See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/354729289

# Spanish 'mirative future'

Chapter · August 2021

DOI: 10.1093/oso/9780198871217.003.0009

CITATIONS 0	;	READS 135	
2 authoi	s:		
	Victoria Escandell-Vidal Complutense University of Madrid 110 PUBLICATIONS 2,260 CITATIONS SEE PROFILE	2	Manuel Leonetti Complutense University of Madrid 74 PUBLICATIONS 1,226 CITATIONS SEE PROFILE

# Some of the authors of this publication are also working on these related projects:



ProA: Métodos, modelos, métricas y herramientas para la evaluación de la prosodia View project



Structures with lexical repetitions from the viewpoint of contemporary linguistic theories https://www.lexicalrepetitions.com/english (RSF no. 19-78-10048 St Petersburg State Univ.) View project

# SPANISH 'MIRATIVE FUTURE'1

Victoria Escandell-Vidal (Universidad Complutense de Madrid) Manuel Leonetti (Universidad Complutense de Madrid)

# 1. Introduction

In many languages, the future tense can display a variety of non-temporal readings<sup>2</sup>. In Spanish, there is a high degree of variation in the possible temporal and non-temporal interpretations (see Fernández Ramírez 1940–1950; Rojo and Veiga 1999; Matte Bon 2006; RAE 2009; Escandell-Vidal 2010, 2014, 2020; Laca and Falaus 2014; Laca 2017; Rodríguez Rosique 2019)<sup>3</sup>. One of the non-temporal interpretations is the so-called 'mirative', illustrated in (1), where the speaker communicates surprise or exceeded expectation about the high degree of a property observed in a certain individual.

(1) a	¡Será	caradura	el	tío!
	be.FUT.3SG	hard-face	the	guy
	'This guy has	is guy has got a lot of cheek!'		

b ¡Tendrá cara el tío! have.FUT.3SG face the guy "This guy has got a lot of cheek!"

According to DeLancey (1997, 2001, 2012), mirativity marks a statement as representing information which is new or unexpected to the speaker (see also Aikhenvald 2004, 2012; Squartini 2018; Cruschina 2019). In (1), the speaker is amazed at the degree of cheekiness or insolence exhibited by a certain individual. The sentences in (2) provide natural paraphrases of (1).

- (2) a His extreme cheekiness is surprising.
  - b It is surprising how very cheeky he can be.

The question that arises is how this mirative interpretation is obtained. Two recent papers have addressed this issue. Rivero (2014) suggests that the future morphology encodes an evidential modal component that marks the information as indirect. Rivero argues that futures are modal categories because they contribute to propositional content, can participate in formal relations with tense and aspect, and allow for agreement or dissent with both the modal claim and the prejacent proposition. As for the evidential component, Rivero states

<sup>&</sup>lt;sup>1</sup> Preliminary work underlying this research was presented at the *SigGram* workshop in Alcalá (Universidad de Alcalá, Madrid, June 2019). We thank the audience for the stimulating debate. A shorter version was published in Spanish as Escandell-Vidal & Leonetti (2019). The development of this research has been partially funded by the project EPSILone (PGC2018-094233-B-C21). We are very grateful to the editors of this volume for their kind invitation to participate and to the anonymous reviewers for many useful suggestions. Needless to say, we keep the whole responsibility for the ideas finally adopted here.

<sup>&</sup>lt;sup>2</sup> See Fleischman 1982; Copley 2009; Jaszczolt and Saussure (eds.) 2013; De Brabanter et al. (eds.) 2014; Baranzini (ed.) 2017.

<sup>&</sup>lt;sup>3</sup> For Italian, see Squartini 1995, 2001, 2004, 2012; Rocci 2000; Mari 2009, 2010; Giannakidou and Mari 2018; Baranzini and Mari 2019. For Portuguese, Mateus et al. 2006. For French, Dendale 2001; Saussure and Morency 2012; Mari 2015; Baranzini and Saussure 2017. For Catalan, Pérez Saldanya (2002).

that futures encode "indirect information" and the mirative use suggests disagreement with the provided information.

Rodríguez Rosique (2015), in turn, analyses examples like (1) as cases of use of the future in an evaluative context "where the future seems to trigger a value related to surprise" (Rodríguez Rosique 2015: 502). In her view, the meaning of the future is 'distance forward'. This meaning can be projected on the utterance when the information has just been activated, thus triggering the interpretation of surprise and unprepared mind. In Rodríguez Rosique's approach, the mirative use is a sort of pragmatic effect: the context must be evaluative beforehand and then the future indicates 'forward distance' (in the sense of Fleischmann 1989).

These two proposals contain many valuable ideas, but do not offer a full account of the future when it gets a mirative interpretation. More specifically, they take for granted that mirative interpretations exist, but do not explain under which conditions (syntactic, semantic or pragmatic) they arise. Thus, the question remains: What is it about this sort of construction that induces a mirative interpretation? This question can be broken down into the following more specific ones:

- i. What is the role of the future verbal form in the mirative reading (given that no other way of expressing futurity allows it)?
- ii. What is the role of grammatical structure?
- iii. What is the role of context given that utterances like (1) are typically a speaker's reaction to acquiring unexpected information (see the 'recency restriction' in Rett and Murray 2013)?

The aim of this paper is to answer such questions. Our main assumption is that there is nothing inherently mirative in the semantics of the future. Rather, the expressive and emphatic flavor of mirative interpretations is a by-product of several factors, including the meaning of the future, word order, attitudinal lexical scales (see Beltrama and Trotzke 2019) and the discourse situation. We will develop a multifactorial approach and show that mirative interpretations arise under very specific conditions, determined by syntax, prosody, information structure, lexical aspect, evaluation and the context. In this way, a more articulated account can be offered that makes it possible to tell apart the contribution of the various factors.

# 2. Mirativity and the role of the context

Before considering other formal properties of the future-tensed sentences that get mirative interpretations, some considerations on mirativity are in order. It is a widely acknowledged fact that mirative interpretations typically obtain in very specific contextual situations. Mirativity arises as a reactive expression prompted by a newly acquired information or a recently observed state-of-affairs. Therefore, expressing surprise and unexpectedness requires a recent triggering event (Rodríguez Rosique 2015).

Therefore, the discourse dynamics places a first constraint on the possibility to obtain mirative interpretations. A piece of information newly added to the common ground (obtained either by direct experience or from hearsay) is judged by the speaker to be unexpected. This imposes a recency requirement between the triggering event and the reaction. The speaker's main purpose is to express her/his attitude towards the eventuality represented, not to merely convey new information. Miratives are exclamations, not assertions, so the propositional content is not asserted, but presupposed. This is why 'mirative futures' cannot serve as answers to information seeking questions, as shown in the dialogue in (3).

(3) A: -¿Qué te Juan? pareció what you.OBL seem.PST.3SG Juan 'What did Juan seem to you?' B: -¡El tío es tonto! the guy be.PRS.3SG stupid 'The guy is stupid' C: -#¡Será tonto el tío! be.FUT.3SG stupid the guy

The prejacent in both answers is the same: the property of being stupid is attributed to Juan. However, only B's reply asserts a new piece of information and provides an answer to A's question. The answer by C, in contrast, is inadequate, since the proposition that 'Juan is stupid' is not asserted but presupposed, and hence C's utterance cannot fulfil A's request of information<sup>4</sup>. Notice, in addition, that B's answer does not have the extreme degree interpretation that we find in the version with the simple future.

Of course, the reason why (3)C is not adequate is not the occurrence of a simple future *per se*. Future-tensed sentences are acceptable answers in other environments, as illustrated in (4) and (5).

(4) A:	-¿Quién	puede	ser	ahora?
	Who	can.PRS.3SG	be.INF	now
	'Who can			

- B: -Será el cartero. be.FUT.3SG the postman 'It must be the postman.'
- (5) A: -¿Cuándo me lo traes? when I.OBL it.ACC bring.PRS.2SG 'When will you bring it back?'
  - B: -Te lo traeré mañana. you.OBL it.ACC bring.FUT.1SG tomorrow 'T'll bring it back tomorrow.'

The future-tensed answers in (4) and (5) express either a conjecture or an intention in the future. In both cases the propositional content is asserted, so they are adequate, informative answers.

When utterances like those in (1) receive a mirative interpretation, their discourse contribution focuses on the extreme degree in which a certain property is present in a subject. The attribution of the property is not asserted, nor is the extreme degree: both are expressed as background assumptions, not as informational updates to the common ground. They are not at-issue content, so they cannot be disagreed upon. What constitutes the point of the

<sup>&</sup>lt;sup>4</sup> C's reply could only be marginally acceptable as the preamble of an actual information-providing fragment.

utterance is the expression of the speaker's attitude towards some newly received information.

Mirative interpretations thus arise when the discourse situation makes clear two facts: first, the triggering event is accessible from the speech situation; second, the speaker has had access to that event. These two features, as we will show later, are crucial to understand how mirative interpretations work.

# 3. The meaning of the Spanish simple future and its role in mirative interpretations

As for the formal properties of the sentences under consideration, the first fact that needs to be explained is why the future morphology is a necessary requirement for the mirative interpretation to arise. As soon as the tense is changed -even if the alternative tense used can have forward-looking interpretations like the simple future-, the mirative interpretation disappears. Consider the examples in (6).

(6)	a	#¡Era be.IMP.3SG			el the	tío! guy		
	b	#¡Ha sido be.PPF.3SG			el the	tío! guy		
	c	# <sub>i</sub> Es be.PRS.3SG	caradu hard-fa		el the	tío! guy		
	d	#¡Va go.PRS.3SG	a to	ser be.INF	caradu hard-fa		el the	tío! guy

All the examples in (6) are well formed, but in none of them the interpretive effect is the same as in (1). This is in principle a quite unexpected result, at least for two different reasons. First, if surprise is the result of a recent discovery, it is not evident why the grammatical resource used should be the future and not the past. In fact, Spanish has mirative readings of the imperfective past (see Reyes 1990; Torres Bustamante 2012), but that interpretation is excluded in (6)a. The present perfect would be well suited to express a recent discovery, as it happens to be the case in the contexts in which mirative interpretations arise; however, it does not do the job either (see (6)b), although in many languages it is past tenses, not futures, that are related to mirative interpretations (Slobin and Aksu 1986; Aikhenvald 2004; Lau and Rooryck 2017).

Second, if the contribution of the future was that of projecting forward distance on the epistemic dimension of the utterance, then one would expect that other forms with future interpretation could also get a mirative interpretation in the adequate situation. But, again, this is not the case. Neither the simple present in (6)c, nor the *be going to* periphrasis in (6)d, which are two common resources to express a future event, can receive a mirative interpretation. This suggests that a tense able to convey a future orientation plus an evaluative context is not enough, and so the contribution of the future tense cannot be only that of expressing metaphorical distance forward. The unacceptability of these examples shows not only that the future is indeed necessary, but also that it is necessary for reasons different from the temporal order (real or metaphorical) of the eventuality described.

If the occurrence of the simple future is a necessary condition, this strongly suggests that it is the specific meaning encoded by the future tense that is involved here. To account for it, we adopt a procedural approach to verbal tenses (see Wilson and Sperber 1993;

Moeschler et al. 1998; Saussure 2003, 2011; Escandell-Vidal 2017a). Tense categories express (a set of) processing instructions to build a representation of the eventuality described. These instructions consist of conditions and requirements for the development of both the encoded propositional schema and the integration of linguistic and extralinguistic information at a higher illocutionary and discourse level, in order to obtain a full-fledged representation.

As for the simple future in Spanish, we follow the proposal put forth in Escandell-Vidal (2010, 2014, 2020). Escandell-Vidal suggests that the simple future in Spanish does not encode a temporal, but an evidential relation: it does not encode an instruction to build the eventuality as taking place at a time posterior to the speech time, but an instruction to represent the eventuality as taking place outside the Speaker's Perceptual Field (SPF). The SPF is "the set of locations / that (s)he has perceptual access to at the time *t*, where perception may involve any sense, not just sight" (Faller 2004: 69; see also Aikhenvald 2004, 2018; Squartini 2001, 2004). Hence, "the speaker can only have indirect evidence for an eventuality that unfolds outside his or her perceptual field" (Faller 2004: 69). By using the simple future, the speaker represents an eventuality for which s/he has indirect evidence only, i.e., a situation that cannot be directly accessed by the speaker from the discourse situation<sup>5</sup>.

This view can be further modelled along the lines developed to account for evidentiality by Nikolaeva (1999), Speas (2008, 2010), Davis et al. (2007) and Kalsang et al. (2013) (see also Faller 2004; Aikhenvald 2004, 2018). This is a *Reichenbachian* approach, where the three *relata* are situations instead of temporal points, and the basic relations are defined in terms of inclusion and accessibility. Evidential distinctions directly encode not the source of information but rather more abstract relations among situations, from which the kind of source can be inferred. In this system, an indirect evidential indicates that the prejacent proposition represents an eventuality falling outside the discourse situation, and that the situation where the information was acquired is located within the discourse situation.

In Escandell-Vidal's proposal, then, the Spanish simple future encodes an indication of inferential indirect evidence: the instruction to interpret the eventuality as a piece of information whose only source is an internal process of the speaker. In other words, the simple future puts two requirements on the interpretation of the eventuality. First, the speaker claims not to have direct perceptual access to the eventuality represented by the sentence. Second, the speaker claims to have formed the representation of the eventuality as the result of an internal, inferential process, i.e., s/he has not received the information from any external source. In fact, as one reviewer points out, conjectures expressed by means of the simple future cannot be based on factual information; this further explains why true epistemic modals, like English *must*, which are compatible with inference from factual information, do not develop mirative readings.

Therefore, the represented eventuality is to be located outside the SPF. The instruction is one and always the same: it is constant and systematic across uses and contexts. Given its procedural nature, this encoded semantic instruction must be satisfied in the interpretation of every occurrence of the simple future. This is a major feature of procedural meaning: it must be satisfied at any cost in any occasion (see Escandell-Vidal and Leonetti 2011; Escandell-Vidal 2017a). There are, however, different ways to satisfy this instruction, i.e., different pragmatic possibilities to develop the instruction inferentially. This means that the encoded instruction is abstract enough to allow for various pragmatic developments.

<sup>&</sup>lt;sup>5</sup> A very similar proposal has been developed in various works by Giannakidou and Mari (Mari 2009, 2010; Mari and Giannakidou 2016; Giannakidou and Mari 2018) on non-veridicality, based on Italian and Greek data. According to Mari, the Italian future signals indirect access to the eventuality described by the assertion. Temporal and conjectural interpretations both satisfy the requirement that the speaker has indirect access to the event. See also.

In the case of the simple future, there are two main pragmatic routes of inferential development, which are related to the two main reasons why a speaker cannot have direct access to an eventuality: this can happen because the eventuality takes place either at a different time, or at a different location. When the instruction is satisfied by representing the event in a time ahead of the speech time, we get temporal interpretations; when the instruction is satisfied by representing the event in a space out of the SPF, we get conjectural readings. Space and time are, thus, the two dimensions where the semantic instruction can be satisfied. Hence, temporal and conjectural interpretation are not two different values of the future, but two different ways to satisfy the same semantic requirement of indirect access

What we call future tense, then, could be better seen as an anti-experiential inferential present. In fact, any future-tensed predication commits the speaker to not having direct perceptual access to the eventuality represented at the speech time (Matte Bon 2006; Caudal 2012; Escandell-Vidal 2020). Of course, each interpretation must consider other contextual and situational factors, such as lexical aspect (Bertinetto 1979; but cf. Mari 2010), agentivity, or grammatical person, to mention just a few. All interpretations, however, must be consistent with the encoded meaning.

Now, turning to mirative interpretations, the framework sketched before makes it possible to understand the role of the semantics of future tense in examples like (1). Our proposal is that the instruction encoded by the simple future indicates that the utterance is the representation of an eventuality whose only source is an internal process of the speaker (not direct experience). This is the linguistic meaning that any occurrence of the simple future will contribute to any utterance.

Therefore, in the case of (1)a, the speaker presents the representation *El tio es (un)* caradura ('The guy is very cheeky') as not corresponding to anything that s/he has directly experienced, but merely as a representation s/he has inferred, i.e., s/he has formed inside her/his mind. Of course, this indication can conflict with what the participants in the conversation know, for instance, because they just experienced how cheeky the guy is. This, however, does not invalidate or cancel the meaning encoded; on the contrary, as we will show later, it is precisely the clash between what is communicated and what is known that triggers the interpretive effect.

In our approach, then, there is no need to resort to any kind of epistemic downgrading, nor is there any metaphorical forward distance involved. The simple future always encodes the same meaning: it points to the speaker's internal processes as the only source of the represented eventuality; and it does so in the mirative cases as it does in any other utterance in which it occurs. It is precisely this semantics that explains why the future cannot be replaced by any of its possible substitutes (the present and the *be going to* periphrasis): although these other forms can be used to refer to eventualities located in a time to come, none of them can give rise to mirative interpretations. This is so because none of them encodes the same interpretive instruction as the simple future, namely the indication that the represented eventuality has the speaker's mind as its only source. Only the simple future has an indirect evidence semantics, which is a crucial ingredient for the mirative interpretation to arise.

This view predicts that it will be impossible to convey mirative interpretations by means of the future tense in languages in which the future has only a temporal, non-evidential semantics, as argued in Escandell-Vidal (2020). The prediction is in fact borne out, at least in the Romance domain. Spanish and Italian are languages with evidential futures, and hence they exhibit mirative uses; French and Catalan, in contrast, have futures with a temporal (non-evidential) semantics and hence they do not allow mirative interpretations (see Dendale 2001; Saussure and Morency 2012; Mari 2015; Squartini 2018). We take this correlation to provide interesting evidence in favour of our approach.

As mentioned before, the semantics of the simple future is not the only factor that determines the existence of mirative interpretations. Our account of mirative interpretations is based on the hypothesis that mirativity is not a property of the future tense, but a byproduct of different factors interacting with the meaning of the future tense. Syntactic structure, discourse assumptions and contextual factors also play a crucial role, as will be shown in the next sections.

#### 4. Word order and mirative interpretations

The literature on the 'mirative future' seems to take for granted that the future tense is the only responsible for the existence of mirative interpretations. We want to contest this view and show that there are other factors involved, the syntactic structure being perhaps the most salient one.

To the best of our knowledge, previous research on the 'mirative future' has paid little attention to an otherwise decisive fact: there are various syntactic restrictions that are in force in mirative interpretations that do not appear in any other use of the simple future. Consider the examples in (7).

(7)	а	¡Tendr	á	cara	el	tío!
		have.F	TUT.3SG	face	the	guy
		'The g	uy has a	lot of o	cheek!'	
	b	*;El	tío	tendrá		cara!
		•	guy	have.FU	jt.3sg	face
			0,			
	с	El	tío,	;tendrá		cara!
		the	guy,	have.FU	jt.3sg	face
	d	¡Tendr	á	cara,	el	tío!
		have.F	UT.3SG	face,	the	guy

The crucial contrast is that between (7)a and (7)b. Only (7)a, but not (7)b, can receive a mirative interpretation. This shows that word order plays a crucial role for this interpretation to arise: the mirative reading requires the subject to be postverbal. When the subject occurs in its canonical preverbal position, the mirative interpretation is excluded. The example in (7)c is acceptable with a mirative interpretation, because what we have there is not a preverbal subject, but a left-dislocated topic in an extra-sentential position. This is therefore no counterargument for the generalisation suggested. The rightmost phrase in (7)d is not a subject either, but again a dislocated topic. Interestingly, right dislocation, as in (7)d, is preferred over left dislocation, as in (7)c.

The requirement that the subject occurs in postverbal position is not found in any other of the interpretations of the simple future. Thus, (8)a, out of a context, can be interpreted as either a conjecture or a prediction (i.e., the anti-experientiality of the future tense can be elaborated as due to either spatial or temporal reasons). (8)b is an example of the so-called 'concessive reading'. In all these cases the subject can occur in preverbal position.

(8) a	El	tío	tendrá	cara.
	the	guy	have.FUT.3SG	face

'The guy must be cheeky (I suppose).' 'The guy will be cheeky (I predict).'

b El tío tendrá cara, pero es inteligente the guy have.FUT.3SG face, but be.PRS.3SG intelligent 'The guy may be cheeky (I admit it), but he is intelligent'

Now, since the postverbal position of the subject is a requirement for the mirative interpretation, any adequate account of mirative uses must integrate this fact in the explanation. The question is, then, what is the role of word order in the licensing of mirative readings.

The pattern illustrated in (7) shows that the subject must occur after the predicate. A detached phrase can occur in either initial or final position, but then it is an extrasentential constituent (and no longer the subject). A non-detached preverbal subject (as in (7)b) would be interpreted as a topic, which would create a topic/comment articulation: in this situation, the mirative interpretation cannot arise. The postverbal subject, on the other hand, is not interpreted as unmarked narrow focus, and can receive a contrastive reading only with a pitch accent and in very limited discourse conditions.

The only possible informational articulation for (7)a seems to be one in which all sentential constituents, including the postverbal subject, belong to the same informational unit. What is, then, the information structure of (7)a? To answer this question, some more examples must be brought into the discussion. Consider the sentences in (9) and (10).

(9) a	*¡Tendrá have.FUT.3SG	cara face	un a	concur contes		
b	*¡Tendrán have.FUT.3PI	cara Lface	dos two	de of	los the	expulsados! dismissed (contestants)
(10) a	#¡Tendrá have.FUT.3SG					5
b	¡Tendrá have.FUT.3SG 'He's got a lot	face,	{your	brothe	r /	Juan!}

The examples in (9) show an additional restriction on subjects: they cannot be indefinite. The mirative interpretation requires that the subject refers to a given entity, accessible in the discourse. It cannot introduce new entities. The contrast in (10) suggests that the conditions are even stronger: definite expressions, such as *tu hermano* ('your brother') and proper names are not allowed either. They can occur as dislocated topics, but not as internal postverbal subjects. The legitimate definite expression in (1) and (7)a, *el tio* ('the guy'), is an epithet. Why then are other definite descriptions and proper names excluded? It is remarkable that in most cases of mirative future in Spanish the subject is null, and this option is strongly preferred over the possibility of using a personal pronoun (cf. *¡Tendrá cara!* vs  $#_iTendrá cara ella!$ ).

Before answering this question, let's take stock of what we have found until now with respect to syntactic restrictions:

- If there is an overt subject constituent, it must occur in a postverbal position, without being in focus (i.e. as a member of a single informational unit).

- The subject must be either deictic or anaphoric; it must refer to a given, accessible entity.
  - Epithets are allowed as postverbal subjects.
  - Definite descriptions and proper names are odd as subjects.
  - Indefinite NPs are excluded.
- Dislocated elements coindexed with the subject are allowed, with a preference for right-dislocated phrases.

The pattern emerging from all these requirements is reminiscent of the pattern found in polar interrogatives and exclamatives. Subject inversion is compulsory (so the postverbal subject does not receive a focal interpretation) and there is no internal topic position (see Escandell-Vidal 1999). Topical elements are preferably dislocated to extra-sentential positions. This suggests that mirative interpretation arises when the simple future is found in an interrogative/exclamative syntax. If this assumption is on the right track, the prediction is that all overt constituents are included in a single information unit, and the focus of the sentence falls on the degree scale of the predicate, as in exclamative sentences (cf. Castroviejo 2008, Beltrama and Trotzke 2019). The next section addresses this issue.

As for the constraints against indefinite NPs and lexical definite NPs, they can be derived from basic properties of the construction too. As Rett and Murray (2013: 459) notice, mirative constructions "are licensed only when the speaker has recently learned the at-issue proposition p". This is what they call the 'recency restriction'. The restriction implies that the referent of the subject must be a highly accessible entity: more specifically, it must be 'in focus', i.e. activated in short-term memory and at the current center of attention (Gundel, Hedberg and Zacharski 1993: 279). This is enough to exclude indefinite subjects, as in (9), because they are incompatible with the 'in focus' cognitive status of the referent, and also to exclude referential expressions like definite descriptions and proper names, as in (10), because they are usually correlated with less restrictive cognitive statuses, like 'uniquely identifiable' or perhaps 'familiar' (lexical definites are in general inappropriate to access the most accessible referents).

In a null subject language like Spanish, the optimal way to refer to an 'in focus' antecedent is a null pronoun. Overt, strong pronouns in subject position are typically used to express contrast or emphasis, and thus they are dispreferred options with respect to null subjects. As for epithets, the reason why they fit naturally in future-tensed sentences with mirative interpretation is that their lexical content is non-descriptive and purely evaluative: as it is unable to constrain the search for a referent, epithets are only felicitous with already given, well established antecedents, and their anaphoric properties are akin to those of weak pronouns.

Finally, also the slight preference for right dislocation compared to left dislocation is ultimately due to the recency restriction. It is well known that the major interpretive asymmetry between left and right dislocation has to do with the kind of information that each operation conveys: whereas left dislocation is typically contrastive and related to topic shift, right dislocation is acceptable only with given, familiar, non-contrastive topics (see for instance López 2016); it is thus expected that the recency restriction favors right dislocation, due to the status of the subject referent.

# 5. Properties, degrees and attitudes in mirative interpretations

Mirative interpretations, then, combine two different features: the occurrence of the simple future and a polar interrogative/exclamative syntax. These two factors are crucial to understand a specific interpretive property: the speaker's surprise does not merely concern a

newly discovered state-of-affairs, but particularly the extreme degree in which a negative property is found in a known referent (Rett, 2011; Zanuttini and Portner, 2003). This fact is illustrated in (11). The adequate paraphrase for (11)a is not (11)b, but (11)c.

- (11) a ¡Será tonto! be.FUT.3SG stupid b #I am surprised to discover that he is stupid.
  - c I am surprised to discover how stupid he can be.

A very powerful restriction operating on the constructions under scrutiny has to do with the nature of the predicate. The examples in (1) show that the property involved in the predication must correspond to an Individual-Level Predicate (ILP). This means that predications indicating processes, activities, accomplishments are excluded, and also Stage-Level Predicates (SLP) are excluded. This is illustrated in (12) and (13).

(12) a	¡Gastará spend.FUT.3SG		dinero! money	#It is surprising how much money he spends!
b	¡Llegará arrive.FUT.3SG		tarde! late	#It is surprising how late he has arrived!
(13) a	¡Estará be.FUT.3SG	cansad tired	o!	#It is surprising how very tired he is!
b	¡Tendrá have.FUT.3SG	sueño! sleep		#It is surprising how sleepy he is!

The sentences in (12) and (13) are perfectly grammatical, but cannot receive a mirative interpretation, as shown by the inappropriateness of the glosses provided. In all cases, temporal and conjectural readings are allowed, but not mirative interpretations: the extreme degree interpretation that characterizes mirative uses is absent here. This shows, then, that the aspectual properties of the predicates are highly relevant.

An additional piece of evidence for this view is offered by the examples in (14). If we compare the sentences in (12) with those in (14), a clear pattern arises. The conceptual import is roughly the same in the two series, but the ideas of 'spending money' and 'being late' are presented under very different lights. In (12) they are represented by dynamic predicates; in (14), in contrast, they are represented by ILPs. Hence, the contrast between (12) and (14) shows that aspect is crucial indeed.

(14) a	¡Será be.FUT.3SG	despilfarrador! profligate	<sup>OK</sup> It is surprising how profligate he is!		
b	¡Será be.FUT.3SG	tardón! unpunctual	$\frac{OK}{I}$ It is surprising how unpunctual he is!		

Only ILPs, as those in (14), can give rise to mirative interpretations. This fact points to another significant requirement for the mirative interpretation to arise: the property must be gradable (or else, admit a gradable interpretation *via* coercion; see Escandell-Vidal and Leonetti 2002; Escandell-Vidal 2017a). Otherwise, the result is ungrammatical, as show in (15).

(15)	a	#¡Será be.FUT.3SG	icipal! icipal
	b	#¡Es be.prs.3sg	municipal! municipal!

The sentences in (16)-(17) show another interesting contrast. The example in (16), an exclamatory declarative with an overt degree quantifier, is a natural paraphrase for (11)a, but if the quantifier is omitted, then the equivalence disappears. The occurrence of the quantifier, however, is impossible with the simple future, as shown in (17) (see RAE 2009:  $\S$ 23.14p).

- (16) ¡Es #(tan) tonto! be.PRS.3SG #(so) stupid 'He is so stupid!
- (17) ¡Será (\*tan) tonto! be.FUT.3SG (\*so) stupid

This contrast shows that in this configuration the simple future triggers the same interpretation as a degree quantifier in the corresponding declarative.

A further interesting feature can be found with respect to the lexical choice of the predicate. Only negative and derogatory predicates are natural in mirative interpretations (Rodríguez Rosique 2015). Adjectives such as *antipático* ('nasty'), *arrogante* ('arrogant'), *lelo* ('foolish'), *frívolo* ('frivolous'), *hipócrita* ('hypocritical'), *incongruente* ('uncongruous'), *inepto* ('clusmsy'), *insolente* ('insolent'), *irresponsable* ('irresponsible'), *odioso* ('hideous'), *terco* ('stubborn') form this natural class. Two predictions can be made from this generalization. On the one hand, non-derogatory predicates will not give rise to mirative interpretations. This prediction is in fact borne out, as shown in (18).

(18) a #¡Será rubia! be.fut.3sg blonde

> b #¡Tendrá hijos! have.FUT.3SG children

The second consequence is that adjectives with more that one meaning, particularly those with a positive/neutral meaning and a negative meaning, will select the negative interpretation when used in the 'mirative' environment. In Spanish, *listo* can mean either 'clever, bright, smart', with a positive bias, or 'opportunistic, egotistical', with a negative connotation. Similarly, *tener suerte* can be understood as either 'to have good and well-deserved luck' or 'to be undeservedly lucky, jammy'. Now, only the negative interpretation allows for the mirative flavour, as shown in the examples in (19).

- (19) a ¡Será listo!
  be.FUT.3SG {opportunistic / #clever}
  'It is surprising how {opportunistic/#clever} he can be!'
  - b ¡Tendrá suerte! have.FUT.3SG luck

'It is amazing how jammy he is!'

In this section, four salient features of the predicates occurring in constructions that allow a mirative interpretation have been identified: first, the predicate must be an ILP; second, the predicate must be gradable; third, the overt expression of a degree quantifier is excluded with the future tense; and fourth, only predicates expressing a negative evaluation can be used. Taken together all these features show that the mirative interpretation cannot be linked to the occurrence of the simple future. The future, of course, is a central component, but these other syntactic and lexical restrictions must be considered as well.

An adequate account of the mirative future should offer some insight about their role. In particular, it would be interesting to find out what their relation is to the mirative interpretation. We propose that

- i. the condition against non-IL predicates is an instantiation of the aspectual restrictions that characterize non-temporal uses of the future, which are known to arise mostly with atelic, stative predications<sup>6</sup> (RAE 2009: §23.14j) -briefly, this feature contributes to the overall interpretation by narrowing down possible readings of the future to conjectural, non-temporal ones;
- ii. the condition on gradability is related to the decisive role of degree for mirativity, which still must be accounted for (see below, section 7);
- iii. the exclusion of overt degree quantification with the future is probably related to the reasons that motivate the use of the mirative future instead of a standard, unmarked exclamation; and

the requirement of having a derogatory interpretation clearly suggests that some pragmatic process must be behind the emergence of mirativity<sup>7</sup>. At this point we have only an intuitive proposal to make about this condition: it is plausible to assume that the expression of the speaker's surprise at negative, reprehensible behavior is dispreferred, due to politeness considerations, with respect to the expression of surprise at positive things, and thus conveyed through indirect strategies; mirative future is one of those indirect strategies, and in Spanish it counts as a specialized means to express a critical attitude. In any case, the question why negative properties are preferred remains an open question. As one reviewer notices, it could be related to some cognitive biases of what counts as a default, but this hypothesis would need extensive testing.

# 6. The role of prosody

In the previous sections we have considered various formal aspects of the 'mirative future' construction. In this section we turn to another formal property: its prosodic contour. We have argued that word order, with the obligatory postverbal position of the subject, suggests that these constructions are instances of interrogative/exclamative modality. A look at the prosodic aspects of the construction can help clarify the matter.

When observed in their written version, both question marks and exclamation marks are allowed and even a combination of both is possible (RAE 2011: §10.8d). This should be

<sup>&</sup>lt;sup>6</sup> This aspectual condition could also be related to an observation often made in the literature on mirative evidentials: as Rett and Murray (2013: 468-469) notice, the mirative interpretation is typically more natural with present tense and imperfect aspect.

<sup>&</sup>lt;sup>7</sup> A striking parallelism appears here between mirative futures and irony. Both emerge as a result of a clash between what the speaker says and some mutually manifest information; both are related to the communication of critical attitudes; both rely on the exploitation of expressive meaning (cf. Escandell-Vidal and Leonetti 2020 for the syntax of irony in Spanish); finally, both force the addressee to follow a complex inferential path to reach the intended interpretation.

no surprise, given that interrogatives and exclamatives are but two variants of the same basic syntax.

- (20) a ¿Será presumido? be.FUT.3SG vain
  b ¡Será presumido! be.FUT.3SG vain
  c ¡¿Será presumido?!
  - be.FUT.3SG vain 'It is surprising how vain he can be!'

The question marks indicate the final fall-rise intonational contour, i.e., the one used for polar interrogatives. The frequency lowers and rises on the stressed syllable *-mi-* and then continues to rise in the final syllable *-do* (a contour represented as L+H\* H% in Spanish ToBI notation: Estebas-Vilaplana and Prieto, 2010; Hualde and Prieto, 2015), as shown in Fig. 1.

The exclamation marks suggest a rising contour ( $H^* H^{\circ}$ ), neatly different from the interrogative intonational pattern. This pattern is found in Fig. 2.

<insert Fig 1 around here>

Fig. 1. Waveform, F0 contour and prosodic labelling of the sentence ¿Será presumido? (fall-rise contour)

<insert Fig 2 around here>

Fig. 2. Waveform, F0 contour and prosodic labelling of the sentence ¡Será presumido? (rising contour)

What is crucial to the current discussion is that both versions can give rise to the mirative interpretation. This could seem an unexpected fact. However, we want to argue that in both cases the processing instructions encoded by the future tense in combination with the sentential modality guide the hearer towards the intended interpretation. What is different in each version is the interpretive route traced by the concurring elements.

# 7. Deriving the mirative interpretations of the Spanish simple future

In the previous sections, all the relevant factors that determine the obtention of mirative interpretations: these factors include the occurrence of the future tense, the VS word order, the restrictions on the kind of predicate and the possibility to have two different intonational contours. It is time now to explain how the mirative interpretations are derived step by step.

Let's examine the structures with the fall-rise version first. The meaning of a polar interrogative can be modelled in terms of the set of its possible answers (Karttunen 1977): hence, the interrogative presents the set of possible alternatives  $\{p, \sim p\}$ . In the case of the mirative interpretation, however, these alternatives do not have the same weight. The reason

is that in the discourse situation one of them has been made salient and prominent. For instance, a certain behavior of any of the participants or another individual has been witnessed by both speaker and hearer. This behavior can therefore introduce a mutually manifest change in the mutual cognitive environment, which results in the addition of new assumptions to the presumed common knowledge. Suppose that the situation has made clear that Juan just did something very silly. The proposition *Juan is very stupid* can then be safely added to the common ground. It is in this context where the utterance ¿Será tonto? (cf. (11)a) is felicitous and can get a mirative interpretation (roughly, 'it is surprising how stupid he can be'). Why is this so?

The interrogative contains a predication in the future tense. As argued in section 3, the Spanish simple future encodes the instruction to treat the eventuality represented as a product of the internal processes of the speaker. In the case under consideration, the situation has made mutually manifest that Juan has been very stupid. By using the simple future, the speaker is presenting the proposition *Juan is very stupid* as a mere conjecture, not a direct observation. By using the interrogative modality, the speaker is asking whether p is the case, thus offering the hearer a set of alternatives  $\{p, \sim p\}$  to choose from. But, of course, for both speaker and hearer it is clear that the proposition p is neither a conjecture of the speaker, nor a doubted conjecture for which the speaker should need confirmation. The situation makes evident that the interrogative is a rhetorical question, pointing unequivocally to one of the alternatives, p, precisely the one that is already part of the common ground.

This explanation can be extended, of course, to first and second person utterances, as shown in (21).

- (21) a ¿Seré tonto? be.FUT.1SG stupid 'It is surprising how stupid I am'
  - B ¿Serás despistada? be.FUT.2SG absent-minded 'It is surprising how absent-minded you are.'

With the fall-rise interrogative intonation, the future-tensed proposition works as a rhetorical question, by which the speaker is pretending that s/he does not know whether the proposition presented as a conjecture by means of the future tense is the case or not. The rhetorical nature of the interrogative comes from the fact that the proposition is already present in the common ground. Rhetorical questions are not relevant as information-seeking questions, but as reminders of already held assumptions.

An additional component must still be added to this picture. In fact, the explanation in terms of the interaction between the conjectural future and the interrogative modality seems to leave out the question why these utterances get an extreme-degree interpretation. We want to argue that this happens when a gradable predicate occurs in an interrogative. For instance, if you ask *Do you feel cold?*, the expected answer does not reduce to *yes* or *no*, but usually include various degrees, such as *a little* or *very much*. This is so because gradable predicates attract the focus. As a consequence, the polar question no longer presents a twoelement set of alternatives  $\{p, \sim p\}$ , but a larger set including all the relevant degrees for the scale suggested by the predicate  $\{p_{d1}, p_{d2}, p_{d3}, \dots, p_{dm} \sim p\}$ . Now, with biased interrogatives, the acceptable range of degrees is reduced back to the extreme ones, leaving no room for neutral or middle-scale interpretations. Consider rhetorical negative interrogatives, like *Isn't it cute?* or *Isn't it horrible?*. Here, the point is not to decide whether the puppy is cute or not, or to what degree it is cute; or whether the situation is horrible, or to what extent it is horrible. The point is to underline how very cute the puppy is or how horrible things are. The possible alternatives are limited to the extreme degree  $\{p_{dl}, p_{d0}\}$ . Then, the context accounts for the bias, which erases one of the possibilities. Rhetorical questions are uttered in situations where both speaker and hearer are supposed to share a common view towards a certain state-of-affairs, so only one of the possibilities is acceptable.

This rhetorical mechanism works, therefore, only if predicates are gradable. This is why non-gradable negative ILPs, such as *intolerable* ('intollerable') and *nefasto* ('dire, nefarious') do not receive mirative interpretations.

The above considerations, then, can explain how the mirative interpretation arises with future-tensed interrogatives uttered in a context that already includes the prejacent proposition. The account is fully compositional; the obvious advantage is that no extra machinery is needed, such as invoking metaphorical extensions, to explain how the mirative interpretation is obtained.

Let's turn now to the version featuring the exclamative, rising contour. This contour is represented in writing by the exclamative marks.

- (22) a ¡Seré tonto! be.FUT.1SG stupid 'It is surprising how stupid I am'
  - b ¡Serás despistada!
    be.FUT.2SG absent-minded
    'It is surprising how absent-minded you are.'
  - c ¡Será caradura! be.FUT.3SG hard-face 'It is surprising how cheeky he is!'

Our proposal is that this pattern is an instance of a class of degree constructions labelled as 'consecutive' (see RAE 2009: § 45.140-p; Castroviejo Miró 2010). Evidence that it is so comes from the fact that mirative future constructions allow a coda expressing the situation that supports the extreme-degree evaluation. The occurrence of the coda requires the addition of a particle, *si* ('whether'), with an intensifier interpretation, as shown in (23-(25)).

- (23) ¡Si seré tonto que me lo he
   Whether be.FUT.1SG stupid that I.OBL it.ACC have.PRS.1SG creído!
   believe.PPT
   'How stupid I must be if I believed that.'
- (24)serás despistada jSi que te whether be.FUT.2SG absent-minded that you.OBL has dejado! lo it.ACC have.PRS.2SG leave.PPT 'Look how clueless you are, if you've left it behind.'
- (25)jSi será caradura ha ido que se whether be.fut.3sg hard-face he.OBL have.PRS.3SG that go.PPT sin despedirse say-goodby.INF without 'Some nerve he has if he's left without saying goodbye!'

When occurring with the particle *si* and the coda, the present tense is also acceptable, with the same emphatic and extreme-degree interpretation as with the simple future (*iSi soy tonto que me lo he creidol*).

Crucially, as in the case of (16) and (17), repeated here as (26) for convenience, the overt intensifier *tan* ('so') can occur with the present, but not with the future, as shown by the contrast in (27)-(28).

creído!

lo

believe.PPT

- (26) a. ;Es tonto! tan be.PRS.3SG stupid so 'He is so stupid! b \*¡Será tonto! tan be.FUT.3SG stupid SO (27);Soy tan tonto que me lo he be.PRS.1SG stupid that I.OBL it.ACC have.PRS.1SG tan 'Look how stupid I am, if I believed that!' (28)despistada \*¡Serás tan que te be.FUT.2SG absent-minded
- be.FUT.2SG so absent-minded that you.OBL it.ACC has dejado! have.PRS.2SG leave.PPT

Evidence suggests, then, that these are examples of covert quantification (RAE 2009: §42.15t), where the simple future licenses the extreme degree interpretation without any overt quantifier.

Additionally, the constructions headed by *si*, either with or without the coda, can be introduced by the imperative *Mira* ('look') acting as the subordinating predicate governing the indirect interrogative, both with the future and the present, as shown in (29)-(30) (See also in the English glosses for (24) and (27)).

- (29)Mira si seré lo he tonto que me look be.fut.1sg I.OBL it.ACC have.PRS.1SG whether stupid that creído! believe.PPT 'Look how stupid I am, if I believed it!'
- (30)Mira he si soy tonto que me lo look whether be.PRS.1SG stupid that I.OBL it.ACC have.PRS.1SG creído! believe.PPT 'Look how stupid I am, if I believed it!'

In all these cases, the simple future puts forward a conjecture, and the coda expresses the state-of-affairs that gives evidence to that conjecture. In a sense, this structure makes overt the clash between what the simple future encodes (namely, that the speaker has no direct evidence for her/his conjecture) and what the context provides (that there is a mutually accessible situation that supports the conjecture). This is exactly the same that happens with the polar interrogative version, the difference being that there the evidence is not expressed. Taken together, both the formal and the interpretive properties of the structure with the rising pattern suggest that what we have here is another version of the polar interrogative. The rising contour indicates that the speaker is prepared to provide the answer to her/his question (see Escandell-Vidal 2017b for details). The fact that this construction alternates with the indirect version headed by *si* ('whether') is another argument for this analysis.

Both structures are, therefore, polar interrogatives acting as rhetorical questions. This explains their syntactic properties (particularly, subject inversion). The fall-rise version presents the conjecture as neutral, so that the role of the shared context is less constrained. The rising version is more explicit, in that the speaker indicates that s/he knows more about it and can even provide the relevant evidence. Though they follow different paths, the two routes lead to the same interpretation.

# 8. Conclusions

In this paper we have put forward an analysis of the properties of the future tense constructions that can receive a mirative interpretation. Our main point has been to argue that mirativity is not an inherent feature of the semantics of the simple future, but the result of the future tense occurring in a certain syntactic configuration and a certain discourse context. There are, in fact, specific syntactic, lexical and discursive requirements that must be met in order to obtain a mirative interpretation.

- In the case under discussion, mirativity appears as a complex effect: the speaker expresses her/his negative attitude at the extreme degree in which a property is observed in a subject. Neither the propositional content nor the extreme degree is asserted; both are presupposed. The main illocutionary point is expressive. Surprise, extreme degree and negative evaluation are, therefore, the main components of the mirative interpretation. Each of these facets can be related to a different aspect of the construction.
- The semantic contribution of the simple future can be accounted for in procedural terms. The Spanish simple future encodes a procedural instruction of evidential nature -more precisely, of the indirect inferential sort. A simple future, then, can be considered as an anti-experiential present: it indicates that at the speech situation the speaker has no direct experience of the eventuality. This specific semantics is crucial to understanding how the mirative interpretation is obtained when combined with the appropriate factors. In addition, it also explains why other alternative means to convey posteriority in time cannot have mirative interpretations.
- Syntactic structure also plays a main role. As far as we know, this is a fact that had never been considered before. Mirative interpretations are only possible in structures with postverbal subjects. The ban against preverbal subjects points to interrogative inversion as the cause of this restriction. Topicalized elements can occur, of course, but they can never be internal topics; on the contrary, they can only occur in detached, extra-sentential positions. This is no surprise, since it is exactly the same that happens in polar interrogatives. Therefore, the main hypothesis is that we are dealing with interrogative/exclamative syntax. This idea is also confirmed by the prosodic properties of these mirative uses: the two intonational contours attested are among the possible contours for Spanish polar interrogatives, each of them with its own interpretive properties.
- As for the lexical choices, mirative uses show a very restrictive pattern. Predicates giving rise to mirative interpretations are all gradable ILPs conveying a property standardly evaluated as negative. When more than one meaning is available for a given predicate, the mirative interpretation always select the negative one. This gradability in the

predicate, together with the interrogative syntax, explains why the alternative set of a polar question is modified to include extreme degrees. When the question is biased, only one possibility is favored.

- Structures with mirative interpretations are rhetorical interrogatives. They are biased and serve an expressive illocutionary purpose. They are not assertions. Both the predication and the extreme degree are presupposed.
- There must be a mismatch between the evidential meaning encoded by the future and the context. In the most straightforward case, the situation can have made clear that the speaker had direct access to the eventuality giving rise to the evaluative comment. Asking the hearer to confirm a conjecture for which both have direct evidence results in a rhetorical interpretation. The simple future makes even more evident the mismatch between what is expressed and the discourse situation. How is the final interpretation obtained? Where does mirativity come from? The idea is that the only reason why a speaker might ask whether a conjecture is true when the situation makes clear that it is could be that it is not easy for him / her to accept the proposition expressed and integrate it into his / her cognitive environment, i.e. that the proposition does not match his / her expectations and causes surprise.

Mirativity is thus achieved by simulating a conjecture against a background of strong evidence on the contrary. In short, mirativity is contextually inferred as a result of a combination of multiple factors that constrain interpretation.

There is nothing intrinsically mirative in the simple future. Yet, only when a future tense encodes evidential indirectness can mirative interpretations be obtained. This fact provides additional support for the idea that Spanish simple future encodes indirect inferential evidence, as argued in Escandell-Vidal (2010, 2014, 2020). From this perspective, the Spanish mirative future reproduces a consistent pattern across languages: mirative interpretations are typically obtained when indirect or inferential evidential markers – the future, in this case – are used in contexts where the speaker has direct experience of the facts As Squartini (2018:2) puts it, "the very essence of what we normally intend as mirativity might be a special overuse of 'indirective' markers in contexts of direct knowledge" (see also Aikhenvald 2004; Rett and Murray 2013; Peterson 2016).

The well attested correlation between indirect evidential markers and mirativity is the result of the pragmatic strategy described above. If this is correct, there is no need to assume that evidential markers are polysemic in any sense (cf. Rett and Murray 2013). This multifactorial approach can be extended to mirative uses of several evidential markers and seems to give better results than approaches based on modal or temporal hypotheses about the semantics of future.

# References

Aikhenvald, Alexandra Y. (2004). Evidentiality. Oxford: OUP.

- Aikhenvald, Alexandra (2012). 'The essence of mirativity', *Linguistic Typology* 16: 435–485 [DOI 10.1515/lingty-2012-0017]
- Aikhenvald, Alexandra (2018). The Oxford Handbook of Evidentiality. Oxford: OUP
- Baranzini, Laura (ed.) 2017. Le futur dans les langues romanes. Bern: Peter Lang.
- Baranzini, Laura and Alda Mari (2019). 'From epistemic modality to concessivity: Alternatives and pragmatic reasoning *per absurdum*', *Journal of Pragmatics* 142: 116-138.
- Baranzini, Laura and Louis de Saussure (2017). 'Le futur épistémique en français et en italien', in Laura Baranzini (ed.). *Le futur dans les langues romanes*. Bern: Peter Lang, 305-322.
- Beltrama, Andrea and Andreas Trotzke (2019). Conveying emphasis for intensity: Lexical and syntactic strategies. *Language and Linguistics Compass*, 13. [DOI 10.1111/lnc3.12343]
- Bertinetto, Pier Marco (1979). 'Alcune ipotesi sul nostro futuro (con alcune osservazioni su potere e dovere)'. Rivista di grammatica generativa, 4: 77-138.
- Castroviejo, Elena (2008). 'Deconstructing exclamations.', *Catalan Journal of Linguistics* 7: 41-90.
- Caudal, Patrick (2012). 'Relations entre temps, aspect, modalité et évidentialité dans le système du français', *Langue Française* 173: 115-129.
- Cruschina, Silvio (2019). 'Focus Fronting in Spanish: Mirative implicature and information structure', *Probus* 31.1: 119-146.
- Davis Christopher, Christopher Potts and Margaret Speas (2007). "The pragmatic values of evidential sentences", in *Proceedings of SALT XVII*. Ithaca, NY: Cornell University, 71-88.
- Copley, Bridget (2009). The Semantics of the Future. London: Routledge
- De Brabanter, Philippe, Mikhail Kissine and Saghie Sharifzadeh (eds.) (2014). Future Tense(s)/Future Time(s). Oxford: OUP.
- Dendale, Patrick (2001). 'Le futur conjectural versus devoir épistémique: différences de valeur et de restrictions d'emploi', *Le français moderne* 69/1: 1-20.
- DeLancey, Scott (1997). 'Mirativity: The grammatical marking of unexpected information'. *Linguistic Typology*. 1: 33–52.
- DeLancey, Scott (2001). 'The mirative and evidentiality', Journal of Pragmatics 3: 371-384.
- DeLancey, Scott (2012). 'Still mirative after all these years', *Linguistic Typology* 16: 529-564 [DOI 10.1515/lingty-2012-0020].
- Escandell-Vidal, Victoria (1999). 'Los enunciados interrogativos. Aspectos semánticos y pragmáticos', in Ignacio Bosque and Violeta Demonte (eds.), *Gramática Descriptiva de la Lengua Española*, Madrid: Espasa, 3929-3992.
- Escandell-Vidal, Victoria (2010). 'Futuro y evidencialidad', Anuario de Lingüística Hispánica, XXVI: 9-34.
- Escandell-Vidal, Victoria (2014). 'Evidential futures. The case of Spanish', in Philippe de Brabanter, Mikhail Kissine and Saghie Sharifzadeh (eds.), *Future Tense(s)/Future Time(s)*. Oxford: OUP, 219-246.
- Escandell-Vidal, Victoria (2017a). 'Notes for a restrictive theory of procedural meaning', in Rachel Giora and Michael Haugh (eds.). *Doing Pragmatics Interculturally*. Berlin: DeGruyter/Mouton, 79-95.
- Escandell-Vidal, Victoria (2017b). 'Intonation and evidentiality in Spanish polar questions', Language and Speech, 60/2: 224-241.
- Escandell-Vidal, Victoria (2020). 'The semantics of the simple future in Romance. Core meaning and parametric variation', *Cahiers Chronos*.

- Escandell-Vidal, Victoria and Manuel Leonetti (2011). 'On the rigidity of procedural meaning', in Victoria Escandell-Vidal, Manuel Leonetti and Aoife Ahern (eds.), *Procedural Meaning: Problems and Perspectives*, Bingley: Emerald, 81-102.
- Escandell-Vidal, Victoria and Manuel Leonetti (2019). 'Futuro y miratividad. Anatomía de una relación', in *Estudios lingüísticos en homenaje a Emilio Ridruejo*, Valencia: Publicacions de la Universitat de València, 385-402.
- Escandell-Vidal, Victoria and Manuel Leonetti (2020). 'Grammatical emphasis and irony in Spanish', in Angeliki Athanasiadou and Herbert Colston (eds.). *The Diversity of Irony*, Berlin: De Gruyter, 183-207.
- Estebas Vilaplana, Eva and Pilar Prieto (2009). 'La notación prosódica en español. Una revisión del Sp\_ToBI', *Estudios de Fonética Experimental* XVIII, 263-283.
- Faller, Martina (2004). "The deictic core of 'Non-Experienced Past' in Cuzco Quechua', Journal of Semantics 21: 45-85.
- Fernández Ramírez, Salvador [1940-1950] *Gramática española*, 4. *El verbo y la oración* (comp de I. Bosque). Madrid: Arco/Libros, 1986.
- Fleischman, Suzanne (1982). The Future in Thought and Language: Diachronic Evidence from Romance. Cambridge: CUP.
- Fleischman, Suzanne (1989). 'Temporal distance: a basic linguistic metaphor', *Studies in Language* 13:1-50.
- Giannakidou, Anastasia and Alda Mari (2018). 'A unified analysis of the future as epistemic modality. The view from Greek and Italian', *Natural Language and Linguistic Theory* 36: 85-129.
- Gundel, Jeannette K., Nancy Hedberg and Ron Zacharski (1993). 'Cognitive status and the form of referring expressions in discourse', *Language* 69: 274–307.
- Hualde, José Ignacio and Pilar Prieto (2015). 'Intonational variation in Spanish: European and American varieties', in Sonia Frota and Pilar Prieto (eds.), *Intonation in Romance*. Oxford: OUP, 350–391.
- Jaszczolt, Katarzyna and Louis de Saussure (eds.) (2013). *Time: Language, Cognition and Reality*. Oxford: OUP
- Kalsang et al (2013). 'Direct evidentials, case, tense and aspect in Tibetan: evidence for a general theory of the semantics of evidentials', *Natural Language and Linguistic Theory* 31/2: 517-561.
- Karttunen, Lauri (1977). 'Syntax and semantics of questions', Linguistics and Philosophy 1: 3–44.
- Laca, Brenda (2017). 'Variación y semántica de los tiempos verbales: el caso del futuro', in Belén Almeida Cabrejas et al. (eds.), *Investigaciones actuales en Lingüística*. Alcalá: Servicio de Publicaciones de la UAH, 159-192.
- Laca, Brenda and Annamaria Falaus (2014). 'Les formes de l'incertitude. Le futur de conjecture en espagnol et le présomptif futur en roumain', *Revue de Linguistique Romane* 78: 313-366.
- Lau, Monica and Johan Rooryck (2017). 'Aspect, evidentiality, and mirativity'. *Lingua* 186–187: 110–119. [DOI: 10.1016/j.lingua.2016.11.009]
- López, Luis (2016). Dislocations and information structure. In Caroline Féry and Shinichiro Ishihara (eds.), *The Oxford Handbook of Information Structure*. Oxford: OUP, 402-421.
- Mari, Alda (2009). 'Disambiguating the Italian future' Proceedings of Generative Lexicon, 209-216.
- Mari, Alda (2010) 'On the evidential nature of the Italian future'. <ijn 00678549>
- Mari, Alda (2015). 'French future: exploring the future verification hypothesis', Journal of French Language Studies 26: 353-378.
- Mari, Alda and Anastasia Giannakidou (2016) 'Epistemic future and epistemic MUST: nonveridicality, evidence, and partial knowledge'. In Joanna Blaszczak, Anastasia Giannakidou, Dorota Klimek-Jankowska, and Krzysztof Migdalski (eds.) *Mood*,

Aspect, Modality Revisited New Answers to Old Questions, Chicago: University of Chicago Press <ijn\_02161962>

- Mateus, Maria Helena Mira, et al. (2006). Gramática da língua portuguesa, Lisboa: Caminho.
- Matte Bon, Francisco (2006). 'Maneras de hablar del futuro en español entre gramática y pragmática. Futuro, *ir a* + infinitivo y presente de indicativo: análisis, usos y valor profundo'. *RedELE* 6 (www.educacion.es/redele/revista6/MatteBon.pdf)
- Moeschler, Jacques (1998). 'Pragmatique de la référence temporelle', in Jacques Moeschler et al. (eds.) *Le temps des événements*, Paris: Kimé, 157-180.
- Nikolaeva, Irina (1999). 'The semantics of Northern Khanty Evidentials.', *Journal de la Societé Finno Ougrienne* 88: 131-159.
- Pérez Saldanya, Manel (2002). 'Les relacions temporals i aspectuals', *Gramàtica del català contemporani*, Barcelona: Empúries, 2567-2662.
- Peterson, Tyler (2016). 'Mirativity as surprise: Evidentiality, information, and deixis', *Journal* of *Psycholinguistic Research* 45(6): 1327-1357.
- RAE (2009). Nueva Gramática de la Lengua Española. Madrid: Espasa.
- Rett, Jessica (2011). 'Exclamatives, degrees and speech acts', *Linguistics and Philosophy* 34: 411-442.
- Rett, Jessica and Sarah Murray (2013). 'A semantic account of mirative evidentials', *Proceedings* of SALT 23: 453-472.
- Reyes, Graciela (1990). 'Valores estilísticos del imperfecto', Revista de Filología Española 70 (1/2): 45-70. [DOI: 10.3989/rfe.1990.v70.i1/2.676]
- Rivero, M<sup>a</sup> Teresa (2014). 'Spanish inferential and mirative futures and conditionals: an evidential gradable modal proposal', *Lingua* 151: 197-215.
- Rocci, A. (2000). 'L'interprétation épistémique du futur en italien et en français: une analyse procédurale', in Jacques Moeschler (ed.) *Inférences directionnelles, représentations mentales et subjectivité, Cahiers de Linguistique Française*, 22: 241-274.
- Rodríguez Rosique, Susana (2015). 'Spanish future in evaluative contexts: A case of mirativity?'. *eHumanista. Journal of Iberian Studies* 8 (Special issue IV: Approaches to Evidentiality in Romance): 500-516.
- Rodríguez Rosique, Susana (2019). El futuro en español. Bern: Peter Lang.
- Rojo, Guillermo and Aleixandre Veiga (1999). 'El tiempo verbal. Los tiempos simples', in Ignacio Bosque and Violeta. Demonte (eds.), *Gramática Descriptiva de la Lengua Española*. Madrid: Espasa, 2867-2934.
- Saussure, Louis de (2003). Temps et pertinence. Eléments de pragmatique cognitive du temps. Brussels: Duculot.
- Saussure, Louis de (2011). 'On some methodological issues in the conceptual/procedural distinction', in Victoria Escandell-Vidal et al. (eds.), *Procedural Meaning: Problems and Perspectives*. Bingley: Emerald, 55-79.
- Saussure, Louis de, and Patrick Morency (2012). 'A cognitive-pragmatic view of the French epistemic future', *Journal of French Language Studies* 22: 207-223.
- Slobin, Dan and Ayhan Aksu (1982). 'Tense, aspect and modality in the use of the Turkish evidential', in Paul J. Hopper (ed.), *Tense-aspect: Between Semantics and Pragmatics*, Amsterdam: John Benjamins, 185–200.
- Speas, Margaret (2008). 'On the syntax and semantics of evidentials', *Language and Linguistics* Compass 2/5: 940-965.
- Speas, Margaret (2010). 'Evidentials as generalized functional heads', in Anna Maria Di Sciullo and Virginia Hill (eds.), *Edges, Heads and Projections: Interface Properties.* Amsterdam: John Benjamins, 127-150.
- Squartini, Mario (1995). 'Tense and Aspect in Italian', in Rolf Thieroff (ed.), Tense Systems in European Languages II, Tübingen: Niemeyer, 117–134.

- Squartini, Mario (2001). 'The internal structure of evidentiality in Romance', *Studies in Language* 25/2: 297-334.
- Squartini, Mario (2004). 'Disentangling evidentiality and epistemic modality in romance', *Lingua* 114: 873-895.
- Squartini, Mario (2012). 'Evidentiality in interaction. The concessive use of the Italian future between grammar and discourse', *Journal of Pragmatics* 44: 2116-2128.
- Squartini, Mario (2018). 'Mirative extensions in Romance: Evidential or epistemic?', in Zlatka Guentchéva (ed.), *Epistemic Modalities and Evidentiality in Cross-Linguistic Perspective*. Berlin: Mouton/DeGruyter, 196-214 [DOI: 10.1515/9783110572261-009].
- Torres Bustamante, Teresa (2012). 'Real tense and real aspect in mirativity', *Proceedings of* SALT 22: 347–364.

Wilson, Deirdre and Dan Sperber (1993). Linguistic form and relevance. Lingua, 90: 1-25.

Zanuttini, Raffaella and Paul Portner (2003). 'Exclamative clauses: At the syntax-semantics interface', *Language* 79: 39-81.