which is borne out (cf. Ivanova 2007).

Although the reportative evidential can be formed based on both aorist and imperfective past participle stems, only imperfective stems are allowed for the mirative, as expected. Furthermore, the past perfect is not a mirative: first, the past auxiliary is not a clitic (Legendre 1996), and second, it is based only on the aorist participle stem (Tomic 2006), which conflicts with mirativity, as we pointed out above. This adds more evidence to the proposal that a particular aspectual feature is needed for miratives. What we have

proposed for the Albanian participle, i.e. that it bears an [unbounded] feature, becomes explicit in Bulgarian, since the Bulgarian participle distinguishes between non-perfective and perfective forms. Only the former is allowed in miratives.

Finally, it is interesting to point out that in some Andean varieties, as for example, in Ecuador (Palacios 2005), the present perfect can get mirative meanings, similar to Bulgarian, as is shown in the following example.

(50) Vi   a Felipe y   ha   estado   casado
      see.PFV.1SG to Felipe and AUX.PR.3SG be.PTCP married
      'I saw Felipe and turns out he's married' (Palacios 2005: 49)

We can explain (50) by splitting Spanish in two dialects with respect to the present perfect. In one dialect, the participle bears an [unbounded] feature, and thus is compatible with miratives; in another one this is not the case.

However, we also need to account for the fact that the present auxiliary is not an intervernor, as in Bulgarian, in contrast to Albanian. More evidence is needed to support this idea, and also we will expect only statives/habitual meanings to be interpreted in this present perfect miratives[34].

---

[34] Hintz (2008) gives examples of the present perfect as miratives in Andean Spanish that include eventive verbs. However, she characterizes these examples as expressing 'emotive' surprise (such as anguish or shame), which is not really the kind of mirative meaning we are analyzing here.

4.3 Hare

DeLancey (1997) sees the independent particle *lõ* in Hare as a mirative marker. However, it is notable that the mirative reading only arises when combined with an imperfective verbal form (51a). If the verb is perfective, as we see in (51b), there is a normal past interpretation, and it also triggers an evidential (inferential) reading, but not a mirative one.

(51)   a. Mary e-wé'   ghálayeyida *lõ*
         Mary its-hide   work.PFV   *lõ*
         'Mary worked on hides'

       b. Mary e-wé'   ghálayeda   *lõ*
         Mary its-hide   work.IMPF   *lõ*
         'Mary is working on hides'

(51a) can be uttered in a context in which the speaker sees Mary covered with moose hair. (b) is appropriate when the speaker has seen directly that Mary was working on a hide, but this was something not expected. I would like to suggest that in Hare, *lõ* is a direct spell out of [mirative] feature on C only when licensed by the [past, unbounded] feature given by the imperfective in T/Asp. We have the configuration in (52):

(52)
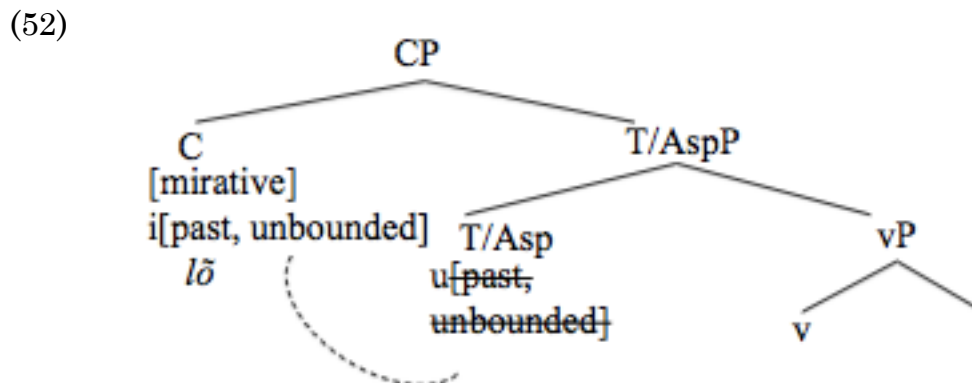
4.4 Arumanian

Friedman (1994) describes a dialect of Arumanian[35] spoken in the Macedonian-Albanian border (the village of Gorna Belica). This dialect has been in contact with Albanian, and as such, it has borrowed the present auxiliary *ka* as a marker of mirativity:

(53) Tini fus-**ka**   dus   Bitol!
      you have.been-**ka** to   Bitol
      'Oh you have been to Britol!'

Interesting enough, Arumanian participles can be aorist or imperfective; the borrowed marker *-ka* (mostly) uses the imperfect base. This is of course related, as Friedman points out, to the fact that in Albanian the aorist is not good with mirative. According to Friedman, the Arumanian mirative is based on both a borrowing (*-ka*), and a calque of the participial base.

Since *ka* is spelled out next to the verb, my proposal is that C agrees with a T/Asp phrase that spells *ka* as a mirative feature. However, C still needs the [past, unbounded] feature, as in Hare, and that comes from the participial form. The participle raises to T/Asp to attach to *-ka* , and together agrees with C. This is sketched in (54):

---

[35] Arumanian (or Aromanian) is a Romance language spoken in Southeastern Europe. It is similar to Romanian, with the difference that Arumanian has been strongly influenced by Greek, while Romanian has Slavic influence.
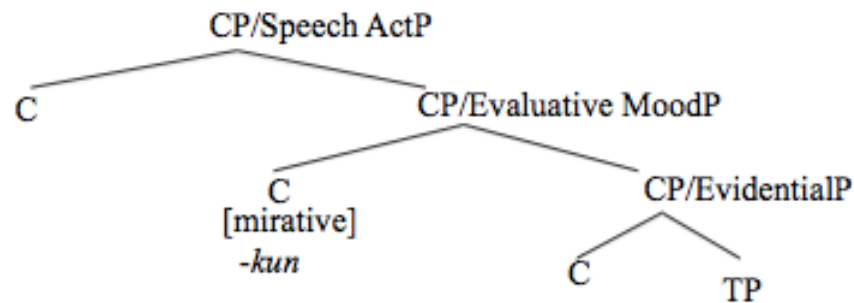
(54)
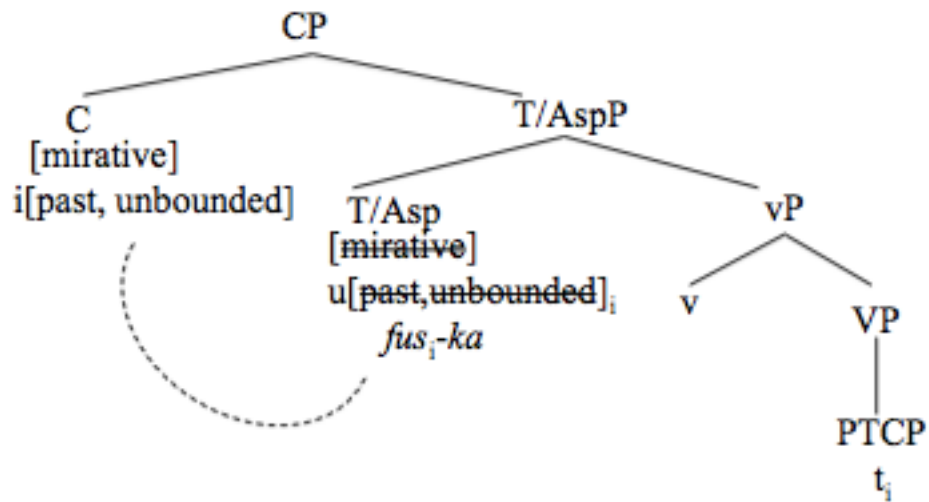
4.5 Korean

Korean's suffix *-kun* has been analyzed as a mirative marker (DeLancey 1997, Cinque 1997). It is one of a class of suffixes whose position in the verb is between the speech mood and the evidential suffixes. Cinque calls the set of suffixes *-kwun* belongs to "evaluative" mood suffixes. An example is given in (55).

(55) a. Ku say-ka   cwuk-ess-keyss-**kun**-a!
      that bird-NOM   died-ANT-EPISTEM-*kun*-DECL
      'That bird must have died!'   (Cinque 1997:53)

  b. chelsu   naka-ss-na-po-*kun*
     Cheolsu go.out-PR-INFERENTIAL-*kun*
     'Cheoulsu must have gone out!'   (DeLancey 1997)

(55a) shows that the suffix is placed before the speech act suffix, while (55b) shows that it is placed after the evidential suffix.

For Korean, assuming that the analysis of *-kun* as a mirative is correct, I propose that *-kun* is a direct spell out of a mirative feature on C. Following Cinque's analysis, an expanded view of the CP domain has a speech act phrase, an evaluative phrase (the mirative, in this case), and an evidential one. This is sketched in (56). This distinction between a higher speech act projection and a lower mirative projection (both in the C domain) will come in handy when we compare exclamations with miratives, in chapter 4.

(56)

```
                    CP/Speech ActP
              _____/          _____
            C                    CP/Evaluative MoodP
                            _____/            \_____
                          C                     CP/EvidentialP
                      [mirative]              ___/        \___
                        -kun                 C              TP
```

4.6 Summary

In this section, I have extended the analysis originally proposed for Albanian to other languages. The languages discussed here show that the [past, unbounded] feature is needed on C. This can be fed by the imperfective form, in which case there is no need of moving the participle (Spanish), or by the presence of perfect forms (Albanian, Bulgarian). Other languages confirmed the idea of a [past, unbounded] feature needed to license the mirative feature on C even if C spells out directly as a morpheme (Hare)

having a [mirative] feature, or if such feature is spelled out in T/Asp (Arumanian). Finally, Korean shows that it is possible to spell out a mirative feature on C, supporting the idea of the covert operator *M* proposed in the previous chapter.

5. Conclusion

This chapter began by presenting the syntactic puzzle Albanian poses for mirativity. As in other languages, Albanian makes use of the 'fake' past tense stratategy to form miratives, but unlike these other languages, it shows overt movement of the past participle in the mirative paradigm.

I argued in section 2 that this movement takes place in order for the participle to Agree with the tense feature on C. There must be a local Agree relation between C and T, which is interrupted by the present tense auxiliary. I follow a reverse Agree version, which allows C to bear an interpretable feature that probes for an uninterpretable feature on a lower goal. The participle movement happens in order to create the right local Agree configuration, without intervenors. However, my system predicted that there could be cases in which such participle movement is not necessary, and this is not supported by the Albanian paradigm.

In section 3, I accounted for these unpredicted cases by adding aspectual features into the system. Basically, I argue that the [past] tense

feature on miratives generally needs to be restricted by an [unbounded] feature. This feature can be matched by the imperfective aspect in Spanish, and by the perfect in Albanian and Bulgarian, by not by so-called imperfective in Albanian (that is really an instance of neutral aspect). This adjustment explains the following. First, participle movement is always necessary for miratives in Albanian, since it carries the right aspectual feature for C. Second, the imperfect can be a mirative in Spanish, but not in Albanian and furthermore, the pluperfect, since it has an imperfect auxiliary, can also be a mirative without participle movement. Finally, the perfective and the aorist are not allowed in miratives in any language, not even in conjunction with participle movement in Albanian. I extended the account to some other languages in section 4.

Chapter 4

Mirativity's next of kin

0. Introduction

The previous chapters have dealt with miratives in a way that treats them as modalized propositions. The semantic analysis reveals a close relationship between miratives and counterfactual constructions, having as key factor the morphological ingredients both phenomena share. Moreover, I have analyzed the modal component of miratives in the shape of a counterfactual conditional.

However, miratives have been connected with the sentence type of exclamations (DeLancey 2001, Rett 2011, Smirnova 2012). A familiar way to express surprise in natural languages is through exclamations, which consist of declarative sentences uttered with a certain intonation that marks exclamatory force. Another way is with exclamatives, sentences with special grammar that also bear exclamatory force. In terms of use, exclamations and exclamatives are like miratives in that they can also mark the speaker's

surprise due to unexpected information. DeLancey (2001), points out that English has a 'mirative intonation contour' that has the same function as in the mirative constructions he analyzes in languages such as Hare. What he calls the 'mirative contour' is the rising intonation one we find in exclamations. His position, then, is that mirativity is a universal semantic category that has been grammaticalized in some languages, whereas in others, like English, it is marked through intonational means. Rett (2011) also points out that mirativity markers in some languages can have the same discourse function as exclamations, since, according to her analysis, exclamations make reference to speaker expectations. Given this parallelism of usage, one may wonder whether a better way to capture the semantics of mirativity is in the same way that has been proposed for exclamations.

In the first part of this chapter, I argue for an analysis that distinguishes miratives from exclamations and exclamative constructions. I do this by examining first some properties that help to distinguish them such as intonation pattern, embeddability and degree restriction; and second, by presenting some contexts in which an exclamation, but not a mirative can be felicitous. Based on this data, I claim that the mirative is a type of assertion rather than a type of exclamation, and thus, cannot be analyzed in the same terms. In a nutshell, I propose that while exclamatives and exclamations express emotive meanings, among them, surprise due to violation of speaker's expectations, miratives are assertions that include a modal component. I also

discuss predictions of this analysis, such as the possibility of combining exclamations/exclamatives with miratives.

Having presented the 'false' relative (exclamations and exclamatives), I next present what I consider the true kin of miratives, i.e counterfactual conditionals. I focus mainly on the morpho-syntax of conterfactuals and miratives, showing that a unified analysis is possible for these constructions, strengthening the comparison already established in chapter 2. First, I display the basic observations regarding the meaning and morphology of these clauses. Second, I present Bjorkman's (2011) syntactic analysis of counterfactuals, showing that it makes use of essentially the same Agree relationship between C and T/V I proposed for miratives in the previous chapter. Third, I discuss the role of mood in distinguishing miratives from counterfactuals, following an approach by Grosz (2011). Then, I present my overall syntactic analysis for counterfactuals and miratives. I extend this analysis to new data in Albanian, showing that a counterfactual-like analysis of miratives can account for the new data, whereas an exclamation-like one cannot. Finally, I discuss some issues related to the interaction between the subjunctive mood and miratives in embedded contexts.

PART 1 **The false kin: exclamations**

1. Exclamations and Exclamatives

In this section, I first describe properties of both exclamations and exclamatives. Then, I review a couple of accounts that treat these two phenomena in a unified way.

1.1 Properties

Exclamations have the form of declarative sentences but bear exclamatory force due to the presence of rising intonation contour, as we can see in (1a), in Spanish or in (1b) in English.

(1)   a. ¡Eres   alto!
         be.PR.2SG   tall
        'You're tall!'

    b. (Wow,) John writes good songs!

Notice that there is no presence of 'fake' past morphology in these examples. Other than intonation, there is no overt grammatical cue to distinguish exclamations from ordinary declarative sentences.

In contrast, exclamative sentences have special grammar including the use of wh-clauses (2), and nominal clauses (3)[36]. It is also possible in English to have exclamative constructions with subject-auxiliary inversion such as (4).

---

[36] See Alonso-Cortés (1999) for a full description of exclamative constructions in Spanish.

(2)   a. ¡Qué   alto   eres!
            what   tall   be.PR.2SG
           'How tall you are!'

       b. How cute these cats are!

(3)   a. El   ruido que   hace!
           the noise what make.PR.3SG
           'That noise it's making!'

       b. The strange songs he writes!

(4)   a. (Boy,) Is he tall!

In what follows, I will focus on wh-exclamatives[37] and exclamations, using Spanish data.

As reported in the literature (Elliott 1971, 1975; Gutiérrez-Rexach 1996; Zanuttini and Portner 2003; Rett 2011, among others) exclamatives have a degree restriction. As a result, they are compatible only with degree adjectives such as *tall* (5), verbs that admit gradation (6), or wh-words that indicate degree (7), such as *Cuánto* 'how much'.

(5)   ¡Qué alto   es   Juan!
       what tall   be.PR.2SG Juan
       'How tall John is!'

(6)   ¡Cómo   corre   Juan!
       how   run.PR.3SG Juan
        (Look) How John runs!'

---

[37] Although the various types of exclamatives share many properties, there are also differences. See for example McCawley (1973) for differences between inversion exclamatives and wh-exclamatives.

(7)   ¡Cuánto   fuma   Juan!
        how much   smoke.PR.3G   Juan
        lit. How much John smokes

Exclamative sentences with no degree element turn out to be ungrammatical, as the examples (taken from Alonso-Cortés (1999)) in (8) show.

(8)   a. *Qué   un   mes   tiene   el   niño!
          what one month have-3SG   the   kid
          lit. ´What a month the kid has!'

        b. *Que 40 kilos   pesa!
          how 40 kilograms   weigh.3SG
          lit. 'How 40 kilograms he weighs!'

        c. *Qué al norte   está Santander!
          how north   is   Santander
          lit. 'How to the north Santander is!'

Exclamations, in contrast, don't have this restriction. In this, we observe they pattern with declarative sentences. Thus, it is possible to have a sentence with no degree element, as we see in (9).

(9)   (Oh,)   ¡Juan fuma!
       (wow,) Juan smoke-PR.3SG
       (Wow), John smokes!

Another difference between exclamations and exclamatives is their status regarding embedabbility. Although there is some debate in the literature (cf. Rett 2011), it is assumed that examples like (10) show that it is possible to embed exclamatives under certain predicates. Exclamations, in contrast, lose exclamatory force, once they are embedded, as shown in (11).

(10) Ya   veo   cuánto   fuma   Juan.
      already see.PR.1SG how.much smoke.PR.3SG John
      lit. I already see how much John smokes

(11) Ya   veo   que #¡Juan fuma!
      already see.PR.1SG   that   Juan smoke.PR.3SG
      #I see that John smokes!

Finally, exclamations and exclamatives present distinct intonation contours. Wh-exclamatives have a high tone (H) on the wh-word and then a falling contour (Navarro Tomás 1948). Exclamations have a rising intonation, with high tone in the last stressed syllable (Sosa 1999). The same generalizations hold for English (Elliot 1971, McCawley 1973).

Exclamations have been understudied, unlike exclamatives. This is possibly due to the fact that exclamatives display a special grammar that calls for an account. However, and despite their differences (degree restriction, embeddability, intonation contour), recent accounts have treated both exclamatives and exclamations as belonging to the same category. In the next section, I review these analyses.

1.2 Theoretical background

As already mentioned, the literature on exclamations (Elliot 1979, Zanuttini and Portner 2003) has been concerned mainly with exclamatives or sentence exclamations that bear some degree element, such as 'such' or 'so'. Thus, sentences like 'She is so beautiful!' or 'She wears such expensive

clothes' have been subsumed under the sentence type of exclamatives, but not

sentences like 'She is beautiful!'. As far as I can tell, Gutiérrez-Rexach (1996)

is the first to consider sentences like (12) as 'genuine exclamative

expressions'[38], since in these sentences, as in degree exclamatives, 'the

speaker is expressing an emotive attitude towards the content of the

utterance'. (Gutiérrez-Rexach 1996:148-149).

(12)   a. You have turned your homework in on time!

        b. John is really funny!

He acknowledges that in form, they do not differ from declarative sentences,

but an analysis that not take in account the different illocutionary force of

exclamations cannot explain the difference between (13a) and a mere

declarative (13b).

(13)   a. John found my book!

        b. John found my book.

Rett (2011) also considers sentence exclamations and exclamatives as

part of the same type of speech act, exclamation. Both Gutiérrez-Rexach and

Rett account for the exclamatory force of these sentences by proposing a

speech act operator (EXC for Gutiérrez-Rexach, E-Force for Rett), that turns

---

[38] Gutiérrez-Rexach mentions that Lewis (1972) gives this example *Hurrah for Porky!* as a type of exclamative, but he also notes that it's difficult to account for this sentence in his model, given that it does not express a complete proposition.

propositions into exclamations. For wh-exclamatives, Gutiérrez-Rexach adds the degree restriction in the scope of the operator, while Rett includes this restriction in the denotation of wh-phrases. In the next sub section, I review these two accounts.

1.2.1 Gutiérrez-Rexach 1996

Gutiérrez-Rexach proposes an illocutionary force operator EXC that turns propositions into exclamations. Its definition is given in (14).

(14)   Let a be the speaker, w a world (typically the actual world), p a proposition, and P $\in$ *EMOT* (the set of emotive properties). Then,

   $EXC = \lambda a \lambda w \lambda p \; \exists P \; [P(w) \; (p)(a)]$

EXC relates the speaker to the proposition, via the set of emotive properties P. If the speaker and the proposition belong to this set, then EXC (speaker) (world) (proposition) holds. When the speaker utters 'John found my book!', as an exclamative sentence, "the speaker is expressing an emotive attitude (surprise, admiration, amazement) towards the fact that John found his book" (p. 154). The denotation for 'John found my book!' is given in (15).

(15)   *EXC (a) (w) ($\lambda w'$[find (w') (my book) (John)] (w)) iff*

   EXC (a) (w) (find (w) (my book) (John)) iff

   $\exists P \in EMOT \; [P(w) \; (find \; (w) \; (my \; book) \; (John))(a)]$

The emotive attitude can be surprise, among others; in that case (16) holds:

(16)   ⟦*EXC* (*a*)(*w*)(*find* (*w*)(*my book*)(*John*))⟧ = 1 iff ⟦*Suprirse* (*w*)(*find* (*w*)(*my book*)(*John*)) (*a*)⟧ = 1

The operator EXC also applies to wh-exclamatives. The difference consists is that it applies to a proposition that includes the degree restriction, as we see in (17b), which is the full denotation of the exclamative sentence in (17a).

(17)   a. How tall John is!

b. *EXC* (*a*) (*w*) (λ*w'*[ι*d*[tall (*w*) (*j*) (*d*)] (*w*)] = ι*d*[tall (*w'*) (*j*, *d*)]]) iff

∃P ∈ *EMOT* [P(*w*) (λ*w'*[ι*d*[tall (*w*) (*j*, *d*)] = ι*d*[tall (*w*) (*j*, *d*)]]) (a)]

Informally, (17b) reads as 'the speaker expresses an [emotional] attitude towards the fact that John is *d*-tall, where *d* is degree of tallness'. Now, in order for (17a) to be felicitous the degree of tallness has to be greater than what the speaker expected. Gutiérrez-Rexach accounts for this via an implicature; so it is not encoded in (17b).

1.2.2 Rett (2011)

Rett also puts together exclamations and exclamatives as being the same type of speech act, namely, exclamations, which is a type of expressive.

Both constructions express speaker's violation of expectations, but there are differences in how this content is expressed.

In Rett's account, exclamations assert that *p* but also express that *p* violates speaker's expectations. Like Gutiérrez-Rexach, Rett proposes an illocutionary force operator for exclamations that is a function from propositions to expressive speech acts. I copy her operator E-force in (18).

(18)   E-Force (*p*), uttered by s_C, is appropriate in a context *C* if *p* is salient and true in w_C. When appropriate, E-Force (*p*) counts as an expression that s_C had not expected that *p*.

As we see, Rett's operator, although similar, differs from Gutiérrez-Rexach in that its expressive content is limited to the speaker's violation of expectations, and as this is encoded directly in the operator's definition. This seems problematic, since it is possible, as we see in (19), to explicitly state that no speaker's expectation has been violated. Rather this sentence expresses the speaker's anger or frustration towards an event that occurs often (hence is expected). It seems that exclamations allow for a wider range of expressive meanings, and thus, Gutiérrez-Rexach's operator EXC seems better to capture the emotive attitudes the speaker expresses by uttering exclamations.

(19)[39]   You overslept again! ... which was, of course, to be expected.

---

[39] Example taken from Grosz (2011).

Turning to exclamatives, these sentences, unlike exclamations, exclaim that *p,* and the utterance expresses that *p* has violated speaker's expectations. They are subject to the degree restriction; they are only felicitous when they exclaim that the degree of some property is higher than what the speaker expected. In order to apply the operator E-force to exclamatives, Rett first turns exclamatives into propositions by assigning, via context, an argument for the degree property denoted by the wh-clause. Informally, a sentence like 'How tall John is!' expresses that there is a degree d' such that the speaker had not expected John to be tall in that degree d'.

In summary, Rett also accounts in a unified way, for exclamations and exclamatives. Rett treats both as expressions of violation of speaker's expectations (non-scalar for exclamations, scalar for exclamatives), and this violation is encoded in the E-force operator. Gutiérrez-Rexach's operator EXC, however, indicates that exclamations and exclamatives express speaker's more general emotive attitudes towards the proposition.

2. Contrasting the mirative with exclamations

2.1 Putting miratives into the picture

We already know that miratives in Spanish make use of 'fake' past tense morphology. In that respect, they are different from exclamations (declaratives with certain intonation contour), and from exclamatives, which

make use of other grammatical constructions. But we may wonder whether miratives pattern with exclamations, with exclamatives or with neither of them, with respect to the properties we discussed in section 1.1.

Like exclamations, miratives do not have a degree restriction. So, mirative sentences that lack degree elements are grammatical (20), and they can perfectly well combinable with non-degree elements (21).

(20)   Juan fumaba.
        Juan smoke.PAST.IMPF.3SG
        'Juan smokes!'

(21) a. El niño tenía   solo un mes!
         the kid have.PAST.IMPF.3SG   only one month
         'The kid is only one month!'

      b. ¡Solo pesabas   40 kilos!
         only weigh-PAST.IMPF.2SG   40 kilograms
         'You only weigh 40 kilograms!'

      c. Asu, Santander estaba   al   norte!
         asu, Santander be.PAST.IMPF.3SG   to-the north
         'Wow, Santander is on the north!'

Regarding embeddability, miratives pattern with exclamatives, rather than exclamations, since they can also be embedded, as (22) shows. I will expand this data in the next section.

(22)   Ya   veo   que   Juan fumaba.
        already see.PR.1SG that   Juan smoke.PAST.IMPF.3SG
        'I see that John smokes'

Finally, although there are no studies regarding the intonation of miratives in Spanish, impressionistically, it seems possible to utter miratives with a flat intonation. Usually, however, miratives do present a special intonational contour. I conducted a short pilot study with 8 participants (all speakers of the Lima dialect) and found that miratives are associated with a rising intonation contour (as exclamations are), but that the last stressed syllable (['**al**to]) presents a complex HL tone. In table 2, I show the pitchtracks of one of the participants. As we see, both the exclamation and the mirative displays high rising contour, but there are differences in the tone of the last stressed syllable. That syllable appears to last longer as well, in the mirative case.
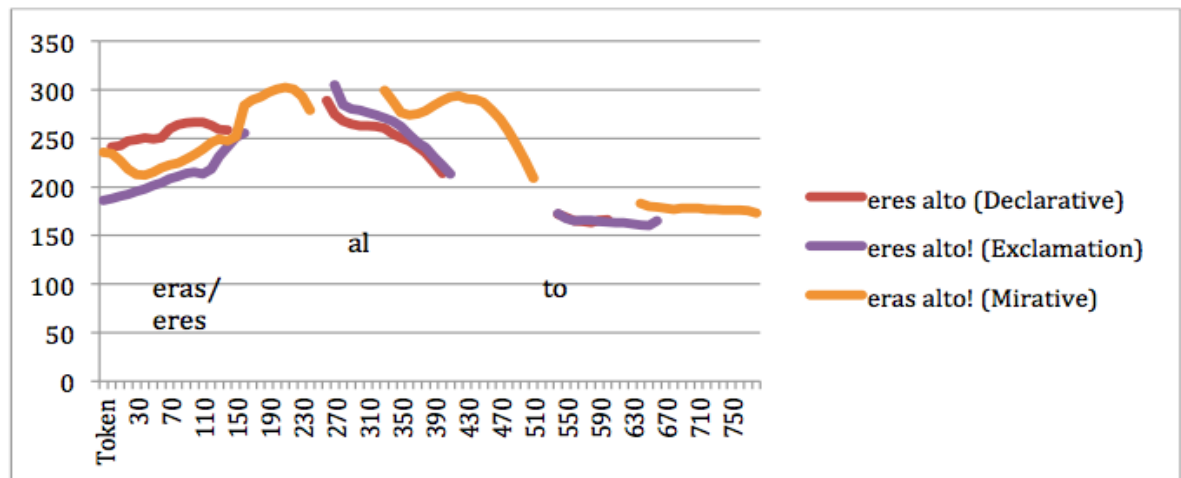

Table 2

I summarize the overview of properties for exclamatives, exclamations and miratives in Table 3.

Property	Exclamative	Exclamation	Mirative
Degree restriction	✓	✗	✗
Embeddability	✓	✗	✓
Intonation	H L	L H	L H-L

Table 3

We see that while the degree restriction property distinguishes exclamatives from exclamations and miratives, the embeddability property distinguishes miratives from exclamations. Also, we have seen that each construction has a distinct intonation contour.

I take the differences in degree restriction and the differences in grammar ('fake' past vs. wh-clauses) as a strong evidence to claim that miratives cannot be a type of exclamatives. In what follows, then, I attempt to sharpen the distinctions between exclamations and miratives, in order to prove that miratives are not a type of exclamation either.

2.2 Deriving the differences

Here, I discuss in more detail what I take to be the main differences between exclamations and miratives, so that I can use these differences to claim that exclamations and miratives call for different analyses. First, I

present minimal pairs of exclamations and miratives, showing that the former do not necessarily require a clash with the speaker's previous beliefs, whereas the latter do as discussed for miratives in chapter 2. This is the result of exclamations being expression of speaker's emotive attitudes, captured by Gutiérrez-Rexach's operator EXC, while miratives does encode the clash, via the operator *M* proposed in chapter 2. Second, I expand the data on embedding, in order to show that exclamations, being speech acts on their own, are matrix phenomenon, and thus, cannot be embedded, while miratives, being modalized propositions, can be further embedded.

2.2.1 Direct clash with previous beliefs

One major claim of this dissertation is that miratives encode a clash with previous beliefs. This clash triggers the sense of surprise. In the contexts to follow, I show that this clash is not required for exclamations. What the speaker does by uttering an exclamation is to express an emotive attitude.

Context 1: Imagine I am arguing with my friend Lucia about her being a jealous person. She claims she is not, but I say the contrary. Later, I see she's upset because her boyfriend is talking to other girls. I say to her:

(23) a. (Ves?) Celosa eres!
      (see)   jealous be-PR.2SG
      '(See?) You're jealous!'

b. #(Ves?) ¡Celosa eras!
   (see)   jealous be.<u>PAST.IMPF</u>.2SG
   '(See?), You're jealous!'

The exclamation in (23a) is felicitous even if the speaker already believed that information and is exclaiming to point it out, as a way to reassert it in triumph. The mirative in (23b) is not felicitous since the assertion does not represent a clash with the speaker's prior beliefs. But if in the same context, my friend was relaxed while her boyfriend was talking to other girls, I could have uttered:

(24)   No eras   celosa!
       no be.<u>PAST.IMPF</u>.2SG   jealous
       You're not jealous!'

In (24) the mirative is felicitous since the assertion clashes with the speaker's previous beliefs. The exclamation counterpart would fit well in this situation too.

   Context 2:   (natural occurrence) There is a Swedish record label called 'Labrador Records' that on its website posted a pro vegetarianism video. I was glad, since I am vegetarian myself, so I reported it to my friend in the following way:

(25)   a. Los de Labrador son   vegetarianos!
           the of Labrador be.PR.3SG vegetarian
           'Those at Labrador are vegetarian!'

        b. # Los de Labrador eran   vegetarianos!
             the of Labrador be.<u>PAST.IMPF</u>.3SG   vegetarian
             'Those at Labrador are vegetarian!'

The mirative (25b) is not felicitous in this context, since there are no previous beliefs about a record label being pro vegetarian or not. The two properties are expected to be independent, having nothing to do with each other. (25b) uttered out of a blue would make the hearer think that the speaker believed they weren't vegetarian. On the other hand, since the speaker is expressing happiness, the exclamation (25a) can be uttered in this context.

We saw in the previous section that it is possible to follow up an exclamation by an explicit statement of non expectation, such as '*Which was, of course, to be expected*'. This is not possible in miratives, as we see in the following minimal pair:

(26) a. Te   quedaste   dormida de nuevo! ... *lo cual era de esperarse.*
      CL.2SG fall-PFV.2SG asleep   again   which was to be expected
      'You overslept again! ... which was to be expected

   b. Te   habías   quedado dormida (?de nuevo!)
      CL.2SG AUX-PAST.IMPF.2SG fall-PTCP asleep   again
   ..... # *lo cual era de esperarse.*
        which was to be expected
          'You overslept (again)!' ... #which was to be expected

(26a) is an exclamation (it uses the past perfective, which cannot be used as a mirative), in which the speaker is expressing an emotional response of anger/frustration, but not surprise. (26b), the mirative (pluperfect) means the speaker thought the hearer has already got up, and encounters the opposite. Thus, the follow up clause is not possible here. Even the adverb 'again' is a bit odd, since it signals that speaker already has p in her modal base.

In the contexts above, Rett's proposal for exclamations cannot be applied, since in none of those contexts did the speaker expect ¬*p*. But Gutiérrez-Rexach's illocutionary operator *EXC* can account for these examples. All that is required for *EXC* to work is that the speaker and the proposition *p* belong to the set of emotive properties P. The emotive property in question can be surprise, but it can also be happiness as we saw in context 2, or frustration as in (26a). Applying *EXC* to (25a):

(27) *EXC*(a)(w)(vegetarian(w) (Labrador)) iff ∃P ∈ EMOT [P(w)(smokes (w) (hearer))(a)]

My operator *M* requires the modal base to entail ¬*p*. If this is the main feature miratives require, we can explain why miratives are infelicitous in the contexts above. In context 1, the modal base entails *p*, and in context 2 it entails *(p or ¬p)*.

2.2.2 Embeddability

The data that we can use to show the embeddability of miratives is quite restricted since most embedding predicates, especially, emotive ones such as 'be surprised at', select for subjunctive mood, whereas both exclamations and miratives are in indicative mood. However, it can be shown that miratives, unlike exclamations, can be embedded.

Let us start with the example I gave in 2.3. As we saw there, exclamations cannot be embedded (28a), unlike miratives (28b)

(28) a. Veo   que #Juan es   alto!
          see.PR.1SG that Juan be.PR.3SG tall
          'I see that Juan is tall!'

     b. Veo   que Juan era   alto!
         see.PR.1SG that Juan be.PAST.IMPF.3SG   tall
           'I see that Juan is tall'

One might think that in (28b) the verb is the real past imperfect, so that this is just embedding a declarative. However, that reading would be odd, since we don't interpret (28b) as saying that Juan was tall in the past. Furthermore, the matrix verb is in present tense, so we are ruling out a sequence of tense effect that would call for a past imperfect verb. In any case, let us look for a clearer context that leans towards the mirative meaning and not the declarative one.

Imagine the following context: I am with my nieces in a pool, and I see that my littlest niece, Lucia, is swimming. I am surprised, so I go to tell my sister (Lucia's mother) about it. I say:

(29) a. Si vas   a la piscina,
         If go.PR.2SG   to the pool,
         vas   a ver que   Lucia   nadaba[40]
         go.PR.2SG   to see that   Lucia   swim.PAST.IMPF.3SG
       Lit. 'If you go to the pool, you'll see that Lucia swims (i.e can swim)!'

---

[40] Thanks to Liliana Sanchez for suggesting this example.

b. Si vas   a la piscina, vas   a ver que (#hace un ratito)
   If go.PR.2SG to the pool, go.PR.2SG to see that (just now)
   Lucia nadaba.
   Lucia swim.PAST.IMPF.3SG
  'If you go to the pool, you will see that just now Lucia was swimming.

c. Si vas   a la piscina, vas a ver   que #¡Lucia nada!
   If go.PR.2SG to the pool, go.PR.2SG to see that Lucia   swim.PR.3SG
   Lit. If you go to the pool, you will see that ¡Lucia swims!

In this context, an imperfect declarative reading is not possible. I am not saying to my sister that Lucia was swimming, as in (29b). I am forcing that (disallowed) reading via the phrase 'hace un ratito' (just now). (29c) has an exclamation (in present tense) embedded, and this is also disallowed. In contrast, (29a) presents an imperfect mirative with the right reading: the speaker has just discovered something not expected, namely, that little Lucia can swim.

There are also predicates that cannot accept a mirative meaning, such as *saber* (to know), or *creer* (believe), since they assert (when the subject is in first person) that the speaker already has *p* in their doxastic domain, so it is not information just discovered. With such predicates, only the declarative imperfect reading arises.

(30) a. Siempre supe   que Juan fumaba.
      always   know-PFV-1SG   that Juan smoke-PAST.IMPF.3SG
      'I always knew Juan used to smoke'

    b. Creo   que Juan fumaba.
       think.PR.1SG that John smoke-PAST.IMPF.3SG
       'I think John used to smoke'

In (30a-b) there is no mirative reading, in which the speaker is surprised at John's present smoking habit. These sentences mean that the speaker know about John past smoking habit, and thus the sentence can be continued by 'cuando era joven' (when he was young).

A verb that makes salient the mirative meaning is 'resultar' ('to turn out'). With this verb, the mirative is easily accepted (31a), the declarative imperfect is bad, unless there is some intonation to support surprise or some other emotive meaning (31b), and an exclamation is impossible (31c).

(31) a. Oye, resulta   que Juan fumaba!
         Hey, turn out.PR.3SG that John smoke.<u>PAST.IMPF</u>.3SG
         'Hey, it turns out John smokes'

      b. Oye, resulta   que #?Juan fumaba (cuando era joven).
         Hey, turn out.PR.3SG that John smoke.PAST.IMPF.3SG
         'Hey, it turns out Juan used to smoke (when he was young)'

      c. Oye, resulta   que #Juan fuma!
         Hey, turn.out.PR.3SG that John smoke.PR.3SG
         'Hey, It turns out John smokes!'

Finally, there is a kind of verb that does not seem to be proper matrix verbs since although they are in imperative mood they do not constitute commands. Instead they function as a kind of discourse marker that contributes some sense of surprise, such as *Mira* (look), *Imagina* (imagine), *Fíjate* (just look), *Alucina* (hallucinate). Syntactically, however, they behave as regular CP-selecting predicates. They cannot embed exclamations, but they do embed miratives.

(32) a. Imagina   que Juan   fumaba!
      Imagine-IMP.2SG   that Juan   smoke.<u>PAST.IMPF</u>.3SG

     b. Imagina   que #¡Juan   fuma!
      Imagine-IMP.2SG   that   Juan   smoke.PR.3SG

(33) a. Mira   que   Juan   fumaba!
      Look-IMP.2SG   that   Juan   smoke.<u>PAST.IMPF</u>.3SG

     b. Mira   que # ¡Juan   fuma!
      Look-IMP.2SG   that   Juan   smoke.PR.3SG

(34) a. Alucina   que   Juan   fumaba!
      Hallucinate-IMP.2SG   that   Juan   smoke.<u>PAST.IMPF</u>.3SG

      b. Alucina   que   # ¡Juan   fuma!
      Hallucinate-IMP.2SG   that   Juan   smoke.PR.3SG

(35) a. Fíjate   que   Juan   fumaba
      look-IMP-CL.2SG   that   Juan   smoke.<u>PAST.IMPF</u>.3SG

     b. Fíjate   que   #¡Juan fuma!
      look-IMP.2SG   that   Juan   smoke.PR.3SG

In (32a-35a) the imperfects with mirative reading are OK in the clausal complement, while the exclamations (32b-35b) are unfelicitous. They are fine if uttered as declarative sentences, but then, the exclamatory force disappears or is only supported by the matrix verb. A better way to save those sentences is to assign exclamatory force to the full sentences.

In speech act theories, it is always assumed that speech acts cannot be embedded[41]. For instance, Zimmerman (1980)[42] proposes the Embedding Thesis: "Illocutionary forces cannot attach to embedded clauses". Green

---

[41] Although this is the standard view on speech acts, see Krifka (2001) for a different approach.
[42] Zimmerman is actually explicating Geach (1965), but he adheres to that thesis as well.

(2000) proposes the Embedded Force Exclusion (EFE): "If φ is either a part of speech or a sentence, and φ contains some indicator f of illocutionary force, then φ does not embed". Green also cites Price (1994) who also proposes a similar thesis "Force modifiers cannot occur in embedded contexts".
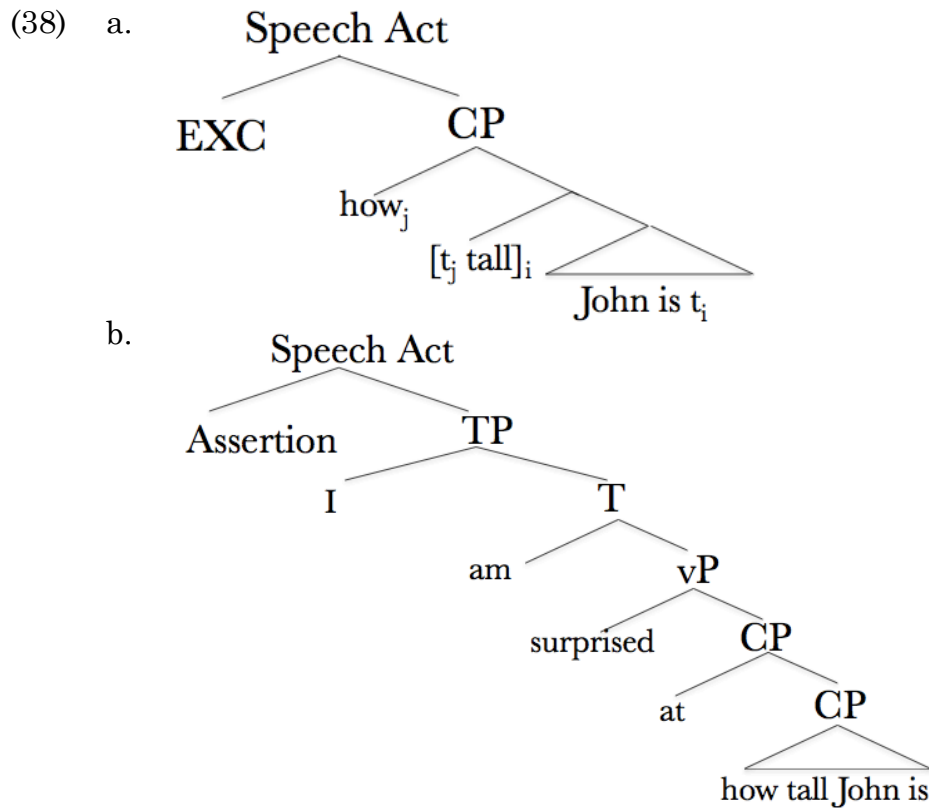
This restriction on speech acts can explain why exclamations are matrix phenomenon (36). Recall that Gutiérrez-Rexach (and also Rett's) operator EXC turns a proposition into the speech act of exclamation.

(36)
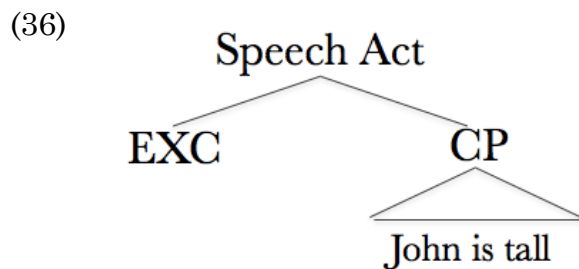
Miratives, on the contrary, since they are just modalized propositions, and not a special kind of speech act, can be further embedded. I assume that in matrix contexts, miratives are usually under the speech act of assertion (37), like other declaratives.

(37)
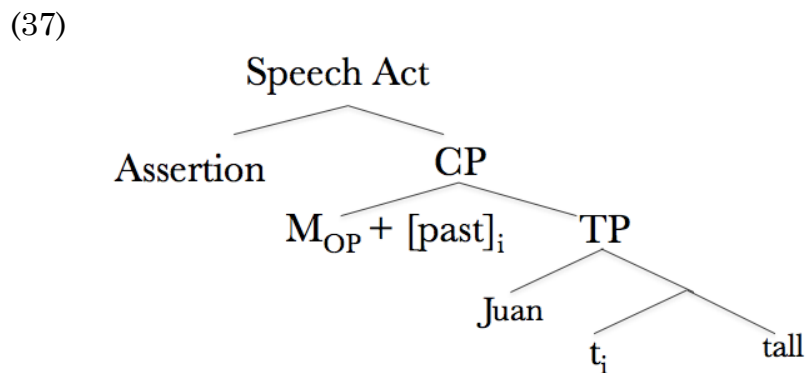
Perhaps embedded exclamatives (as argued by Rett 2011) are not truly exclamations, but rather just embedded wh-clauses as roughly sketched in (38b), while (38a) shows a matrix exclamative.

(38) a.

```
          Speech Act
         /         \
       EXC          CP
              how_j
                [t_j tall]_i
                         John is t_i
```

b.

```
          Speech Act
         /         \
   Assertion        TP
        I          /  \
                  T
             am      vP
                 surprised    CP
                          at      CP
                              how tall John is
```

My conclusion is that the mirative is not a speech act operator but rather a modal one. While exclamatives and exclamations express emotive meanings (among them, surprise), miratives include a modal component. This modal part encodes the clash with the speaker's previous beliefs, and the surprise effect is a pragmatic consequence of this clash.

2.2.3 A further consequence

The analysis above predicts that it should be possible to embed a mirative (since it denotes an ordinary modal proposition) under an EXC speech act operator. This is borne out. It is possible to add exclamation force (emotive property) to a mirative by using intonational means. For instance, imagine I discover that Juan is a vegetarian, so I can express happiness on top of my surprise. The structure for (39a) is given in (39b)

(39) a. ¡Juan era   vegetariano!
         Juan be.<u>PAST.IMPF</u>.3SG   vegetarian
         'Juan is a vegetarian!'

   b. [Speech act: EXC [CP [Modal Base + [past] [TP[q= Juan is a vegetarian]]

We can also combine a wh- exclamative with a mirative as sketched in (40). In (40), the sentence's interpretation is that the hearer's height exceeds a certain degree, something that contradicts what the speaker had earlier believed.

(40)
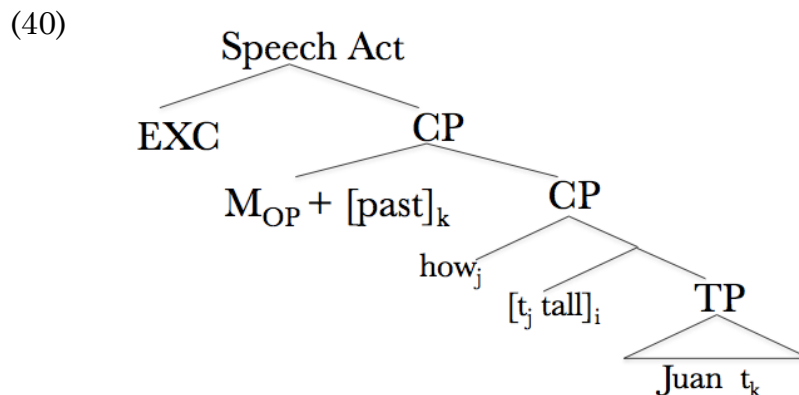
This is supported by data in (42), in which an exclamative and a mirative interact.

(41)   ¡Qué alto eras!
       How tall be.<u>PAST.IMPF</u>.2SG
       'How tall you are!

2.2.4 On the status of the mirative as a modal sentence

So far, I have shown that miratives can be embedded, although with some restrictions, while exclamations, being speech acts, cannot. This leads me to the conclusion that miratives are modal sentences, and not speech acts. However, this is not entirely straightforward. A key difference is that miratives are speaker-oriented, and thus, they do not shift their interpretation to the attitude holder, as happens in an ordinary modal sentence, as shown in the pair in (42).

(42)   a. (Si vas a la piscina), vas a ver   que Lucia nadaba.
       (If you go to the pool), go.PR.2SG to see that Lucia swim.<u>PAST.IMPF</u>.3SG
            '(If you go to the pool), you'll see that Lucia swims!'

       b. Juan cree   que Lucia puede nadar.
          Juan think.PR.3SG   that Lucia can swim
          'Juan thinks that Lucia can swim'

In (42a), it is the speaker who is surprised, although there is a presupposition that the hearer may find that event surprising as well. In (42b), that Lucia can swim is something relative to Juan's beliefs, not to the speaker's beliefs. There is the question then of why miratives behave

differently. I will show, however, that first, miratives are closer to modal claims despite the example in (42a), and second, that the differences we still encounter are due to the discourse status that miratives have.

In (42a) we find that even though the speaker is the one whose beliefs clash with the fact that Lucia swims, there is also an anchoring to the hearer's own beliefs. The speaker's report of Lucia's surprising swimming abilities is relevant only if the hearer will agree with him. Pragmatically, the speaker thinks that the hearer also thinks that Lucia cannot swim. If this is the case, could it be that (42a) is really about the hearer's beliefs (2nd person) and it is just a side-effect of the context that, for the speaker, the fact that Lucia swims also clashes with the speaker's own beliefs? Let us try to set up a context in which (42a) can be felicitous only with respect to the hearer's beliefs. Imagine that I know that Lucia can swim, but my mother, who does not live with us, does not believe so, despite me telling her so many times that Lucia swims. Finally, my mother visits us in a sunny day, and all the children are playing in the pool. So, upon her entrance in the house, I tell her:

(43)   Si vas a la piscina (ahorita),   vas   a ver que
        If you go to the pool (right now) go.PR.2SG to see that
        Lucia nadaba…   (como siempre te lo he dicho).
        Lucia swim.<u>PAST.IMPF</u>.3SG   (as I always told you so)

        'If you go to the pool (right now), you'll see that Lucia swims! (as I
        always told you so)'

(43) is felicitous in this context, as we have set it up. Furthermore, the follow

up makes clear that the fact that Lucia swims does not clash with the speaker's beliefs, but only with the hearer's. So it seems that after all, it is possible for a mirative in an embedded clause not to be anchored to the speaker, similar to ordinary modal sentences. This is even clearer in an example like (44), in which, the regular interpretation (for example, as part of a narrative) does not involve the speaker's beliefs, but only those of the third person matrix subject, in this case, 'she'.

(44) Ella se   da cuenta   ahora que él fumaba.[43]
     She CL.3G realize.PR.3SG now   that he smoke.PAST.IMPF.3SG
       'She realizes now that he smokes.'

A suitable context could be a narration about a couple, in which he lied to her about his smoking habits, and one day she caught him smoking.

If we go back to our example in (42), we notice that if we change that sentence into a 3rd person matrix subject, now, the speaker's participation fades. As in (44), the sentence in (45) is all about the matrix subject's beliefs.

(45)   (Si va a la piscina), él va   a ver que Lucia   nadaba.
(If he goes to the pool), he go.PR.3SG to see that Lucia swim.PAST.IMPF.3SG
       '(If he goes to the pool), he'll see that Lucia swims[44].'

So, it seems that miratives are not always speaker-oriented, and, in

---

[43] Thanks to Carlos Fasola for suggesting a similar example to prove this point. I adapted it so that it matches easily my native-speaker intuitions.

[44] It is also revealing that in both (44) and (45) when the subject is 3rd person and the speaker is not involved in the surprise, there is no way to add an exclamatory contour to the mirative. The intonation in those examples is almost similar to a declarative sentence.

fact, they can shift to the attitude holder. This supports our analysis that miratives are modal claims. However, we cannot leave aside the following differences:

(46)   a. Embedded uses of the mirative are marginal, unlike normal modal claims.

        b. Mirative's use in discourse is basically a speaker-oriented root phenomenon.

        c. Mirative's embeddability is highly restricted by the set of predicates that can take a mirative sentence. Some of these predicates are not even

        canonical selecting predicates, but rather they function as a kind of

        discourse-markers.

        In summary, we have the following situation with respect to miratives. Limited embedding facts show that miratives are like modal claims that, even in special cases, can shift to the attitude holder. This is not, however, the standard use of miratives. So, it may be simplistic to claim that miratives are just like ordinary modal sentences. Therefore, I want to propose that miratives are better described as an in-between phenomenon, along the lines of the recent literature on quasi-subordination (Dayal and Grinshaw 2009) and free indirect discourse (Sharvit 2008). Let us review briefly these topics so that we can fit mirativity into this picture.

        Quasi-subordination refers to clauses that, although subordinate,

pattern in some respect with main clauses. Dayal and Grinshaw propose that this type of clauses behave like main clauses due to their discourse status. This can explain then why in (32), repeated here in (47), although structurally subordinated, the embedded mirative is speaker-oriented, with an assumption that the hearer will find its content surprising. The selecting predicate is in imperative mood but it does not constitute a command to the hearer; it is rather a discourse marker to call the hearer's attention.

(47) Imagina   que Juan fumaba!
       Imagine-IMP.2SG   that Juan smoke.<u>PAST.IMPF</u>.3SG

Something similar happens in (42). In a context in which the speaker reports what she has found surprising, she is assuming the hearer will find it surprising as well. A special context such in (43) is needed to take the speaker out of the picture.

Now, as for the examples in (44) and (45), I think this is related to the cases discussed by Sharvit in her article about free indirect discourse (FID). FID is a narrative technique used to report what a character thinks or says. I copy in (48) the examples discussed by Sharvit (p.354). In a context in which John, two months ago, looked at my picture in his room, and thought: "Yes, I want to marry her today", there are three ways to report it now: direct discourse (48a), standard indirect discourse (48b), and free indirect discourse (48c).

(48)   a. As he looked at my picture, John thought: 'Yes, I want to marry her today.'
b. As he looked at my picture, John thought that he wanted to marry me that day.
c. John looked at my picture. Yes, (he thought), he wanted to marry me today.

FID is similar to DD in that it keeps the adverb 'today' to refer to the day of the event, while in SID, the speaker has to shift it to an anaphoric expression. On the other hand, FID is similar to SID in that the pronouns shift in the same way: the 3rd person pronoun refers to the subject, and the first person pronoun refers to the speaker. There is also a tense shift to past tense. Sharvit's account for FID is to consider it a case of attitude report, and that FID has 'de se' pronouns in the tense and person domains, similar to SID, but not to DD. However, they have different semantics, and that is why FID looks like DD in some ways. I won't go over the technical details of this proposal. What I am interested is that this is another case in which a phenomenon has both properties of independent discourse and those of a dependent clause. Thus, my proposal for examples like (44) and (45), in which the surprise is oriented to the third person matrix subject, may be an instance of FID. In other words, another way to report the subject's surprise could be:

(49) Ella se   da cuenta   ahora: "él fumaba".
    She CL.3G realize.PR.3SG   now: he smoke.<u>PAST.IMPF</u>.3SG
      'She realizes now: "he smokes!"'[45]

---

[45] Note that, in this case, it is possible to add exclamatory intonation contour.

In (49), we have a case of DD or quotation, and it is clear that it is speaker-oriented. So, (44) after all is not a mere modal sentence, with the surprise shifted to the attitude holder. If we see this example as FID, then, it makes sense that the speaker is not longer in the picture, since the 'speaker' now is the subject of the sentence.

In summary, I have shown that miratives differ from exclamations, by being modal statements and not speech act. One of the arguments is the miratives' ability to embed, and even to shift the surprise to the attitude holder. However, all these facts have some restrictions, making miratives not a canonical case of a modal sentence. This is due, probably, to the way miratives are used in discourse (root phenomenon, speaker-oriented, implying speaker's emotions). Although more work is needed, it is better to assign to miratives an in-between status, and phenomena like quasi-subordination and FID may be useful in clarifying what such status is.

3. Conclusion

The goal of this part has been to argue for different analyses for miratives and exclamations/exclamatives, despite their superficial similarity. I showed that even though all these constructions can be used to express the speaker's surprise, miratives have different syntactic and semantic properties. In view

of this, my proposal is that miratives do not constitute a type of exclamations, but rather is a type of assertion to which force can be added.

PART 2 **The true kin: counterfactual conditionals**

1. Observations

In this section, I explore a comparison between the antecedent clause of conterfactuals (CF) and miratives. The semantic analysis I have put forward for miratives is strongly based on the semantics of counterfactuals, in the way it takes into account the role of past tense. I have also proposed that miratives are modal statements that have a counterfactual piece in their meaning. The goal of this section is to review this similarity in more detail, as well as to discuss some differences.

1.1 Verbal morphology

We have seen that counterfactuals and miratives make use of the same tense and aspect morphology. Iatridou (2000) presents evidences that cross linguistically, the antecedent clauses in counterfactuals conditionals are in past imperfective. We see this in Spanish as well, as shown in (50):

(50)   Si tuviera   plata,
     if have.PAST.IMPF.SUBJ.1SG money,
     me   compraría   una casa.
     Cl.1SG   buy.COND.1SG   a   house
     'If I had money, I would buy a house'

(50) is a present counterfactual: the antecedent clause refers to a hypothetical

present eventuality, despite the past morphology it displays. Similarly,

miratives with present reference also have past imperfective morphology, as

we see in (51).

(51)   (Oh,) tenía   plata.
     oh   have.PAST.IMPF.1SG money
     '(Wow,) I have money!'

The pattern extends to past counterfactuals (52) and miratives with past

reference (53). Both use the pluperfect in order to refer to past situations.[46] I

have assumed an analysis in which one layer of past contributes to the

counterfactual/mirative meaning, while the other layer contributes its

standard temporal meaning to the proposition.

(52)   Si hubiera   tenido   plata   (en ese entonces),
     if Aux.PAST.IMPF.SUBJ.1SG have.PTCP   money (back then),
     habría   comprado una casa.
     AUX.COND.1SG buy.PTCP a house
     'If I'd had money (back then), I would have bought a house'

---

[46] As seen in chapter 2, we know that in Spanish it is possible for the pluperfect to have present readings with stative verbs. A counterfactual analog could be the mismatched past counterfactuals discussed by Ippolito (2003), such as 'If Charlie had taken his Italian test tomorrow, he would have passed.' In that sentence, there are two layers of past, but the interpretation is future-oriented, instead of past oriented, as expected.

(53) (Oh,) había   tenido   plata.
      oh   AUX.PAST.IMPF.1SG have.PTCP money
      '(Wow,) I had money!'

A felicitous context for (53) could be one in which I decided not to buy something because I thought I didn't have money, but later I realized that I could have afforded it.

Now, we observe in the examples above that these forms are not identical. Although they share the same tense and aspect morphology, they do not share the same mood morphology. Counterfactuals are in subjunctive mood, while miratives are in indicative mood. We can summarize these morphological values in the following table:

| Verbal morphology	CF antedecent clause	Mirative
Tense	PAST	PAST
Aspect	IMPERFECTIVE	IMPERFECTIVE
Mood	SUBJUNCTIVE	INDICATIVE

Table 4

Given this distinction in mood, we should wonder what role this mood difference is playing, and how to represent its contribution in the semantic/syntactic analysis. Before going to the analysis, let us see first what could be the role of mood.

1.2. Reverse factivity

In counterfactuals, in the antecedent, the proposition q (and its consequent q') holds in non-actual worlds (w'), while $\neg q$ holds in the actual world ($w@$). Thus, in (52) the actual state of affairs is that I don't have money (and so, I can't buy a house), but I entertain a contrary-of-fact scenery in which I own some money, and I do buy a house. In miratives, we encounter a reverse situation: the speaker asserts q, which does hold in $w@$, but miratives bring up my past beliefs p that entails $\neg q$. So, $\neg q$ holds in non-actual worlds in which hadn't I discovered the actual state of affairs, my past beliefs would have continued to entail $\neg q$. Thus, in (53), if I had not discovered money in my pocket, I would have continued believing in me lacking money. Below, I sketch these differences.

(54)   a.

$$p \subseteq \neg q\ (w')$$

$$t^*\ q\ (w_@)$$

   b.

$$q\ (w@)$$

$$t \quad t^*$$

$$t' \quad t^*\ q \rightarrow q'\ (w')$$
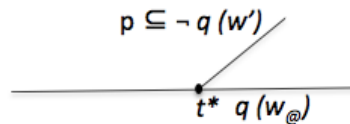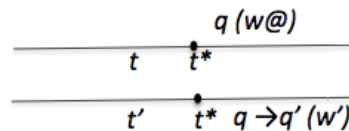
In (54a), the mirative, t^* represents the discovery time/speech time. At that time, a branching situation occurs: what the speaker asserts is factive, and what is contrary to the facts is the situation in which my past beliefs still hold. In (54b), the counterfactual, t' represents a counterpart of the actual

world in the past[47] (in Arregui's terms) which leads to the following (non-actual) situation: if q holds, then, q' also holds. In the actual world, however, the past t only leads to $\neg q$.

Although it is true that not all languages that present 'fake' past morphology in counterfactuals also present subjunctive mood (Ippolito 2000, Halpert and Bjorkman 2011), I will take into account this mood distinction Spanish makes in order to account for the reverse factivity situation that we see in (54). Briefly, I see subjunctive mood as mark of irrealis, while the indicative expresses realis[48].

2. On the morphosyntax of miratives and counterfactuals
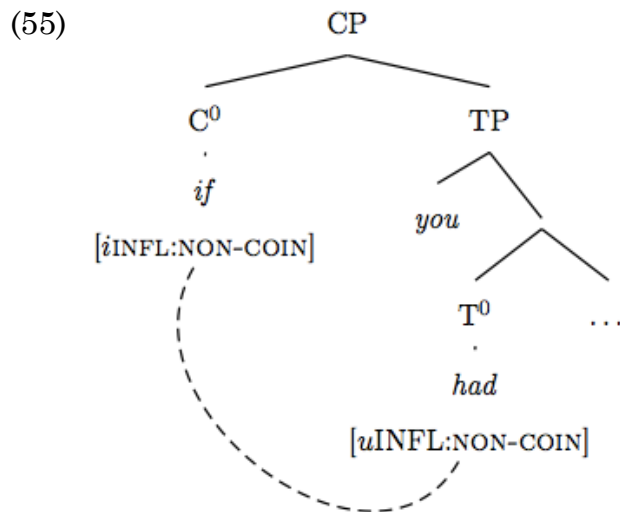
2.1 Extending the syntactic analysis to CF

In chapter 2, I proposed a syntactic analysis for miratives that at its core consists of an Agree relationship between C and T/v. Past tense is

---

[47] Arregui (2004) defines a past-counterpart of the actual world as a world that is similar enough to count as a relevant alternative to the actual world, depending on the claim made by the conditional.

[48] Interestingly, Akatsuka (1985) also notices the relationship between conditionals, counterfactuals and miratives. She includes surprise within the range of speaker attitudes the conditionals may have as in "If he's so happy to see me, I should have come earlier", the antecedent of that sentence means "I didn't know this until now". Moreover, the complementizer *to* in Japanese, also introduces counterfactual verbs as well as the verb *siru* 'get to know'. Akatsuka places mirativity in the border of the realis/irrealis distintion, distinguishing "state of knowledge" (realis) from "newly- learned information" (irrealis). In that sense, mirativity, although closer to the state of knowledge, it is closer also to conditionals and counterfactuals (irrealis).

interpreted in C, but spelled out in T. For counterfactuals, since we are proposing that they are like miratives, a similar syntactic analysis can be done. In fact, Bjorkman (2011) proposes an analysis for the antecedent clause of counterfactuals in the same spirit as what I propose for miratives.

Bjorkman labels the tense feature on counterfactuals [non-coincidence], adapting the terminology of Ritter and Wiltschko (2010) for tense. It is the same feature that is found in temporal clauses, but the difference is that in counterfactuals this feature is structurally higher, i.e. in the C domain. In (55), I copy the structure Bjorkman (2011: 224) proposes:

(55)

$$
\begin{array}{c}
\text{CP} \\
\diagup\quad\diagdown \\
\text{C}^0 \qquad\qquad \text{TP} \\
\textit{if} \qquad\qquad \textit{you} \\
[\textit{i}\text{INFL:NON-COIN}] \qquad \text{T}^0 \quad\cdots \\
\qquad\qquad\qquad \textit{had} \\
\qquad\qquad [\textit{u}\text{INFL:NON-COIN}]
\end{array}
$$

In (55), C Agrees with T. In Bjorkman's term's, C values the uninterpretable feature in T. In my terms, C checks its interpretable feature against T (once the uninterpretable feature in v/V has moved to T). For miratives, I have proposed a similar configuration, tense is interpreted in C, and there is an Agree relation with T.

So far, it seems that we can give a similar syntactic and semantic account for the tense marking in both counterfactuals and miratives. Syntactically, we propose the same configuration between C and T, and semantically, a real past tense analysis sees the past tense as the locus of the counterfactual/mirative interpretation. In both cases the tense restricts the worlds that are accessible from the modal base. However, we still need to account for the reverse factivity and the differences in mood morphology. As hinted above, I propose that these two properties go together.

2.2 Putting mood into the picture

Following a traditional view (Bello 1847, Givon 1994), I assume that subjunctive is the hallmark for 'irrealis' or for talking about counterfactual worlds, while indicative refers to 'realis', or actual worlds, at least in these constructions.[49]

Grosz (2011) also discusses the role of mood (subjunctive vs. indicative) for certain exclamative constructions in German: In (56a) the auxiliary is in indicative, while in (56b) it is in subjunctive. We see that in the former, the eventuality denoted by the proposition ('He scolded us') happened in the

---

[49] The subjunctive also appears in subordinate clauses, but only under certain predicates. In many cases, factivity does not seem to play a role. I will say more about it in section 4.

actual world, while in the latter, it's entertained as a possibility (it has not happened yet in the actual world).

(56) a. **Hat** der vielleicht geschimpft!
   Did he maybe scold
   'Boy, did he scold us!'

   b. **Hätte** der vielleicht geschimpft!
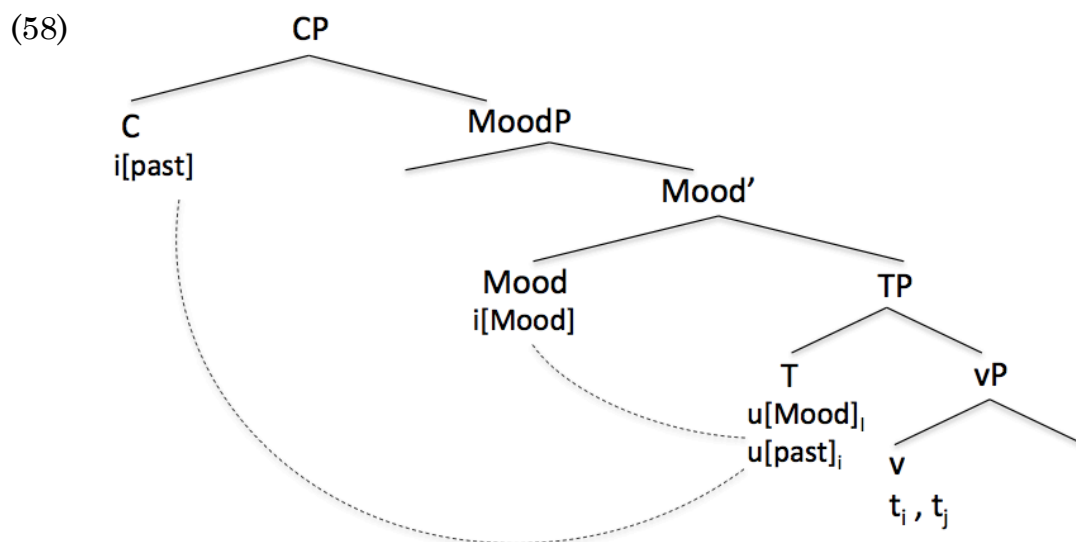   Had   he maybe scolded
   'Boy, would he have scolded us!'

Grosz proposes the following meanings for the feature [iMood] depending on the values it can take: counterfactuality or factivity:

(57) a. $[\text{iMood}_{\text{CF}}] = \lambda p.\lambda w : p \cap \text{Dox}_{\text{speaker}}(w) = \varnothing.\ p(w)$ Counterfactuality
    "The speaker presupposes p to be false"

   b. $[\text{iMood}_{\text{FACT}}] = \lambda p.\lambda w : p \cap \text{Dox}_{\text{speaker}}(w) \subseteq p.\ p(w)$ Factivity
    "The speaker presupposes p to be true"

Grosz also proposes a syntactic implementation of mood. There is a syntactic head Mood, that bears an interpretable feature [iMood], C bears an uninterpretable feature [uMood]. I'll adapt this approach for my syntactic account of counterfactuals and miratives. Since I am adopting a reverse Agree approach, [iMood] will Agree with a lower head; I propose that this head is Tense.

2.3 The overall morphosyntactic picture for CF and miratives

We have seen that the counterfactuals and miratives share the 'fake' past morphology, but differ in their mood morphology. We can capture these facts in the following way. [past] is interpreted in C, but there is an Agree relationship between C and T. The mood head bears an interpretable [iMood] feature that spells out the meanings Grosz proposes in (57). This head agrees with T (once the uninterpretable feature on v moves to T). I propose the Mood Agrees with T/v, since the mood morphology is also present in the verb; in the case of Spanish, the verbal form is a fusion of mood, tense and aspect. Mood is not an intervenor between C and T, since it bears a different feature from that of C.

(58)

```
                    CP
           ┌─────────┴──────────┐
           C                   MoodP
        i[past]           ┌──────┴──────┐
                                      Mood'
                               ┌────────┴────────┐
                             Mood               TP
                           i[Mood]         ┌─────┴─────┐
                                           T          vP
                                        u[Mood]ᵢ   ┌───┴───┐
                                        u[past]ᵢ   v
                                                 tᵢ , tⱼ
```

In (58), i[past] is interpreted in C, and depending on the meaning of the modal (either CF or mirative) we get the differences in meanings. In both

cases [past] is spelled out in T. i[Mood] is interpreted in the Mood head, but spelled out in T as well. This accounts for the differences in verbal morphology. Regarding interpretation, following Grosz's definitions, if i[Mood] is indicative, the assertion is factive, while if it is subjunctive, the assertion is counterfactual. This patterns with the morphology and interpretation of miratives and counterfactuals.

3. Extension to Albanian

Now, let us consider how to extend the analysis presented above to counterfactuals in Albanian. Given the syntactic peculiarity of Albanian miratives (analyzed chapter 3), it is worthwhile to explore whether miratives and CFs in Albanian are alike in the relevant respects, and if not, how to account for these differences using the analysis proposed for counterfactuals and miratives. Then, I discuss a novel piece of data Albanian displays: the possibility of combining miratives with counterfactuals. I show how this is derived, and use this new piece of evidence to support the claim given in part 1 of this chapter concerning the status of miratives.

3.1 Counterfactuals in Albanian[50]

The antecedent clause of Albanian counterfactuals consists of a complementizer plus the verb in past imperfective but in subjunctive mood. The subjunctive mood in Albanian is formed in the following way: there is a subjunctive particle *të* and the verb in subjunctive mood. The subjunctive mood has a reduced paradigm with forms for present tense, past imperfective, present perfect (the auxiliary in present subjunctive form), and pluperfect (the auxiliary in past imperfective subjunctive form). Aorist forms are not allowed in this mood.

Now, in the imperfective aspect, the verbal forms placed after the particle *të* are the same as the indicative mood. We may analyze the subjunctive mood for those cases as the combination of the particle *të* and the verb in default mood morphology or indicative mood (but given that it is the same paradigm so far, we may also think that there is no trace of morphological mood in the verb whatsoever). However, this is not true. In the present tense, the verb does bear a different morphology for the subjunctive mood in the second and third person singular. In those cases, the subjunctive mood takes a different stem (with the suffix *-e*), instead of the stem (with te suffix *-a*) used for the indicative mood, and it triggers different person markings. As well, the verbs *kam* (to have) and *jam* (to be) that are also used as auxiliaries changes the stem for all persons, and that also triggers

---

[50] All Albanian examples in this section are taken from Newmark et. al. 1982.

different person marking in the second and third person singular. The result then is almost a complete different verbal form for the subjunctive, in the present tense. To illustrate, in table 5 I copy the paradigm given in Newmark (1982:53-54), in the present tense singular, for the verbs *jap* 'to give', and *kam* 'to have'.

	IND	SUBJ	IND	SUBJ
1S	jap	të jap	ka-m	të ke-m
2S	jep	të jap-ësh	ke	të ke-sh
3S	jep	të jap-ë	ka	të ke-t-ë

Table 5

Now it happens that we don't see these changes in the past imperfective tense which is the same as in the indicative mood. The only difference consists of the obligatory particle ***të*** before the verb in the subjunctive mood. However, I will take the evidence that the present tense paradigm provides in order to argue that also in the imperfect case, the verb bears a mood feature. This mood feature enters into Agree with the Mood head. Keeping this in mind, let us see now what is the morphological make-up of the antecedent clause in a counterfactual conditional.

Albanian present counterfactuals, in the antecedent clause, consist of a complementizer (*po* or *sikur*) plus the verb in imperfect subjuctive form, that is, the particle ***të*** plus the verb in imperfective, as shown in (59).

(59) po të   isha   në vendin tënd
      if SUBJ   be.PAST.IMPF.1SG   in place your
   'If I were in your place...'

In past counterfactuals, the verb is in the pluperfect form, consisting of an auxiliary in imperfect plus a past participle, as we see in (60).

(60) sikur të   mos e   kishte   parë   Sania, …
      if   SUBJ   NEG CL.3G AUX.PAST.IMPF.3SG see.PTCP Sania
      'If Sania had not seen her, ...'

As we see, we get a similar pattern to that seen in counterfactuals in Spanish (and other languages). However, we do not find the participle movement encountered in miratives in Albanian. The crucial question then is why such movement is not present in counterfactuals.

I claim that since the Mood head needs to check its interpretable subjunctive mood, the corresponding uninterpretable feature is only found in the imperfective forms, in counterfactuals. Since imperfective also bears a [past] feature, the semantics of counterfactuals is preserved. For miratives, we proposed that the [past] feature needed an [unbounded] feature only found in the perfect forms (see Chapter 3, section 3.1.1). For counterfactuals, we can hypothesize two options: either the pastness in counterfactuals does not require such feature, and it only needs [past], or given that it also asks for subjunctive, and the subjunctive past form is only found in the imperfective morphology, then it follows that that is the only choice available for counterfactuals in Albanian.

The structure and derivation for the antecedent clause of a counterfactual in Albanian is given in (61):

(61)
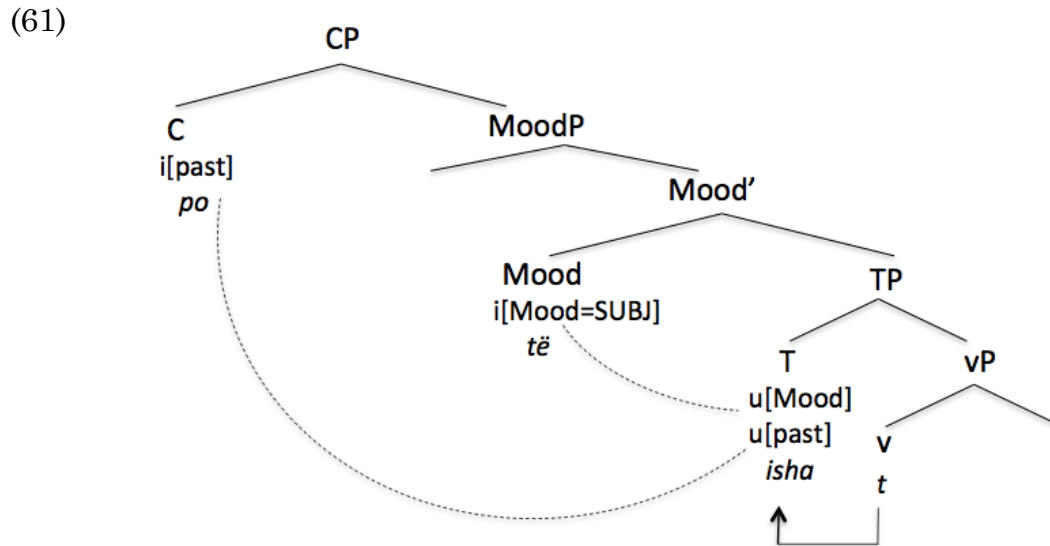
In (61), I present the structure for the present counterfactual given in (59). I propose that the subjunctive particle *të* is the spell-out of the Mood head, when valued as subjunctive. This interpretable subjunctive mood Agrees with T that bears an uninterpretable Mood feature. C bears a (displaced) past tense feature that also Agrees with the uninterpretable past feature in T. There is no need of participle movement (that would prevent a counterfactual with the simple imperfective subjunctive form, since those forms do not have a past participle), since T here has the necessary features: u[subj], u[past], so, T can Agree directly with C and the Mood head, in order to form the counterfactual.

Now, since the movement in miratives is v to T, rather than T to C, we predict that a mirative can happen, namely, participle movement, embedded under the subjunctive particle. This indeed is attested, as we will see in the next sub-section.

3.2 Embedding miratives in counterfactuals

In the examples in (62) we see what the Albanian grammar tradition calls the rare but attested 'subjunctive-admirative'

(62) a. (Below the lead-colored cluster of clouds, there fly around and roam about a few small clouds, pitch-black)
      sikur të   **qen-keshin**   tym   prej dinamit
      if   SUBJ   be.<u>PTCP</u>.AUX.PAST.IMPF.3PL   smoke by dynamite
      '(….), as if they actually were dynamite smoke.'

    b. (Ra dhe u ronit e u shkri),
      sikur të pas-kësh   **qenë**   prej dëbore.
      if   SUBJ <u>AUX.have.PTCP-AUX.PAST.IMPF.3SG</u> be.PTCP by snow
      '(It fell and crumbe and dissolved), as it if had been [made] of snow'

    c. Sikur e   gjyshja   **të**   mos   e
   If   his grandmother SUBJ NEG him
      pas-kësh   **thirrur**
      <u>AUX.have.PTCP-AUX.PAST.IMPF.3SG_call.PTCP</u>
      'If his grandmother had not actually called him, ...'

(62a) shows a present subjunctive-admirative: the past participle moves to the auxiliary, which bears imperfective-subjunctive morphology. (62b-c) show past perfect subjunctive-admiratives: a past participle remains in situ, while

the second auxiliary (which is also a past participle) raises to attach to the higher auxiliary that bears imperfective-subjunctive morphology.

My proposal for these examples is that, instead of a special 'subjunctive-admirative' form, what we have here is perfectly compositional. It is a mirative, embedded under the domain of the counterfactual clause (headed by the complementizer). In the embedded clause, we follow our analysis for miratives: C has an interpretable [past, unbounded] feature that needs to be checked against the participle, which bears the corresponding uninterpretable feature. The participle moves to T, and this movement happens inside the embedded clause. This checking of features for the mirative does not involve the participation of the original features placed on T, which consist of a u[past] feature and a u[mood] features, the morphological specification of the subjunctive imperfective verb. These features then can be checked against the corresponding i[past] in the higher C head, and i[Mood] in Mood. The possibility of the [past, unbouded] feature in the lower C head to get checked against the [past] feature in T is ruled out, since the imperfective does not have the same feature, as we claim in chapter 3. Since it is not the same feature, it does not intervene in Agree relation between the higher C head and the [past] feature in T. The structure and derivation of a mirative embedded inside a counterfactual (as the example in (62a)) is shown in (63).

(63)
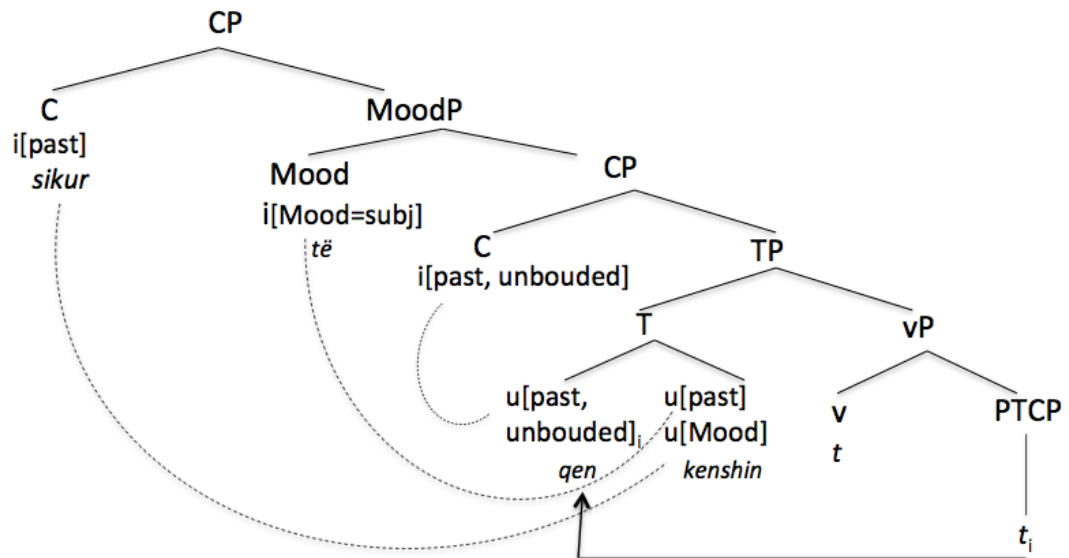
In the analysis above, I have used the term 'embedding' in a rather liberal way, since this is not a prototypical case of a clause embedded under a matrix verb. In this case, there is only one verb but two CP structures, one of them 'embedded' under the other one. Can this be a case of CP-recursion, similar to the 'if-then' structure in sentence (64)?

(64) John believes [CP that [CP if it rains then the party will be cancelled]

Iatridou and Kroch (1992) define the licensing conditions for CP-recursion to occur. This is possible only under CPs that are governed by a verb as sketched in (65).

(65) [V [CP$_1$ [CP$_2$]

As we see (65) does not match what we have in (63) for Albanian, unless it is possible to embed this structure under a matrix verb, such as 'believe' or

'think'. More work is needed in order to clarify which type of structure (63) is. For now, what it is relevant to our discussion is the fact that the Albanian morphosyntax allows a combination of counterfactual and mirative, which can be analyzed under the theory I propose here.

Newmark (1982) does not provide an interpretation for the sentences in (62), apart from the presence of the adverb 'actually' in the gloss. According to my analysis, I propose that since now the embedded mirative is under the scope of the subjunctive particle, then the full clause is presupposed to be false, following the interpretation of the subjunctive. So, for (62), I can predict the following meaning: "if they were dynamite smoke (which they aren't), that would contradict my previous beliefs". One may wonder whether the embedded mirative clause does not specify indicative mood. Since I am assuming that the clause is interpreted under the domain of the subjunctive, then the raised participle is in default mood. Grosz also proposes a meaning for default mood: 'Default does not trigger any presuppositions with respect to the truth or falsity of p'.

Finally, the fact that we can find a mirative embedded in the antecedent clause of a conditional gives further support to our analysis in part 1 of this chapter, in which I argued that miratives are not speech acts.

The full Embedding Thesis (Zimmerman 1980) is stated in (66)

(66) Illocutionary forces cannot attach to embedded clauses, therefore they cannot attach to antecedent clauses in conditionals.

Zimmerman exemplifies this thesis in this way:

> Nonsense results, for example, if one tries to attach a force indicator to an embedded antecedent conditional clause, as in
>
> If !Open the door, then the draft will put out the fire,
>
> or
>
> If ?Is the door open, then the draft will put out the fire.
>
> There is a similar restriction on embedding where force is indicated not by verb inflection or word order, but by the presence of an explicit perfomative, as in 'If I (hereby) christen this aircraft carrier 'U.S.S. Intervention', then it will have a revealing name. (Zimmerman 1980:219)

What Zimmerman shows in those examples is that it is not possible to embed speech acts such as imperatives or questions (or performatives). Exclamations cannot happen in such environment either, but as Albanian shows, miratives are felicitous there. This confirms that miratives are not exclamative speech acts.

An exclamation analysis of miratives couldn't account for data in (62), but a view on miratives as modalized propositions that can be further embedded under other predicates or particles is compatible with such data.

Now, Spanish does not present these counterfactual-mirative forms. This could be due to the fact that subjunctive fuses with tense/aspect in the verbal morphology. And we know that the imperfective form by itself could be a mirative in Spanish, unlike Albanian. The fact that in Albanian it is the imperfect that is used in counterfactuals, and not the past participle could

play a role in the formation of the structures in (62). So, if counterfactuals always require a subjunctive form and this can be expressed independently from the mirative form, we can expect a combination of such forms, as seen in Albanian. But in Spanish, the same imperfective form is used for both counterfactuals (in subjunctive mood) and for miratives (in indicative mood). We observe then a morphological restriction that prevents a counterfactual-mirative to happen in Spanish. Nevertheless, we know that even in Albanian such forms are rare. And this could be due to the strange combination of meanings. Miratives are always factive, and in these forms we are forcing a non-factive interpretation onto the mirative. There is also a final point I want to discuss in relation to subjunctive mood and the mirative. Our discussion of mood has assumed a correlation between subjunctive and irrealis, on one hand; and between indicative and realis on the other hand. However, as mentioned before, we know that this correlation does not hold in embedded clauses, where the choice of the subjunctive does not correlate with the non-factivity of the clause, but rather it depends on the type of predicate in the matrix clause. Let us discuss these cases and their relationship to mirativity in the next section.

4. What happens to the mirative and subjunctive mood in embedded clauses?

In the section on embedding, I said that the fact that many emotive predicates select for subjunctive mood makes it harder to test the embeddability of the mirative. I've been assuming so far that since miratives are factive, the subjunctive mood clashes with them. However, while this is true in root sentences, it is not that clear for embedded clauses. In Spanish, some predicates select subjunctive mood instead of indicative mood. This choice does not depend on the factivity of the embedded clause, as shown in (67).

(67)   Juan se   alegra que María fuera   a la fiesta.
        Juan CL.3G glad   that Maria go.PAST.SUBJ.3SG to the party
        'Juan is glad Maria went to the party.'

In (67), Maria went to the party, so the embedded clause is about an event that happened. However, the embedded verb is in subjunctive mood[51]. This is because the selecting predicate *alegrarse* ('to be glad'), as well as other emotive predicates (*sorprenderse* 'to be surprised', *lamentarse* 'to regret') selects subjunctive mood instead of indicative mood. Other classes of verbs that select subjunctive mood are desire verbs (*querer* 'to want', *desear* 'to desire'), and modals (*es posible que* 'it is possible that', *es necesario que* 'it is necessary that').

---

[51] This part on the distribution of subjunctive mood in embedded clauses in Spanish is taken from Villalta (2008).

In embedded clauses, indicative mood is selected by epistemic verbs (*saber* 'to know', *creer* 'to believe', *think* 'pensar'), perception verbs (*ver* 'to see'), communication verbs (*decir* 'to say'), certainty predicates (*estar seguro* 'be sure'), fiction verbs (*soñar* 'to dream of'), among others. A predicate like *saber* is factive, while *creer* is not, however, both select indicative as shown in the pair in (68).

(68) a. Juan sabe   que María fue   a la fiesta.
        Juan know.PR.3SG that Maria go.PAST.IND.3SG to the party
        'Juan knows that Maria went to the party'

      b. Juan cree   que María fue   a la fiesta.
        Juan think.PR.3SG that María go.PAST.IND.3SG to the party
        'Juan thinks that Maria went to the party'

We saw in section 2.2.2 that a mirative can appear in an embedded clause only if the selecting predicate allows for such a meaning. Thus, a predicate like 'know', or 'think' does not match with a mirative meaning, since it implies the speaker is already aware of the embedded fact. But verbs such as 'realize', 'find out', 'turn out', or 'guess', all allow a mirative meaning to arise. All of these verbs select indicative mood in the embedded clause. So, let us see now what happens with factive predicates that should semantically allow for a mirative meaning, but select for the subjunctive mood.

Emotive verbs such as *sorprenderse* 'to be surprised', *lamentarse* 'to regret' or *doler* 'to hurt' should not conflict at all with the recent discovery of

194

a fact that clashes with the speaker's beliefs. Since subjunctive mood in the embedded clause is a property required by the predicate and does not conflict with factivity, then we should expect the past imperfect subjunctive in embedded classes to express a mirative meaning. However, this is not the case:

(69) a. Me   sorprende   que Juan fumara.
         CL.1SG surprise.PR.3SG that Juan smoke.PAST.IMPF.SUBJ.3SG
         'It surprises me that Juan smoked.'
        * "It surprises me that Juan is a smoker'

     b. Lamento   que   Juan fumara.
        sorry.PR.1SG that Juan smoke.PAST.IMPF.SUBJ.3SG
        'I am sorry that Juan smoked.'
        * 'I am sorry that Juan is a smoker'

     c. Me   duele   que Juan fumara
        CL.1SG hurt.PR.1SG that Juan smoke.PAST.IMPF.SUBJ.3SG
        'It hurts me that Juan smoked.'
        * 'It hurts me that Juan is a smoker'

In (69a-b), the interpretation is about a past specific event, i.e. that Juan smoked, and a mirative interpretation is not possible.

Now, what if we try to use indicative mood instead of subjunctive mood? Is the sentence ungrammatical? Or is it possible to get a mirative or other meaning?

(70) ??Me   duele   que Juan fumaba.
        CL.1SG hurt.PR.1SG that Juan smoke.<u>PAST.IMPF</u>.IND.3SG
         a. It hurts me that Juan smoked.
         b. It hurts me that Juan is a smoker.

First, according to my intuition and other Lima Spanish speakers, (70) is not an acceptable sentence. But, some speakers (like myself), putting aside the unacceptability of the sentence, can assign it an intended mirative meaning, i.e. the speaker has just found out that Juan is a smoker. Other speakers, however, assign it a specific past interpretation reading, as in (69c). For these last speakers, it is possible that the indicative is losing the contrast with the subjunctive, as reported in the literature for bilingual speakers[52].

Given the data in (69) and (70), there is still the question of why a subjunctive-mirative is not allowed. Let us explore three possibilities:

1. Mirative has indicative as part of its array of features, along with [past] and [unbounded].

2. a. The aspect of the Spanish past subjunctive form is not imperfect but rather *pretérito*.

   b. The Spanish past subjunctive form is not specified for aspect, so it is lacking the [unbounded] feature necessary for the mirative.

3. The CP structure of an embedded clause under a predicate that selects for subjunctive conflicts with the CP structure of the mirative.

---

[52] Escobar (1980, 2000) and Silva-Corvalan (2001) report that Quechua-Spanish speakers tend to use indicative in contexts where subjunctive is expected. Montrul (2008) makes a similar observation for heritage speakers of Spanish in the United States.

The first hypothesis solves easily the question of why we don't get a subjunctive-mirative form. However, this solution will not account for Albanian, which does present a subjunctive-mirative form, and this is because the subjunctive in the verb checks its feature against an independent Mood head, and not via C (that bears the mirative operator). Also, it does not explain why (70) is not a good sentence. There should be more to say about the structure of a clause with subjunctive mood vs. a mirative clause.

The second hypothesis is more interesting. We have been assuming, following the Spanish grammatical tradition, that the past subjunctive has imperfective aspect, despite the fact that we do not have another past subjunctive form to compare with (a perfective one). In (69), there is an episodic interpretation, but it is not clear whether this event is seen as ongoing (imperfective) or punctual (perfective). It could be either an ongoing event (71a), similar to the verb in imperfective as in (71b); or a punctual one (72a) which is equivalent to the sentence in perfective aspect (72b).

(71)　　a. Me duele　　　　　que Juan fumara
　　　　　　CL.1SG hurt.PR.1SG that Juan smoke.PAST.IMPF.SUBJ.3SG
　　　　　　durante la fiesta.
　　　　　　during the party
　　　　　　'It hurts me that Juan smoked during the party.'

　　　　b. Juan fumaba　　　　　　　　durante la fiesta.
　　　　　　Juan smoke.PAST.IMPF.3SG during the party
　　　　　　'Juan smoked during the party'

(72)   a. Me   duele   que Juan fumara
          CL.1SG hurt.PR.1SG that Juan smoke.PAST.IMPF.SUBJ.3SG
          en la fiesta.
          at the party
          'It hurts me that Juan smoked at the party.'

       b. Juan fumó   en la fiesta.
           Juan smoke.PAST.PFV.3SG at the party
           'Juan smoked at the party'

So we can say that maybe subjunctive in embedded clauses does not have a value for aspect, so that it could take either a perfective or imperfective value. We can discard hypothesis 2a. As for hypothesis 2b, we encounter the following problem. The imperfect value the subjuntive takes in embedded clauses is progressive, and not generic or habitual, as shown in (73-74), which are not perfectly acceptable sentences.

(73)   ?Me   sorprende   que los dinosaurios comieran kelp.
          CL.1SG surprise.PR.3SG that the dinosaurs eat.PAST.IMPF.SUBJ.3PL
             'It surprises me that the dinosaurs ate kelp.'

(74)   ?Me   duele   que Juan fumara
           CL.1GS hurt.PR.1SG that Juan smoke.PAST.IMPF.SUBJ.3SG
           cuando era joven.
           when was young
           'It surprises that Juan smoked when he was young'

This is the opposite of what we see in counterfactuals and miratives that make use of the imperfect, in which only generic and habitual meanings are allowed, but not the progressive interpretation. So, if seems unlikely that the subjunctive does not take an [unbounded] feature for the progressive reading.

I am assuming here, as in chapter 3, that the unmarked/default value for the [unbounded] feature is the progressive.

So if the subjunctive has all the relevant features ([past, unbounded]) for the mirative, why we do not get a mirative reading in (69)? Even a mirative in indicative is rejected under a subjunctive-selecting predicate as in (70). The last hypothesis that I entertain here is a structural explanation.

My best guess for explaining this puzzle is that all cases of mirative embedding are cases of CP recursion. This structure, already mentioned in chapter 3, patterns very closely with what we have been discussed so far for the subjunctive and its interaction with the mirative. Before we explains how CP recursion applies to these cases, let us review what Iatridou and Kroch (1992) discuss for CP recursion in the if-then construction in (75).

(75) John believes [CP that [CP [if it rains] [Spec,CP then the party will be cancelled.]]

The 'if-then' sentence, analyzed as CP recursion, is not possible when the matrix predicate is an emotive verb, a negated epistemic verb, or a directive one, as we see in (76a-c).

(76) a. I regret/doubt/am surprised that if it rains *then the party will be cancelled

b. I don't think that if it rains ??then the party will be cancelled.

c. I insist that if you are questioned, *then you answer honestly

All these verbs in Spanish select for subjunctive verb in the complement clause. So, it seems that there is something about the nature of the predicate (that in Spanish is overtly marked as the appearance of subjunctive in the complement clause) that rejects CP recursion in the form of an 'if-then' construction in English, and an embedded mirative in Spanish. In (77) I sketch the parallelism for Spanish:

(77) a. Resulta   [CP que [CP [C MOP [TP Juan fumaba]]]
         turn out.PR.3SG   that   Juan smoke.<u>PAST.IMPF.IND</u>.3SG
         'It turns out Juan smokes!'

      b. Me   duele   [CP que *[CP [C MOP [TP Juan fumara]]]
         CL.1SG hurt.PR.1SG   that   Juan smoke.<u>PAST.IMPF.SUBJ</u>.3SG
         'It hurts me that Juan smokes!'

In (77a) a predicate as 'turn out' allows a mirative meaning and selects indicative mood in the complement clause, which is OK for having an embedded mirative sentence. In (77b) 'hurts' also should allow a mirative meaning on semantic grounds, but it selects subjunctive mood in the complement clause, and then a mirative sentence cannot be the complement clause.

I will follow Iatridou and Kroch's explanation for (76). In order for CP recursion to be licensed, the higher CP needs to get deleted at LF. This is so because the deletion at LF of the higher CP correlates with the 'transparency' of such CP for the purpose of the lower CP being licensed under government by the matrix verb. This deletion is possible for affirmative indicative

complementizers, since they lack semantic content. The verbs that do not allow CP recursion are the ones whose semantic requirements make their complementizers to have semantic content. They cannot be deleted at LF, and thus, CP recursion is not allowed. Iatridou and Kroch assume that such verbs have a 'negative' complementizer, following Laka (1990) proposal for Basque and Spanish. In Spanish, it is this negative complementizer selected by verbs that in turn selects subjunctive in the embedded verb. This negative complementizer is not semantically empty, and thus it cannot be deleted. As we see, we have now a better alternative of why a subjunctive-mirative is not allowed in Spanish. Since the mirative has a CP layer (following my proposal for the placement of the M operator in C), embedding it generates a CP-recursion syntactic structure. This structure can only be licensed in indicative environments, but not in subjunctive ones.

5. Conclusion of the chapter

The goal of this chapter has been to strengthen the analysis given for miratives in this dissertation. In doing so, I had first to rule out a speech act analysis for miratives, and I presented arguments proving that miratives, although similar in meaning, cannot be a type of exclamation. After that, I reviewed the similarities found between counterfactual constructions, similarities that have guided the semantic and syntactic analysis presented in this dissertation for miratives in Spanish and Albanian. I have proposed in

this chapter a unified syntactic structure for both constructions that takes into account also their differences, specifically, the differences in mood morphology. I extended this analysis to new Albanian data (counterfactual-mirative clauses) that has confirmed our proposal for miratives as different from exclamations. I have also discussed in detail the issue of mirative's embbeddability and its relationship with subjunctive mood.

Chapter 5

Final remarks

Although the focus of this dissertation has been a particular phenomenon, mirativity, the analysis proposed here is derived from current generative views on language. In that sense, mirativity is not the result of particular language specifications, but rather it arises from the interaction of the CP and TP domains, via an Agree operation. However, mirativity, as a specific use of past tense morphology, has a somewhat limited distribution across languages. This poses two related questions:

i) Why do languages with the same grammatical ingredients as Spanish not have miratives? For example, there are Romance languages that do not have a mirative use of the past imperfect; and even other Spanish dialects that have not developed a mirative use for the pluperfect.

ii) What is lacking in languages that do not have miratives? Is it something related to the operator M, for instance, or something about the

features on T or C that do not conspire to allow the operator M to work? The second view assumes that null operators are universal.

In this concluding chapter, I make an attempt to answer these questions, by means of extending the consequences of my own analysis. Before going to these questions, let us take first a look at the big picture which mirativity fits into.

1. The big picture

The core proposal for mirativity offered in chapters 2 and 3 has the following components: on the semantic side, a modal operator (placed on C) manipulates a past tense feature as the time argument of the modal base; and, on the syntactic side, an Agree relationship is established between C and T that obeys locality requirements. The placement of the mirative operator within the C domain follows a view of CP as the locus of functional projections that are discourse related (Rizzi 1997, Cinque 1999). We have also compared miratives with exclamations and counterfactuals, and concluded that even though our analysis showed that miratives are closer to counterfactuals than to exclamations, it may be an oversimplification to see miratives merely as modal sentences. In this respect, a complex view of the CP domain may help to locate mirativity. Actually, Cinque (1999:5), using mirative data from Korean (discussed in Chapter 3) and the order of suffixes

in other languages, proposes the following layers in the left periphery of the clause.

(1)   Speech act > Evaluative mood > Evidentialiy > Epistemic > Tense > Aspect > Voice

Cinque's evaluative mood is the label for the mirative suffix in Korean. Now, interestingly, it is located below the speech act layer and above the epistemic layer. This seems congruent with what we proposed for miratives as not being a speech act phenomenon but not exactly a modal claim either. However, the fact that miratives (at least the ones we studied here) make use of tense/aspect morphemes suggests that their placement in a multi-layer CP domain is close to TP. In this respect, mirativity does not differ from other phenomena that make use of the same mechanisms to derive the desired meaning and structure. We have explored in chapter 4, the case of counterfactuals conditionals, a phenomenon related to mirativity, which is analyzed in semantic terms (cf. Ippolito 2002, Arregui 2004) and in syntactic terms (cf. Bjorkman 2011) in a similar way to what I discussed here for miratives. The modal operator (counterfactual or mirative) is in C and takes scope over TP. The manifestation of 'fake' (uninterpretable) past tense morphology in T is seen as a reflex of agreement with the 'real' (interpretable) past tense morpheme placed in C.

Mirativity, in the terms analyzed here, also contributes to the discussion of the direction of Agree and the distribution of interpretable and

uninterpretable features. Similar to phenomena such as negative concord, sequence of tense, and multiple case assignment, I have shown that Reverse Agree, in which the interpretable feature probes down for checking/valuing the uninterpretable feature, has wider empirical adequacy.

Now, how does mirativity relate to current views on the connection between the C-domain and TP? Chomsky (2004, 2005, 2008) argues that T is not active for φ-agreement until it merges with C, since it is C that transfers these φ-features to T. Once C transfers these features to T, it is possible for T to Agree with with Spec, vP in order to get Subject-Verb agreement. Ouali (2008) explores three possibilities derived from this notion of feature transfer (or inheritance). First, C could transfer its φ-features to T, and not keep a copy of them. An example is subject-verb agreement in simple declarative clauses. Second, C could not transfer its features to T. An example is anti-agreement effects in Berber, in which in certain wh-clauses (and others), there is no subject-verb agreement, but rather C itself agrees with the wh-subject. This only happens if C also bears a left-periphery feature, such as a wh-feature. Third, C could transfer its φ-features to T but also keep a copy of them. An example is certain cases of long distance agreement in Berber, which show both subject-verb agreement, but also 'complementizer' agreement.

Now, Chomksy (2005:9) observes the following: "In the lexicon, T lacks these features. T manifests them if and only if it is selected by C (default

agreement aside); if not, it is a raising (or ECM) infinitival, lacking φ - features and tense. So it makes sense to assume that Agree- and Tense-features are inherited from C, the phase head". If tense-features are inherited from C, what happens in the mirativity case in which C is the one bearing the tense features? As Ouali discussed for subject-verb agreement cases, I would like to argue that miratives and counterfactuals are examples of C not transferring Tense features to T, but rather keeping them, in virtue of having left periphery features. C then Agrees directly with v/V (moved to T). Seen in this way, mirativity is another instance of the strong connection of the C-domain and T/V domain. I leave open the question of what is the full space of possibilities that we can derive from this configuration and the different arrays of C and T features, and whether all those possibilities are attested.

2. On cross linguistic variation

The grammatical ingredients that Spanish and Albanian employ for mirativity are the following:

i)   M operator

ii)   [past] tense feature

iii)   [unbounded] aspect feature, given by the imperfect

This configuration of elements accounts for the mirative use of the past imperfect in standard Spanish and for the mirative use of the pluperfect in Andean Spanish. However, the issue remains of why in Peninsular Spanish the pluperfect has not developed a mirative use as well. A simple answer could be that Andean Spanish got the mirative use from the Andean languages, such as Quechua and Aymara. But this won't be a fully satisfactory answer, since there is nothing in my proposal that prevents a Spanish pluperfect from being a mirative. The Andean pluperfect has a mirative use by virtue of the [unbounded] features born by the auxiliary. If this is the case, then what happens to the Peninsular pluperfect?

Although there is not much literature on the subject of the Spanish pluperfect, there is a considerable amount of work on the Peninsular present perfect and its differences with American Spanish uses (Schewenter 1995, Escobar 1997, Westmoreland 1998, Howe and Schewenter 2008). The Peninsular Present Perfect has undergone a grammaticalization process from an anterior perfect (with relevance to the present, not bounded) towards a perfective use (only references to specific points in the past, bounded), similar to the *pretérito*. This is consonant with what has been called the 'aoristic drift' for some Romance languages, such as French or Northern Italian (Squartini and Bertinetto 2000). In these languages, the periphrastic perfect (present perfect) has a perfective value. Now, since in modern Spanish usage the past perfect (the pluperfect with the auxiliary in perfective) is not longer

used (*hubo trabajado* 'had worked'), one may wonder whether the pluperfect had also taken perfective values in Peninsular Spanish, while in Andean Spanish it has kept its imperfective (unbounded) values. If it is the case, these differences in the grammaticalization paths of the pluperfect across dialects might shed light on our first question.

Harder to answer is the question of what happens to the imperfect in Romance languages that do not develop a mirative use. The French imperfect, for instance, has the same uses as in Spanish: progressive, habitual, generic, and counterfactual. It may be very difficult to argue that the French imperfect does not have the [unbounded] feature, for example. However, Bjorkman and Halpert (2011) argue for a view of the French past imperfective as underspecified for aspect, and only specified for past tense. Evidence for this proposal comes from the fact that imperfective auxiliaries in French (as in a pluperfect) have perfective meanings. If we follow this approach, we can explain why the French imperfective does not have a mirative use. The same story would also work for English: the absence of a 'true' imperfect form is the reason of not having the mirative. This proposal, however, would raise two problems for our analysis. The lesser one is that we would have to adjust our view on counterfactuals regarding the presence of an [unbounded] feature. Only pastness (as proposed by Bjorkman and Halpert) would be required. This may not be so difficult to accommodate, since even I myself have entertained the idea that maybe the past

subjunctive is Spanish is not specified for aspect after all. The second and more serious problem is that there is nothing so far that would avoid the same analysis for Spanish with respect to the imperfect. At this point, although I cannot offer a good answer to this puzzle, I want to suggest that maybe we should increase our set of features in order to account for this cross linguistic variation. A good candidate to add could be mood features. Spanish, in contrast with English and French, does present an overt subjunctive mood[53]. We make use of this feature to distinguish between miratives and counterfactuals. Although we didn't incorporate an overt indicative feature within the M operator (we assumed that it comes for free with the factivity of the assertion, in root clauses), it may be necessary to add it, in order to distinguish the [past, unbounded] mirative imperfect of Spanish from the [past, unbounded] non mirative of French. The French imperfect is used in counterfactuals as well, while the Spanish imperfect needs to be in subjunctive mood in order to be used in counterfactuals. This suggests that the French imperfect is underspecified for mood, and thus it may not fit with a mirative requirement[54] for indicative mood. Again, this shows that miratives are somewhat more complex forms (in terms of their feature make up) than simple modal statements, including counterfactual conditionals.

The next question is about the status of the M operator. We could have also said for French that it simply does not have the mirative operator as

---

[53] The French imperfect subjunctive is lost in the spoken language.

[54] This idea predicts that languages with miratives should have an overt indicative/subjunctive distinction. We have seen that this is true for Albanian, but we have not surveyed another languages in this respect.

part of its lexical inventory. However, this is not a satisfactory answer; we should avoid *ad hoc* stipulations as much as possible. Also, the fact that in Spanish, dialects do present mixed mirative paradigms suggest that the absence/presence of an operator cannot be the only factor, but rather the conspiracy of features that are responsible for deriving the mirative meaning. Thus, following this view, we may say that the operator M is potentially available for all languages but its activation/licensing depends on the morphological make up of the tense/aspect paradigm, or some other mechanisms. As we have seen in chapters 1 and 4, some languages can have an overt morpheme as the spell out of M (such as Korean), in others the operator is licensed through tense/aspect features, and in other languages, there may be other ways to license it.

3. Conclusion

The main goal of this dissertation has been to provide an analysis of mirativity in Spanish and Albanian. I have tried to answer the question of why past tense morphology presents this non-temporal use, and I have argued that it is a case of real past tense morphology, but one that is interpreted outside the T domain. This analysis, along with the incorporation of aspectual features into the picture, allows us to understand also the syntactic differences between Spanish and Albanian.

At a general level, this dissertation has also contributed to the discussion of Agree, the connection between the CP and TP domains, and the modal status of miratives. While many questions (some of them discussed in this chapter) remain open, I hope this work has shed some light on the understudied area of mirativity.

References

Adger, David (2003) *Core Syntax*. Oxford University Press New York.

Aikhenvald, Alexandra (2004) *Evidentiality*. Oxford: Oxford University Press

Akatsuka, Noriko (1985) "Conditionals and the epistemic scale" *Language 61*: 625-639

Alonso-Cortés (1999) Las construcciones exclamativas. La interjección y las expresiones vocativas. En Bosque, I and V. Demonte (eds.) *Gramática descriptiva de la lengua española*. Vol. 3, Madrid: Espasa Calpe. pp. 3993-4050.

Anderson, A. (1951) A note on subjunctive and counterfactual conditionals. *Analysis* 35-38.

Arregui, Ana. (2004) On the accessibility of possible worlds: the role of tense and aspect. Doctoral Dissertation, University of Massachusetts at Amherst.

Bhatt, R. (1999). *Covert modality in non-finite contexts*. Ph.D. Thesis, University of Pennsylvania.

Bjorkman, Bronwin (2011) BE-ing Default: The Morphosyntax of Auxiliaries. Phd Dissertation, MIT.

Bjorkman, Bronwyn M., and Claire Halpert.(2011) In search of (im)perfection: the illusion of counterfactual aspect. NELS 42

Bello, A. (1847) *Gramática de la lengua castellana destinada al uso de los americanos.*

Cerrón-Palomino, R. (1990) Aspectos sociolingüísticos y pedagógicos de la motosidad en el Perú. En (Cerrón-Palomino, R. y Gustavo Solís, eds.) *Temas de lingüística amerindia*, Lima: CONCYTEC/GTZ, 153-180

Cinque, G. (1999) *Adverbs and Functional Heads*. New York: Oxford University Press

Cipria A. and C. Roberts (2000) Spanish Imperfecto and Preterito: Truth Conditions and Aktionsart Effects In A Situation Semantics. *Natural Language and Linguistic Theory* 8: 297–347, 2000.

Chomsky, Noam (2000) Minimalist inquiries: the framework. In *Step by step: Essays on minimalist syntax in honour of Howard Lasnik*, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89–155. MIT Press.

Chomsky, Noam (2001). Derivation by phase. In Ken Hale: A Life in Language, ed. Michael Kenstowicz. Cambridge, MA: MIT Press.

Curnow, Timothy (2000). Why 'First/Non-First Person' is Not Grammaticalized Mirativity. *Proceedings of ALS2k, the 2000 Conference of the Australian Linguistic Society*

Cusihuamán, Antonio (2001). *Gramática quechua Cuzco-Collao*. Cuzco: Centro de Estudios Rurales Andinos Bartolomé de las Casas.

Dayal, Veneeta and Jane Grinshaw (2009). *Subordination at the Interface: the Quasi-Subordination Hypothesis*. Rutgers University Ms.

DeLancey, Scott (1997). Mirativity: The grammatical marking of unexpected Information. *Linguistic Typology* 1.1:33-52.

DeLancey, Scott (2001). The mirative and evidentiality. *Journal of Pragmatics* 33: 369-382.

Dickinson, Connie (2000). Mirativity in Tsafiki. *Studies In Language* 24(2):379-421.

Duchet, Jean-Louis et Remzi Përnaska (1996) L'admiratif Albanais. In Guentchéva, Z. (ed.) *L'énonciation mediatisée*. Louvain: Peeters. pp. 31-46

Elliott, Dale (1971) The grammar of emotive and exclamatory sentences in English. Phd Dissertation, Ohio State University.

Elliot, Dale (1974). Towards a grammar of exclamations. *Foundations of Language* 11, 231–246.

Escobar, Anna María (1980). *Native Bilinguals and Andean Spanish in Peru*. Unpublished master's thesis for master's degree, State University of New York, Buffalo, NY.

Escobar, Anna María (1994). Evidential Uses in the Spanish of Quechua Speakers in Peru. *Southwest Journal of Linguistics* 13: 21-43

Escobar, Anna María (1997). Contrastive and innovative uses of the present perfect and the preterite in Spanish in contact with Quechua. *Hispania* 80, 859-870.

Escobar, Anna María (2000). *Contacto social y lingüístico: el español en contacto con el quechua en el Perú*. Lima: Pontificia Universidad Católica del Perú.

Ferreira, Marcelo (2011). *Displaced aspect in counterfactuals: Towards a more unified theory of imperfectivity*. Presentation.

Fleischman, Victor (1989). Temporal Distance: A Basic Linguistic Metaphor. *Studies in Language* 13-1, 1-50.

Friedman, Victor (1980). The Study of Balkan Admirativity: Its History and Development" *Balkanistica* 6, pp.7-30

Friedman, Victor (1981). Admirativity and Confirmativity. *Zeitschrift für Balkanologie*. 17.1: 12-28

Friedman, Victor (1986). Evidentiality in the Balkans: Bulgarian, Macedonian, and Albanian. In Nichols, W. and J. Chafe (eds.) *Evidentiality: The linguistic coding of epistemology*. Norwood NJ: Ablex

Friedman, Victor (1994). Surprise! Surprise! Arumanian has had an Admirative! *Indiana Slavic Studies*, Vol. 7, 79-89

Friedman, Victor (2000). Confirmative/NonConfirmative in Balkan Slavic, Balkan Romance, and Albanian with Additional Observations on Turkish, Romain, Georgian, and Lak. In Utas, B., and L. Johanson (eds) *Evidentials in Turkic, Iranian, and Neighbouring Languages*, Berlin: Mouton of Gruyter pp. 329-66

Friedman, Victor (2003). Evidentiality in the Balkans with special attention to Macedonian and Albanian'. In Aikhenvald, A. and R. Dixon (eds.) ' *Studies in Evidentiality*. Amsterdam: John Benjamins.

Givon, Talmy (1994). Irrealis and the subjunctive. *Studies in Language*, 18(2), 265–337.

Guentchéva, Zlatka. (ed.) *L'énonciation mediatisée*. Louvain: Peeters Guerzoni and Sharvit 2007

Gutiérrez-Rexach, J. (1996). The semantics of exclamatives. In E. Garrett & F.Lee (Eds.), *Syntax at sunset: UCLA working papers in Linguistics*. Los Angeles, CA: Department of Linguistics, UCLA

Geach, Peter. (1965). Assertion. *Philosophical Review* 74.

Green, M. (2000). Illocutionary force and semantic content. *Linguistics and Philosophy*, 23, 435–473.

Grosz, Patrick (2011). *On the grammar of optative constructions*. MIT

Dissertation.

Guerzoni, Elena and Yael Sharvit (2007). A question of strength: on NPIs in interrogative clauses. *Linguistics and Philosophy* 30, 361-392.

Hale, Austin (1980). Person markers: Finite conjunct and disjunct verb forms in Newari. In Ronald Trail (ed.), *Papers in South-East Asian linguistics 7.*

Hamid, Ouali (2008). On C-to-T Phi-Feature Transfer: The nature of Agreement and AntiAgreement in Berber. In D'Alessandro R. et al. (eds.),*Agreement Restrictions*, 159-180. Mouton deGruyter.

Hargreaves, David (1990). Indexical functions and grammatical sub-systems in Kathmandu Newari. *Chicago Linguistic Society* 26:179-193.

Herrero, Joaquín. (1969) Apuntes del castellano hablando en Bolivia. *Boletín de Filología Española 9*

Hacquard, Valentine (2009). On the interaction of aspect and modal auxiliaries. *Linguistics and Philosophy* 32: 279–315

Hardman, Martha. (1982). The Mutual Influence of Spanish and the Andean Languages. *Word* 33 1-2: 143-157

Hitnz, Diane (2008). Los perfectos como mirativos en el castellano en contacto con el quechua. Congreso de la ALFAL, Montevideo.

Howe, Chad and Scott Schewenter (2008). Variable Constraints on Past Reference in Dialects of Spanish. In Westomoreland M. and J.A. Thomas (eds.) *Selected Proceedings of the 4th Workshop on Spanish Sociolinguistics*, 100-108. Somerville, MA: Cascadilla Proceedings Project.

Iatridou, Sabine (2000). The Grammatical Ingredientes of Counterfactuals *Linguistic Inquiry* Vol 31, Number 2: 231-270

Iatridou, Sabine and Anthony Kroch (1992). The Licensing of CP-Recursion and its Relevance to the Germanic Verb-Second Phenomenon. In *Working Papers in Scandinavian Syntax.*

Ippolito, Michela (2002). *The Time of Possibilities.* MIT Dissertation

Ippolito, Michela (2003). Presuppositions and Implicatures in Counterfactuals. *Natural Language Semantics* 11: 145-186

Ivanova-Sullivan, Tania (2007). *Expressing surprise in Bulgarian: the meaning and use of the admirative.* Unpublished manuscript. Ohio State University.

Jacobsen (1964). *A grammar of the Washo language*. PhD. Dissertation, University of California at Berkeley.

James, Deborah (1982). Past tense and the hypothetical: A cross-linguistic study. *Studies in language* 6, 375–403.

Kamp, Hans and Uwe Reyle (1995). *From discourse to logic*. Kluwer Academic Publishers, Dordrecht.

Kany, Ch. (1947). Some aspects of Bolivian Popular Speech. *Hispanic Review* 15: 193-205

Kratzer, Angelika (1998). More Structural Analogies Between Pronouns and Tenses. *Proceedings of Salt VIII*. CLC Publications, Cornell University, Ithaca, N.Y.

Krawczyk, Elizabeth (2012). *Inferred Propositions and the Expression of the Evidence Relation in Natural Language Evidentiality in Central Alaskan Yup'ik Eskimo and English*. Phd Dissertation, Georgetown University

Krifka, Manfred (2001). Quantifying into question acts. *Natural Language Semantics* 9, 1–40.

Krifka, Manfred et al. (1995). Genericity: An Introduction. In G.N. Carlson and F.J. Pelletier (eds.) *The Generic Book*, 1-124. Chicago and London: University of Chicago Press.

Kusumoto, Kiyomi (2005). On the quantification over times in natural language. *Natural Language Semantics* 13, 317-357.

Laka, Itziar (1990). *Negation in Syntax: On the Nature of Functional Categories and Projections*. MIT dissertation

Laprade, Richard (1981). Some Cases on Aymara Influence on La Paz. In Hardman, Martha (ed.) *The Aymara Language in Its Social and Cultural Context*. Florida: University of Florida Press. 207-227

Lascarides and Asher (1993). A Semantics and Pragmatics for the Pluperfect. In *Proceedings of the European Chapter of the Association for Computational Linguistics (EACL93)*, pp250--259, Utrecht, The Netherlands.

Lazard, Gilbert (1999). Mirativity, Evidentiality, mediativity or other? *Linguistic Typology* 3: 91-109

Lenci, A., and P. M. Bertinetto (2000). Aspect, adverbs and events: Habituality and perfectivity. In J. Higginbotham et al. (Eds.), *Speaking of events*, 65–287. Oxford/New York: Oxford University Press.

Legendre, Géraldine. (1998). Morphological and Prosodic Alignment of Bulgarian Clitics. In *Optimality Theory: Syntax, Phonology, and Acquisition.* Oxford: University Press

McCawley, Noriko. (1973). Boy! Is syntax easy. In *Proceedings of the ninth regional meeting of the Chicago Linguistics Society*, 369–377. Chicago: Chicago Linguistic Society.

Montrul, Silvina. (2008). Incomplete Acquisition in Spanish Heritage Speakers: Chronological Age or Interfaces Vulnerability? In Chan H., H. Jacob and E. Kapia (eds.), *Proceedings of the 32nd Annual Boston University Conference on Language Development*, 299-310. Somerville, MA: Cascadilla Proceedings Project.

Murray, S. (2010). *Evidentials and the Structure of Speech Acts*. PhD thesis, Rutgers.

Musan, René (1997). Tense, Predicates, and Lifetime Effects. *Natural Language Semantics* 5: 271–301

Navarro Tomás, T. (1948). *Manual de entonación española*. New York: Hispanich Institute.

Newmark, Leonard et al. (1982). *Standard Albanian*. Stanford: Standford University Press

Nishiguchi, Sumiyo (2007). Covert emotive modality is a monster. In T. Washio et al. (eds). *JSAI, LNAI*. 191-204.

Ogihara, Toshiyuki (2000). Counterfactuals, temporal adverbs, and association with focus. In Jackson, Brendan and Tanya Matthews (eds.) *Semantics and Linguistics Theory (SALT) 10,* 115-131. Ithaca, NY: CLC.

Palacios, Azucena (2005) La influencia del quichua en el español andino ecuatoriano", en C. Ferrero Pino y N. Lasso-von Lan (eds.), *Variedades lingüísticas y lenguas en contacto en el mundo de habla hispana* , Ed. 1st. Books Library, Bloomington, 44-52

Palmer, Frank R. (1986). *Mood and Modality*. Cambridge Textbooks in Linguistics. Cambridge University Press Cambridge.

Pancheva, Roumyana (2003). The aspectual makeup of perfect participles and the interpre- tations of the perfect. In *Perfect explorations*, ed. Artemis Alexiadou, Monika Rathert, and Arnim von Stechow, 277–306. Berlin: Mouton de Gruyter.

Partee, Barbara (1973). 'Some Structural Analogies between Tense and Pronouns', *The Journal of Philosophy* 70, 601–609.

Pérez, Jorge Iván (2004). *Los castellanos del Perú*. Lima: Proeduca-GTZ

Pesetsky, David and Esther Torrego (2004) *The Syntax of Valuation and the Interpretability of Features*. MIT, ms.

Peterson, Tyler (2008). Examining the Mirative and Nonliteral Uses of Evidentials. In Déchaine, R. M., T. Peterson, M. Schenner and U. Sauerland (eds.), *Evidence from Evidentiality*. Vancouver: UBCWPL.

Potts, Christopher (2005). The Logic of Conventional Implicatures. *Oxford Studies in Theoretical Linguistics*. Oxford: Oxford University Press.

Reichenbach, H. (1947). *Elements of Symbolic Logic*. Berkeley CA, University of California Press.

Rett, Jessica (2011). Exclamatives, degrees and speech Acts. *Linguistics and Philosophy* 34, 411-412.

Rivero, Maria Luisa. (1990). The location of non active voice in Albanian and Greek. *Linguistic Inquiry* 21, 135-146.

Ritter, Elizabeth and Martina Wiltschko (2010). The composition of INFL: An exploration of tense, tenseless languages and tenseless constructions. LingBuzz/001078, July 2010.

Rizzi, Luigi (2004). Locality and the Left Periphery. In Belleti, A. (ed.) *Structures and Beyond. The Cartography of Syntactic Structures*, Vol. 3. Oxford University Press.

Sanchez, Liliana (2004). Functional convergence in the tense, evidentiality and aspectual systems of Quechua Spanish bilinguals. *Bilingualism: Language and Cognition* 7 (2), 147-162.

Schwenter, Scott A. (1994). The Grammaticalization of an Anterior in Progress: Evidence from a Peninsular Dialect. *Studies in Language* 18, 71-111.

Sharvit, Yael (2008). The puzzle of free indirect discourse. *Linguistics and Philosophy* 31, 353-395.

Simons, Mandy et al. (2010). What projects and why. *SALT 20*

Silva-Corvalán, Carmen (2001). *Sociolingüística y pragmática del español*. Washington DC: Georgetown University Press.

Aksu-Koç, Ayhan and Dan Slobin (1986). A psychological account of the development and use of evidentials in Turkish. In W. Chafe and J. Nichols (eds.) *Evidentiality: The linguistic coding of epistemology*. 159-167.

Smirnova, Anastasia (2012). Evidentiality in Bulgarian: Temporality, epistemic modality, and information source. Ms.

Sosa, Juan Manuel (1999). *La entonación del español*. Madrid: Cátedra.

Squartini, Mario and Pier Marco Bertinetto (2000). The simple and compound past in Romance languages. In Dahl, Östen (ed.) *Tense and aspect in the languages of Europe*, 385-402. Berlin: Mouton de Gruyter

Steele, Susan (1975). Past and irrealis: Just what does it all mean? *International Journal of American Linguistics* 41, 200–217.

Steedman, Mark (1997). Temporality. *Handbook of Logic and Language*, 895–938.

Tomic, Olga (2006). *Balkan Sprachbund Morpho-Syntactic Features*. Springer

Torres Bustamante, Teresa (2010). *The Semantics of Mirativity in Peruvian Spanish*. Rutgers Ms.

Torres Bustamante, Teresa (2012). Real past and real tense in mirativity. In *Proceedings of SALT 22*.

Villalta, Elisabeth (2008). Mood and gradability: an investigation of the subjunctive mood in Spanish. *Linguistics and Philosophy* 31: 467-522

Westmoreland, Maurice (1988). The Distribution and the Use of the Present Perfect and the past Perfect Forms in American Spanish. *Hispania* 71 (2), 379-384.

Wurmbrand, Susi (2011). Reverse Agree. Consequences for the domain of QR. ZAS, Berlin.

Zanuttini, Rafaella and Paul Portner (2003). Exclamative clauses: At the syntax–semantics interface. *Language*, 79(1), 39–81.

Zavala, Virginia (1999). Reconsideraciones en torno al espanol andino. *Lexis* XXIII Nº1. Lima: PUCP.

Zeijlstra, Hedde (2010). There is only one way to agree. Talk given at GLOW 33, Wroclaw, Poland.

Zimmerman, David (1980). Force and sense. *Mind* 89, 214–233.

Zhang, Ning (2013). Encoding Unexpectedness by Aspect Inflection. *Concentric: Studies in Linguistics* 39 (1), 23-57

Zymberi, Isa (1991). *Colloquial Albanian*. Routledge.